Final Public Report
Focused Audit of Affiliated Transactions
and Management Audit
of the South Jersey Gas Company

Volume Four: Management and Operations

Public Version
(SHADED MATERIALS ARE CONFIDENTIAL)

Presented to the:

Division of Audits
New Jersey Board of Public Utilities

By:

65 Main Street
Quentin, Pennsylvania 17083

(717) 270-4500 (voice)
(717) 270-0555 (facsimile)
Admin@LibertyConsultingGroup.com (e-mail)

April 22, 2005

Management and Operations
Table of Contents

I. Introduction 1
A. Background 1
B. Summary of Recommendations 2
II. Corporate Governance 6
A. Introduction 6
B. Compliance with Public Requirements 9
1. Audit Guidelines 9
2. Findings 10
3. Conclusions 13
4. Recommendations 14
C. Governance Structure 14
1. Audit Guidelines 14
2. Findings 15
3. Conclusions 18
4. Recommendations 20
D. Special Audit Committee Requirements 20
1. Audit Committee 20
2. Findings 21
3. Conclusions 24
4. Recommendations 25
E. Composition and Selection 26
1. Summary of Audit Activities 26
2. Findings 27
3. Conclusions 30
4. Recommendations 31
F. Board and Other Committee Operations 32
1. Audit Guidelines 32
2. Findings 34
3. Conclusions 36
4. Recommendations 37
G. Board Awareness of Key Issues and Information 37
1. Audit Guidelines 37
2. Findings 38
3. Conclusions 41
4. Recommendations 41
H. Promoting Board Effectiveness 41
1. Audit Guidelines 41
2. Findings 42
3. Conclusions 44
4. Recommendations 45
III. Organization 47

A. Background 47
B. Findings 47
C. Conclusions 49
D. Recommendations 50
IV. Strategic Planning 51
A. Introduction 51
B. Strategic Planning Framework and Process 53
1. Summary of Audit Activities 53
2. Findings 53
3. Conclusions 60
4. Recommendations 63
C. Business and Service Plans 64
1. Summary of Audit Activities 64
2. Findings 65
3. Conclusions 73
4. Recommendations 75
D. Major Marina Projects 76
1. Summary of Audit Activities 76
2. Findings 77
3. Conclusions 81
4. Recommendations 83
E. SJI Planning Influences on the Utility 83
1. Summary of Audit Activities 83
2. Findings 83
3. Conclusions 88
4. Recommendations 89
V. Finance 90
A. Financial Policy and Management 90
1. Background 90
2. SJG Capital Structure: 1999-2001 90
3. SJG Equity Management and Dividends 2002-2004 92
4. Future Earnings and Dividend Growth 93
5. Conclusions 94
6. Recommendations 95
B. Credit Ratings 95
1. Background 95
2. Credit Rating Analysis 95
3. SJG 2003 Recapitalization 96
4. Credit Impact of Non-Utility Businesses 97
5. Conclusions 98
6. Recommendations 99
C. Financing 99
1. SJG Debt Financing 99
2. SJG and SJI Lines of Credit 100
3. Non-Utility Business Financing 103
4. Non-Utility Credit Requirements 104

5. Conclusions 104
6. Recommendations 104
D. Cash Management 104
1. Short-Term Borrowing Levels 104
2. Cash Forecasting 106
3. Daily Cash Management 107
4. Cash Pooling and Inter-company Balances 107
5. Letters Of Credit 108
6. Conclusions 108
7. Recommendations 108
E. Investor Relations 108
1. Background 108
2. Conclusions 109
3. Recommendations 109
F. Risk Management 109
1. Background 109
2. Counterparty Credit Evaluations 111
3. Risk Monitoring 113
4. SJI Guarantees 113
5. Conclusions 115
6. Recommendations 116
G. Utility Credit Insulation 118
1. Background 118
2. Utility Equity Maintenance 118
3. Separate Credit Ratings 119
4. Cash Management Segregation 119
5. Inter-company Balances and Loans 119
6. Pledges, Liens and Collateral 119
7. Bankruptcy Protection 119
8. Financing Separation 120
9. Conclusions 120
10. Recommendations 120
VI. Budgeting 121
A. Budgeting Process 121
1. Background 121
2. Findings 121
3. Conclusions 122
4. Recommendations 122
B. Trends in Expenditures 122
1. Background 122
2. Findings 122
3. Conclusions 126
4. Recommendations 126
C. Reporting 126
1. Background 126
2. Findings 127

3. Conclusions 128
4. Recommendations 128
D. Reviews and Approvals of SJG's Construction Expenditures 128
1. Background 128
2. Findings 128
3. Conclusions 130
4. Recommendations 130
VII. Accounting and Controls 131
A. Background 131
B. Accounting Systems 131
1. Findings 131
2. Conclusions 132
3. Recommendations 133
C. Accounting Policies and Procedures 133
1. Background 133
2. Findings 133
3. Conclusions 134
4. Recommendations 134
D. Accounting Data Collection 134
1. Background 134
2. Findings 135
3. Conclusions 137
4. Recommendations 137
E. Reporting Structure 138
1. Background 138
2. Findings 138
3. Conclusions 139
4. Recommendations 139
F. Intercompany Receivables and Payables 140
1. Background 140
2. Findings 141
3. Conclusions 142
4. Recommendations 143
G. Work Order Procedures & Continuing Property Records 143
1. Background 143
2. Findings 143
3. Conclusions 145
4. Recommendations 145
VIII. System Planning and Design 146
A. Background 146
B. Findings 146
C. Conclusions 148
D. Recommendations 150
IX. System Operations 151
A. Background 151
B. Findings 151

1. Organization & Staffing 151
2. Expenditures 153
3. Engineering Services & System Integrity 153
4. New Construction & Replacement 155
5. Utility Service 155
6. Theft of Service 155
C. Conclusions 156
D. Recommendations 170
X. Dispatch 174
A. Background 174
B. Findings 174
C. Conclusions 175
D. Recommendations 175
XI. Customer Services 176
A. Background 176
B. Findings 177
1. General 177
2. Meter Reading 177
3. Billing 178
4. Credit & Collection 178
5. Complaints and Inquiries 179
C. Conclusions 179
D. Recommendations 188
XII. Environmental Remediation 190
A. Background 190
B. Findings 190
1. Efforts to Determine Scope of Responsibility 191
2. Status of Federal and State Concerns 192
3. Other Potentially Responsible Parties 192
C. Conclusions 193
D. Recommendations 193
XIII. Executive and Director Compensation 194
A. Background 194
B. Executive Compensation 194
1. Background 194
2. Findings 195
3. Conclusions 204
4. Recommendations 205
C. Administration of Executive and Director Compensation 205
1. Background 205
2. Findings 205
3. Conclusions 207
4. Recommendations 207
D. Compensation of Outside Directors 207
1. Background 207
2. Findings 207

3. Conclusions 210
4. Recommendations 210
E. Consulting Agreement with SJI's Chairman 210
1. Background 210
2. Findings 210
3. Conclusions 211
4. Recommendations 211
F. Employment Agreements 211
1. Background 211
2. Findings 212
3. Conclusions 212
4. Recommendations 212
G. Stock Ownership Requirements 212
1. Background 212
2. Findings 212
3. Conclusions 213
4. Recommendations 213
XIV. Information Systems 214
A. Background 214
B. Organization, Functions, and Infrastructure 214
1. Background 214
2. Findings 214
3. Conclusions 218
4. Recommendations 218
C. Planning, Resources, and Initiatives 218
1. Background 218
2. Findings 218
3. Conclusions 221
4. Recommendations 221
D. Arrangements for Business Continuity and Disaster Recovery 222
1. Background 222
2. Findings 222
3. Conclusions 223
4. Recommendations 223
E. Implementation of the Lawson System 223
1. Background 223
2. Findings 224
3. Conclusions 228
4. Recommendations 228
XV. Legal Services 229
A. Background 229
B. Findings 229
C. Conclusions 232
D. Recommendations 233

Note: Shaded information on pages 60, 68, 69, 70, 71, 77, 78, 79, 80, 81, 82, 87, 90, 92, 93, 102, 103, 104, 108, 111, 112, 114, 115, 116, 230 and 231 is proprietary and confidential.

I. Introduction

A. Background

This portion of Liberty's audit examined the issues that typically comprise principal focuses of a general management and operations audit. The principal exception is gas supply. This topic, which forms a central element of a general management and operations audit of an LDC, was examined and reported on separately. The objectives of this management and operations segment of Liberty's audit was to describe management and operations in the following areas, assess effectiveness and efficiency, and make recommendations to address any problems, concerns, or improvement opportunities observed:

- Organization/Governance
  - Utility/non-utility resource alignment
  - Corporate governance
  - Internal controls
  - Director selection
  - Auditor independence
  - Chairman/CEO separation
  - Sarbanes-Oxley and NYSE compliance
  - Executive compensation
  - Affiliate structure and relations
  - Independence and utility focus of SJG management
- Strategic Planning
  - Definition/description of mission and purpose
  - Strategy development and implementation processes
  - Specificity, measurability of expected results and required resources
  - Responsiveness to changed conditions
  - Communication of and commitment to approved plans
  - Specific short- and long- range goals of each affiliate
  - Business strategy
  - Utility focus of SJG and shared resources
  - Sufficiency of utility expertise
  - Risks to utility operations
  - Past or potential harm to utility from diversification
  - Propriety of utility goals for current/expected environment
- Finance
  - Debt management
  - Encumbrance of utility assets for non-utility purposes
  - Review of external financings for negative effects from non-utility businesses/activities
  - Use of tax considerations to justify investments
  - Tax consolidation methods and allocations
  - Separation of utility cash resources
  - Use of utility-generated funds for non-utility purposes
  - Prior and potential write-offs and impacts on the utility

  - Impact of diversified businesses on cost of capital
  - Insulation of utility capital access and costs from non-utility impacts
- Accounting and Property Records
  - Accounts payable
  - Accounts receivable
  - Compensation and benefits
  - Budgeting
  - Work order procedures
  - Continuing property records

Liberty also performed a diagnostic review of other key areas of management and operations, including:

  - System operations
  - Customer service
  - Marketing
  - Human relations
  - Legal/E\external Relations
  - Support services.

B. Summary of Recommendations

Governance

MO-1. Establish an independent source of board support for receipt and investigation of concerns or complaints, or provide and publish an alternate procedure for persons who may be deterred by the involvement of management.

MO-2. Eliminate the requirement that the Nominating and Governance Committee take counsel from inside directors in recommending committee chairs to the full board.

MO-3. Restructure the Executive Committee's responsibilities to remove the inference that it serves as the primary source of recommendations on certain governance document, securities, and financial issues.

MO-4. Formally solicit competitive proposals for providing outside audit services.

MO-5. Make the addition of industry experience a priority in board member recruitment.

MO-6. Emphasize more frequent rotation in directorships.

MO-7. Adopt a lower threshold for the level of business dealings that may be permitted enterprises that board members are associated with, on the one hand, and SJI entities, on the other hand.

MO-8. Incorporate gas-industry issues training into plans to bring outside experts to board meetings for educational purposes.

MO-9. Add a utility-specific module to the annual board performance measurement process and use it separately for both the SJI and SJG boards.

Organization

MO-10. Realign officer functional responsibilities to avoid conflicts of interest.

Strategic Planning

MO-11. Focus on the specific economic environmental indicators most meaningful to SJI and its affiliates, and attempt to ascertain cause and effect linkages, along with numerical levels of economic indicators needed to underpin specific business objectives or growth targets.

MO-12. Include formal contingency planning, and generate 12 to 18 month rolling-forward forecasts to enhance the ability to assess the realism of future expectations.

MO-13. Selectively conduct more in-depth competitive assessments.

MO-14. Encourage more detailed director involvement in the planning process and its key documents.

MO-15. Assure that the financial plans do not *lead* the strategic plans.

MO-16. Provide for more consistent and amplified business plans.

MO-17. Require all businesses and service organizations to adopt and use more structured and comprehensive set of metrics in the style of the Balanced Scorecard.

MO-18. Negotiate and execute agreements covering all internal service providers.

MO-19. Improve the process for focused intelligence gathering on key utility competitors and customers.

MO-20. Liberty recommends the businesses and services include optimistic and pessimistic scenarios in their plans to complement their "base" cases.

Finance

MO-21. Establish and operate a rolling cash management forecast for the utility similar to that being established for the non-utility entities and SJI.

MO-22. Limit the amount of guarantees that SJI can make by relating them to SJI equity net of the BPU floor for SJG equity.

MO-23. Strengthen utility financial protections.

Accounting and Controls

MO-24. Complete SJG's implementation of the Lawson system this year.

MO-25. Implement cost-center accounting for SJI and the other affiliates this year.

MO-26. Require that vendors invoice the correct affiliate.

MO-27. Make accounting and CAM policies and procedures available electronically.

MO-28. In conjunction with converting to the Lawson system, develop an enhanced SJI chart of accounts and coding system.

MO-29. Require all employees, except for senior officers to routinely complete time sheets.

MO-30. Use automated time reporting for all employees.

MO-31. Commit the necessary resources to enhance the detail general ledger and cost center reporting process to provide for meaningful reports and analyses.

MO-32. Examine the capability to make increased used of automation in generating intercompany bills.

MO-33. Formally include SJG in procedures requiring reconciliation of intercompany receivable and payable balances.

MO-34. Implement the Lawson system capital asset module.

MO-35. Include audits of continuing property records and work order procedures and activities in future internal audit plans.

System Planning and Design

MO-36. Broaden the range of options that are considered for extending services.

System Operations

MO-37. Increase the SJG workforce or supplement it with contract labor to address growing backlogs.

MO-38. Develop leak repair timeframes to ensure the prompt repair of "B" leaks.

MO-39. More aggressively promote the *NJ One Call program* within the SJG service territory.

MO-40. Improve compliance tracking and reporting.

MO-41. Pursue a more aggressive revenue protection program.

Customer Service

MO-42. Reallocate resources or increase staffing to ensure timely refunds to customers.

MO-43. Reprioritize calls so that SJG customers do not receive a lower level of service than do SJESP customers.

MO-44. Continue to research customer research to better understand customer expectations and perceptions.

Executive and Director Compensation

MO-45. Place responsibility for administering executive compensation with the assistant vice president for human resources, the company's officer responsible for managing the compensation of all other management personnel.

MO-46. Retain the cost of the consulting agreement with the former CEO at SJI, without further distribution to SJG.

Information Systems

MO-47. Make the first order of business of the new IS steering committee a commitment to a comprehensive study of SJG's needs for more distributed systems and enhancements to existing systems, unconstrained by stringent budgetary limitations.

MO-48. Institute a process for managing IS projects, supported by appropriate tools, and reporting on project status.

MO-49. Apply the resources needed to expedite the full implementation of all of the Lawson modules that SJG and SJI can reasonably use.

Legal Services

MO-50. Centralize responsibility for retaining and managing outside counsel.

II. Corporate Governance

A. Introduction

Corporate governance has become a major focus of corporate America in the wake of scandals and financial difficulties at many companies – many of the considered leaders in their fields. New exchange listing requirements and guidelines and the provisions of the Sarbanes Oxley Act (*SOX*) have produced benchmarks for examining performance in a number of areas now considered crucial, or at least substantially more important in:

- Assuring that boards of directors provide for effective oversight
- Demanding that senior management make affirmations and take stricter responsibility for information upon which investors rely.

Protection for those who buy securities and make loans form the core constituency whose interests stock-exchange and Congressional guidance and requirements seek to protect. The interests of the more general public, of which customers form a primary element, at least from the perspective of utility regulators, certainly derive benefit from more transparent corporate operations and more stringent controls on the completeness and accuracy of reported information. Nevertheless, it would be rash from the customer-protection view to consider recent initiatives as addressing the sum and substance of how governance should be structured and provided in a utility holding company.

Liberty's audit has placed strong emphasis on examining efforts to comply with the requirements and guidance resulting from recent initiatives. To a very great extent, these new rules and expectations have dominated the agenda and the discussion of the boards of SJI and SJG over the past couple of years. They have also framed, as much as any other single subject, the dialogue between the boards and executive management. Even at the working level, many SJI and SJG work groups; *e.g.*, corporate counsel, internal audit, and information systems, have witnessed substantial disruption and increase to their routine work requirements as they have struggled to evaluate controls and make the changes necessary to meet new public requirements and expectations.

These changes, however, have not led Liberty to change substantially in the goals it seeks to accomplish as compared with those of engagements that took place before these new developments. Specifically, Liberty's objective has been to determine how successful SJI and SJG have been in adopting and implementing a governance structure that serves and promotes utility interests, even as it has had to focus on a set of non-utility businesses that have been growing in size, diversity, and risk.

Liberty's review of governance placed significant emphasis on the need for creating a proper balance between executive management and the board of directors – a difficult task, especially for corporations moving into new and challenging business areas. On the one hand, it is far too easy to create a structure and a set of operating principles that fails to provide a source of effective outside and critical examination of management's vision, goals, and plans. On the other hand, it is possible to go too far and consequently produce an antagonistic, confrontational

environment that makes it difficult for a corporation to focus on day-to-day requirements, let alone to take steps to adapt and change to emerging opportunities and risks in a changing business environment.

A board of directors needs to provide a source of independent wisdom, judgment, and experience in overseeing the:

- Corporation's broad direction
- Integration of the strategies and plans of multiple business segments with different and sometimes competing needs and requirements
- Consistency of specific performance results with goals and objectives, and, more generally, with practical notions of what defines success, proper risk mitigation, and flexibility in exploiting opportunities
- Actions taken to assure fair dealing with stakeholders of all types and compliance with public requirements
- Efforts to assure that controls intended to apply to senior management as well as lower, operations levels get planned and executed with sufficient objectivity, vigor, and thoroughness.

These obligations require a board that is talented, experienced, and capable of thinking independently and on occasion concluding differently from executive management on what is best for the corporation at an overall level. At the same time, such independence will not serve well if a board and executive management are unable to:

- Share a largely common vision for the corporation
- Operate with a strong sense of mutual respect for talents and abilities on both sides
- Communicate candidly and effectively
- Work through differences with tact and the need to maintain effective working relationships
- Respect fully the differing roles and responsibilities of each other.

There may be times when significant, and sometimes even blunt, disagreements become necessary, but they should not be common. They should be capable of prompt and effective resolution when they do occur. Moreover, boards must recognize that no corporation can be effective long term if it routinely intervenes in what are day-to-day matters, or even if it comes frequently to overrule strategies, goals, objectives, and plans brought to it by senior management. At the same time, recent experience has shown that the absence of sound board oversight and effective contribution to setting overall direction and measuring performance against it can be a recipe for disaster, whether at the hands of changing external circumstances, or, in at least a some cases, manipulation of information and self-dealing by senior executives.

A discussion of these factors affecting successful corporate governance demonstrates that they are soft, behavioral ones, which do not lend themselves to formulaic solutions, or to simple rules. Moreover, even full implementation of recent changes; *e.g.*, those imposed by SOX, cannot inoculate a company against all ills that may infect it at this high level. The faithful implementation of those requirements is a positive indicator, but care must be taken to assure that the need for instilling and encouraging sound structures and proper actions not be reduced to

a simplistic checking of boxes. A rote approach will tend to produce a legalistic, rather than the needed behavioral, approach to assuring the adequacy of corporate governance, particularly for corporate families that house public utilities and their special service requirements and public accountability. To be effective, all participants must view corporate governance not as a matter of passing discrete legal tests, but as a vibrant, internalized contributor to achieving strong performance, which, in the case of a utility, necessarily includes meeting public service obligations and expectations.

At the same time, it is more than merely optimistic to envision changes a board's transformation into a sort of internal public regulator. External regulation has a strong and important place in assuring the public accountability of utilities; boards simply cannot be expected to take on primary responsibilities in that regard. They exist, as they should, primarily to create transparency in the operation of public corporations, to help to manage risk as a company pursues strategic opportunities, and to help to deliver value to shareowners. Boards can and should certainly understand and act in accord with the behavioral and operational constraints peculiar to public utilities. Nevertheless, that duty does not warrant an expectation that they will substantially discount traditional board duties to shareowners, in favor of taking on (as a primary duty) service as a watchdog for the customer interest. Nothing in SOX does or should change the need for a board to balance investor, customer, and general public interests, or, more particularly, to realize that investor interests cannot be served without due recourse to obligations and expectations about utility customer and general public interests.

This difference seems clear when expressed at the conceptual level, but can be difficult to follow when we leave the stage where strategies, goals, and objectives are developed, and we move to the nitty-gritty of the operations, systems, programs, resource commitments, and activities it takes to pursue them. This increasing lack of clarity mimics the decreasing ability that boards have realistically to influence directly the day-to-day grind of a corporation, especially one pursuing many different lines of activity. The challenge is, however, to make sure that the board remains involved and aware enough of events at this level to allow meaningful assessment of:

- Who has the responsibility and resources dedicated to achieving success
- What failings (internal or external) exist when plans, objectives, and goals are not being achieved
- When do actual circumstances and intractable limitations make plans, objectives, and goals impossible or impracticable to achieve
- Where does accountability lie for failings or weaknesses in achieving success
- Why did the problems occur and have successful corrections been identified and implemented?

Liberty believes that the tension between producing an effectively functioning board and keeping it from becoming an inappropriate intrusion on the need for effective, fluid, and timely executive action is a matter of succeeding in meeting a small but critically important set of standards regarding overall corporate governance. Liberty has structured the work of this task area to provide an examination of how the SJI family has applied each of these standards in designing and in executing its corporate governance process. Liberty's assessment of corporate governance

examined the following key areas, with a particular focus on the structure, management, and operations of SJG:

- Conducting an effective board member selection process that produces the right skills and attitudes
- Creating an effective structure for dividing board responsibilities
- Assuring sufficient director time commitments
- Establishing effective board participation in executive succession
- Providing sufficient initial and ongoing training and education for new and incumbent board members
- Providing the board with sufficient and timely information to exercise its responsibilities
- Ensuring that the board is knowledgeable and conversant with the kinds of information it needs to know to perform effectively
- Giving the board real control over executive compensation
- Providing the board with sufficient and appropriate compensation
- Recognizing the differences in the needs and requirements of multiple subsidiaries, particularly the public service responsibilities imposed on regulated public utility affiliates
- Assuring auditor independence
- Properly structuring the roles and interactions between the board chairman and the CEO
- Measuring board effectiveness
- Complying with public requirements.

B. Compliance with Public Requirements

1. Audit Guidelines

Liberty addresses this subject first because of its broad impacts across nearly all-important areas of board structure and performance. There is substantial conformity between SOX and roughly contemporaneous action by the major American stock exchanges. Principal SOX requirements relevant to this audit include the following:

- Audit committee to hire/fire, compensate and oversee independent auditors
- Independent accountants to report directly to audit committee
- Limitation on other corporation compensation of audit committee members
- Formal audit committee procedures for treatment of accounting, controls, and audit related complaints, including assurance of anonymity
- Audit committee to retain its own advisors
- Disclosure of financial “expertise” of audit committee members
- Various CEO and CFO compliance and verification statements
- Limits on trading during “blackout” periods
- GAAP financials filed with the SEC to reflect all auditor-identified adjustments
- Disclosure of off-balance sheet transactions
- Officer loan limitations
- Filing of internal control report and assessment
- Reporting on code of ethics adoption
- Maintenance of audit workpapers

- Controls on non-audit work by independent accountants
- Establishment of independent accountants' "independence" standards.

The proposals adopted by the major exchanges mirror much of what Liberty has described as its principal areas of inquiry in this focus area. Liberty SJI's board structure and how it performed compared with the guidelines (particularly those of the NYSE, where SJI is listed). Liberty's examination considered the following guidelines:

- Majority of directors to be independent
- Regularly convened executive sessions of non-officer directors only
- Identification of outside director presiding at above meetings
- All audit, nominating, compensation committee members to be independent
- Audit committee to approve all related party transactions
- Limits on other compensation of directors by corporation
- Tightened definition of "independent" director
- Independent director approval of director nominations
- Independent director approval of CEO compensation
- Independent accountants' hiring/firing solely by audit committee
- Audit committee prior approval of non-audit services by independent accountants
- Audit committee power to retain independent services
- Audit committee members to understand financial statements
- Exchange approved continuing director education
- Accelerated disclosure of insider transactions
- CEO compensation approval at executive session
- Shareowner rights to vote on all stock option plans
- Annual CEO certification against violations
- Adoption and posting of business and ethics codes.

Much of the consideration of these issues falls under the subsequent sections into which Liberty divided its audit work. The work addressed here focuses primarily on the processes by which SJI and SJG have assured that they have acted soundly to identify recent changes in requirements, met them through a structured and comprehensive plan, provided an adequate system for tracking and verifying compliance, and complied with deadlines for taking important actions. Liberty's work also examined whether the board took an appropriate leadership role in the design and execution of activities required to meet applicable public requirements.

2. Findings

SJI began efforts to identify and begin to plan for meeting the requirements of SOX promptly. By August 2002, the corporate counsel had advised the directors in some detail about the requirements of the Act, recent SEC corporate accountability initiatives, and proposed New York Stock Exchange listing standards. The presentation contained a first list of action items and assignments of responsibility for executing them.

SJI developed a detailed plan for Section 404 compliance, which board members received in advance of their November 2003 meeting. This plan focused on two key milestones in Section 404 compliance:

- Management's assessment of internal controls in the 2004 Annual Report
- The independent accountant's attestation and report concerning that management assessment.

SJI designated its three senior officers (CEO, President, and CFO; the first two positions were held by different people at the time) to promote corporate-wide awareness of the requirements and the importance of meeting them. Overall direction of the compliance efforts fell to a steering committee consisting of the officers and senior managers responsible for administrative, financial, and accounting matters:

- Vice President of Information Services
- SJG Executive Vice President and COO
- Controller
- CFO (also a s*ponsor*)
- Director of Internal Audit
- Manager of Financial Reporting
- Executive Vice President and Chief Administrative Officer (*CAO*)
- Corporate Secretary and Corporate Counsel.

SJI assigned the Internal Audit Manager as the project manager of the Section 404 compliance-plan. He led an implementation team, consisting of audit, IS, accounting, operations, and outside consultants. The team met bi-weekly, and reported to the steering committee. The team began work under a plan that contained a comprehensive, specific list of action items:

- Select a software-based compliance tool to recommend to the steering committee (the steering committee had approved the recommended choice)
- Identify entities and processes requiring controls evaluation, documentation, and assessment, and review them with the independent accountants for concurrence
- Conduct interviews with business-process owners to identify significant objectives, control objectives, and controls in place
- Identify and correct gaps between controls objectives and controls in place
- Update risk assessments and narratives of business processes
- Test selected controls in conjunction with independent accountants
- Conduct independent-accountant reviews of documentation and retesting of selected controls.

The November 2003 plan contained a schedule listing the key milestones for each quarter, through completion of the project in the fourth quarter of 2004.

SJI has sought substantial outside assistance in assuring the sufficiency of its efforts to implement SOX Section 404. A 2004 presentation by its independent accountants exemplifies this use of expertise. That presentation stressed the need for management's acceptance of responsibility for assessing the effectiveness of internal controls and the obligation to evaluate and provide a written assertion, based on sufficient evidence, about the effectiveness of those

controls. The presentation noted the requirements for outside accountant evaluation and tests, and for the issuance of opinions about the effectiveness of internal control and management's assessment of it. The presentation stressed that the board, not the independent accountants, must evaluate the Audit Committee's effectiveness. The presentation also addressed the details of the Audit Committee's role, listed indicators of material control weaknesses, and laid out the specific roles required of the independent auditor.

SJI has responded to SOX code-of-ethics provisions by adopting codes of ethics for its directors and its principal executive and financial officers. The codes address conflicts of interest, compliance with competition and anti-trust laws, the confidentiality of company information, misuse of company property, compliance with laws and regulations, soliciting or accepting gifts, avoidance of conflicting or embarrassing employment or business transactions, use of influence to secure employment, maintenance of accurate and complete records, abuse of authority, compliance with policies and procedures, insider trading, and reporting of violations. There is a special section on arms'-length dealing with SJG affiliates. The executive and financial officer *Financial Code of Ethics* sets forth a list of eight general principles to which SJI expects its officers to adhere.

The corporate counsel has played the key staff role in assisting the board to meet the requirements of SOX, the SEC, and the New York Stock Exchange. He has used outside expertise in helping to frame SJI's compliance planning. His work has been benefited by a number of outside sources of guidance, key among them the February 2003 *Audit Committee Resource Guide*, which came from SJI's independent accountants. This nearly 50-page guide contains detailed, subject-by-subject descriptions of new requirements and guidance applicable to audit committees, which comprise a principal vehicle for accomplishing the changes needed. The guide talks about the reasoning behind rules and guidance, and provides a helpful checklist for audit committees to use in meeting statutory and exchange-listing requirements.

The Audit Committee took the lead for the board in detailed work to implement recent governance and controls requirements and guidance. The remainder of the board has taken efforts to remain current with compliance activities, for which it has ultimate responsibility. For example, the chair of another committee showed awareness of the difficulty that many companies have been facing in meeting compliance schedules. SJI's progress has been a frequent topic of board discussions. Those discussions gave him confidence that the Audit Committee was actively assuring that efforts remained on schedule.

The Audit Committee chair has spent a major portion of his time on assuring progress in meeting requirements. He asks for regular progress reports. The compliance schedule included a 3-month float period. Most of that has been used, but reports still show progress to be timely. The SJI 10-K filing, which will come in late February or early March of 2005, is a major milestone. An earlier indication was expected to come with the January 10-Q filing. Subsequently, the independent accountants' key attestation compliance will come with the annual meeting in March. The 10-Q filing scheduled for imminent filing as Liberty finished the draft of this report.

One member of the Audit Committee cited routine and regular updates as an important element of essentially all Audit Committee meetings. This committee member recalled the delivery of

summaries to the full boards of all the reports provided to the committee. He was knowledgeable of recent, moderate slippage in the compliance schedule, but noted that the committee has asked the independent accountants for regular schedule updates, and has remained confident of generally timely completion of required activities.

The Audit Committee adopted on May 29, 2003 required procedures for handling complaints. They address the receipt and treatment of complaints and anonymous submissions by employees addressing accounting, auditing, or controls issues. The office of corporate secretary and corporate counsel provides administrative support to the committee under these procedures. This management office submits complaints to the chair of the Audit Committee. The procedure calls for the Audit Committee chair to contact the CEO for information and support in responding to the complaint. The procedure does not detail the methods by which complaints or internal concerns can be made confidentially or how they will be kept confidential.

3. Conclusions

a. SJI and SJG moved promptly to identify stock-exchange and SOX requirements requiring response and action, and formulated a comprehensive plan and schedule for addressing them.

The Company made appropriate use of its independent accountants and other sources of expertise in identifying requirements, in formulating plans, in identifying compliance tools, and in structuring a plan that would comprehensively meet requirements and deadlines for action. A timely, comprehensive plan was issued, the personnel involved followed it, attention to schedule has been continual, and schedule performance has supported timely completion of activities, albeit with some slippage. There is no indication that the slippage that resulted was either uncharacteristic or due to inattention to work completion.

b. Board members have exercised leadership over compliance efforts, and have remained actively involved in monitoring the substance and the timing of actions as part of compliance plans.

Board members showed awareness of status; Audit Committee members demonstrated more detailed knowledge of the particular difficulties of compliance and what was being done to address them. Audit committee members in particular understood the key compliance activities under their sponsorship.

c. Adequate resources have been marshaled and committed to assure timely compliance.

SJI made effective use of its independent accountants and a systems-provider to identify requirements, help plan to meet them, educate the board and senior executive management, carry out major work activities, and verify compliance. The Company strengthened Internal Audit's structure and resources in 2004, and used the resulting increase in capability to assist in compliance activities.

d. There exists an effective set of tools to assure that controls undergo comprehensive and timely evaluation, change, and certification.

SJI used a systems provider to develop a comprehensive tool for assuring that there was an adequate baseline assessment of controls and that there will continue to be periodic assessments, testing, and improvement.

e. SJI has adopted the required procedures for handling complaints, but they do not specifically address how they will be kept confidential.

Management can have a role in complaint receipt and, at board discretion, investigation as well. A critical element of these procedures lies in giving persons sufficient confidence that their concerns, which may relate to management's actions, will remain confidential. Certainly the board should have access to management's support in appropriate cases. The gap lies in failing to make clear that the board will establish other channels for receiving and investigating concerns and complaints where required.

4. Recommendations

1. Establish an independent source of board support for receipt and investigation of concerns or complaints, or provide and publish an alternate procedure for persons who may be deterred by the involvement of management.

There is no clear requirement for an independent source of receipt and investigation. Moreover, a small company such as SJI might find the creation of one for all concerns and complaints unduly burdensome. While such independence is the preferred approach, it would be satisfactory if practical considerations led to a special procedure for concerns and complaints that persons wish not to become known to management. Making it clear to all that such confidentiality will be preserved is important to include in the procedure, in order to assure that there is no unintended barrier to bringing matters to the attention of the board.

C. Governance Structure

1. Audit Guidelines

Overall Structure

The scope of operations of large corporations exceeds the board's ability to provide sufficient oversight acting exclusively as a committee of the whole. Recent changes in public expectations underscore the need for a sub-structure that provides specialized expertise and more focused attention on key areas, particularly in those associated with financial controls. It is important to ensure a robust committee structure, well-defined missions for each committee, and assignment of members with sufficient relevant expertise.

Liberty examined board and committee structure, membership, governing document, minutes, and key decisions. Liberty applied the following criteria in evaluating committee structure and operations:

- Whether the board structure provides for sufficient utility focus and independence of operation
- Whether the committee structure comports with public requirements and the scope and complexity of operations

- Whether charter documents and understanding of the role, mission, responsibilities, and resources of each committee are comprehensive, well designed, and clear
- Whether board members have a lead role in determining committee membership
- Whether the skills and experience of committee members is commensurate with the mission, complexity, and workload requirements of each committee
- Whether the agendas and minutes of the committees reflect concern about the right issues and show substantial attention to them
- Whether the committees have sufficient control over their agendas and deliberations to keep them sufficiently independent of management.

CEO/Chairman Division

Separating the roles of CEO and board chairman provides one indicator of a commitment to board independence. There are methods to compensate where that approach is not taken, such as the creation of a lead director; however, they tend to be more difficult to administer successfully. Some companies operate under the premise that a largely outside board suffices to balance CEO/chairman and board power, or "clout." That may be true, but it depends entirely on the "constitution" of the particular board involved. It is too simplistic difficult to see board power as a function of voting numbers. A lead outside director or an outside chairman provides a more tangible form of counterbalance. Yet even that is not the only issue. An outside chairman can also serve as a kind of peer otherwise unavailable to a CEO in a corporation. Having another very senior person to use as a sounding board has been cited as a constructive means for providing a source of freewheeling, informal, and often confidential discussions with a non-threatening peer.

Liberty applied the following criteria in assessing the appropriateness of the company's approach to CEO/Chairman role division:

- Whether there has been a conscious and informed decision about combination of the CEO/chairman role, use of a lead director, and other means to assure a sound counterbalancing of influence and authority
- Whether the board and senior executive management structure at the holding company and utility level is sufficient to give utility needs sufficient weight and clout.

2. Findings

Overall Structure

SJI has three principal director groups. At the top of the governance hierarch sits the SJI board. It consists of 11 directors: nine outsiders, the chairman (retired CEO), and the current CEO. Two principal director groups occupy the next governance tier: SJG and SJE. Their members consist of the SJI directors split so that no director sits on both boards. Five outside directors and the two inside directors sit on the SJG board and the remaining four outside SJI directors sit on the SJE board. The SJE board oversees not only SJE, but all of SJI's non-utility entities. Non-utility operations fall under a number of different subsidiaries, but the SJE board deals with them collectively in a single meeting. The committees do not follow this structure; with one exception, they operate in common for SJI, SJG, and SJE. SJI, SJG, and SJE do have separate executive committees. The committees continue to operate on a combined basis, with one exception; the

boards of SJI, SJG, and SJE had met simultaneously in a common session. SJI changed this practice, because of the BPU's affiliate standards. Now, the SJE board meets first, the SJG board meets next, and the SJI board (which combines the separate membership of the SJG and SJE boards) meets.

SJI does not limit board size to a defined number, but sets a general standard of not exceeding the number that can function efficiently. The Nominating and Governance Committee consults with the chairman and CEO to determine what number of directors to recommend for the full board's decision.

The governance guidelines express a preference for decisions to be considered by the entire board. The board therefore does not assign a number of broad issues to a given a committee, but addresses them as a whole. Examples of such issues include CEO selection, succession planning, and dividend declarations. This approach has led to a committee structure generally limited to those required for the operation of a publicly owned company, with a few additions. Those committees include:

- Audit
- Compensation/Pension
- Environmental
- Executive
- Management Development Committee
- Nominating and Governance.

The governance guidelines state that the Audit, compensation/pension, and Nominating and Governance Committees shall consist solely of outside, independent directors.

Audit Committee

The committee operates under a charter that specifies its purpose in terms directly related to financial reporting and information, internal controls, and auditing, accounting, and financial reporting. The charter lists the committee's responsibilities as:

- Providing a source of independent and objective monitoring toe financial reporting processes and the internal control system
- Reviewing and assessing the efforts of the independent accountants and of internal auditing
- Providing for open communications among the independent accountants, financial and senior management, internal auditing, and the board.

The charter requires at least three members, all of whom must qualify as independent, and all of whom must have working familiarity with basic finance and accounting practices. At least one member must have accounting or related financial management experience. The committee must meet at least three times annually, and at least once per year separately with management, the director of internal auditing, and the independent accountants. The charter sets forth a 20-point list of specific duties and responsibilities addressing:

- Documents that the committee must review
- Recommending, overseeing, and consulting with independent accounts

- Financial reporting
- Process improvements in its areas of responsibility
- Ethical and legal compliance.

Compensation/Pension Committee

The charter for this committee describes its purpose as assisting the board in compensation of executives. The charter provides a list of 22 specific responsibilities, categorized by the committee's two principal functions:

- Develop and administer an executive compensation program that will attract and retain talent, and balance compensation and corporate growth
- Oversee pension plan and other post-retirement benefit assets that achieve targeted returns within specified risk tolerances.

The charter requires at least three members, all of whom must qualify as independent. The committee must meet at least two times annually. The current chair of the Compensation/Pension Committee has a legal background. He has served on this committee or its predecessors almost since his first election to the board in 1990, and became its chair in 2004. This committee determines executive compensation; the Nominating and Governance Committee has responsibility for director compensation. Both committees use the same consultant, who now reports directly to the board. The consultant reported jointly to management and the board before 2004. The committee excuses management when the consultant presents compensation analyses and recommendations. The SJI Compensation/Pension Committee handles compensation for all executives, whether the executives serve SJI, SJG, SJE, or a combination of these entities.

Environmental Committee

The charter for this committee, which the board created in April 2003, describes its purpose as overseeing environmental activities. Its responsibilities comprise review and evaluation of management's site remediation activities and oversight of any litigation related to environmental concerns. The charter requires no minimum membership or meeting frequency.

Executive Committee

The Executive Committee consists of the chairman, the CEO, the chairs of the Audit, Compensation/Pension, and Nominating and Governance Committees and the next two longest-serving board members. The SJI chairman chairs the Executive Committee. This committee's charter gives it the power, typical for such bodies, to exercise all the powers that the board as a whole may exercise. Where it does so, it must report its actions at the next full meeting of the board, which may revised them. The charter of the Executive Committee gives it other powers, which it has not met to exercise in 2003 or 2004. These additional powers include making recommendations to the entire board with respect to:

- Amendments to corporate governance documents
- Common stock dividends
- Long-term financial planning and forecasting
- Issuance and redemption of securities
- Entry of leases

- Capital structure
- Borrowings and other subsidiary financial matters.

This committee recommended committee chairs to the full board until early 2004. This function then moved to the Nominating and Governance Committee. Part of the impetus for making this change was director concern that the composition of the Executive Committee; *i.e.*, the inclusion of all current chairs, could tend to maintain the status quo. In addition, the change would mitigate any concerns about management influence on the selection of chairs for committees whose independence is a major objective. The currently posted corporate governance guidelines note that the nomination and governance committee undertakes its responsibility for recommending committee chairs in consultation with the chairman and the CEO.

Management Development Committee

The committee is effectively headed by the CEO, but functions without as much leadership structure as other committees. The committee's first role about years ago was to examine the management team and succession plan. On an ongoing basis, it is now looking at the management group as a whole, and defining needed and existing skill sets in order to assure that the management team's composition meets SJI's. This committee is also examining whether the company has the proper change management approach. Diversity is another goal the committee is addressing.

Nominating and Governance Committee

The charter for this committee lists three purposes:

- Making recommendations to the board on organization and practice
- Identifying director candidates
- Recommending changes in director compensation.

The charter provides a list of 10 specific duties and responsibilities required to fulfill these purposes. The charter requires at least three members, all of whom must qualify as independent. The committee has no minimum meeting requirements.

CEO/Chairman Division

SJI separates the CEO and chairman positions, with the former CEO holding the latter position. This alignment reflects a transition period, during which the board sought to keep the former CEO/Chairman (and current chairman) with company for a transition period following his recent retirement at the start of 2004 as CEO.

3. Conclusions

a. The overall board structure provides an effective means for assuring a focus on utility operations and relative independence of operations.

Utility holding companies seeking to continue their focus on utility subsidiaries that dominate operations and results face a dilemma. Too little separation in structure or membership among boards can lead to diminished utility attention. Too much can produce difficulties in integrating utility and non-utility strategies, plans, resource requirements, and activities into a cohesive

whole. There is no perfect solution and much depends on the ability of board members ultimately to *wear different hats* as they face important issues. Nevertheless, SJI has developed a split structure that supports an effective, continuing, and dominant focus on utility operations. It has separated its outside directors so that none sits on both the utility and non-utility governing bodies. Moreover, the SJG board members have relatively longer tenures than do the SJE members. Too much should not be made of structural as opposed to behavioral considerations in this regard. Nevertheless, this structure, and the separate meetings of the boards create an effective platform for allowing utility focus and independence.

The recombination of these same directors to form the SJI board similarly constitutes an effective means for allowing the proper integration of utility and non-utility strategies, plans, resource requirements, and activities into a cohesive whole.

b. The Committee structure comports with public requirements and the scope and complexity of operations of SJI and SJG.

The required committees exist and have responsibilities for the functions required of them. The use of an environmental committee reflects the importance of environmental remediation activities, litigation and complex insurance issues that face the company. The use of a Management Development Committee also reflects a substantial commitment to make substantial change and improvement in how it identifies existing and future management needs and structures a comprehensive performance management program.

c. The committee charter documents establish clear and proper roles, missions, responsibilities, and resources for each committee.

The documents make clear the responsibility of each committee and are notable in providing detailed guidance in identifying the specific activities that fall within those responsibilities. Membership and meeting requirements are clear and appropriate to the mission and activities of the committees.

d. The process of increasing the power of board members to take the lead in recommending committee chairs and members to the full board is in transition, but still shows indications of significant insider director influence.

The executive committee, which includes the two most senior executives and current committee chairs performed this function until recently. While it has nominally moved to the Nominating and Governance Committee, SJI corporate governance guidelines continue to specify a consultative role by the SJI chairman and the CEO in carrying out this role. The committee should not be so constrained in the exercise of this role. They may of course elect to consult with these two inside directors, or whomever else they consider appropriate.

e. The Executive Committee's charter gives it duties that should fall to the full board and that it appears not to exercise in any event.

The committee already has the power to act in place of the whole board when necessary. Beyond that power, its charter allows it, even where not so necessary, to alter governance documents, and make key securities and financial decisions. These powers fall more in the nature of a *super-board*, as opposed to an *emergency* board. The committee has not exercised these powers and it

does not appear to have plans to do so. The committee includes more than half of the outside directors, which makes so large that it no longer offers significant economy of operation, as compared with the full board. Moreover, despite its focus on financial matters, it excludes the recent director additions made to strengthen the boards' financial experience and capabilities. Their failure to be included results from the seniority bias in membership, which is limited to committee chairs and the two otherwise most senior directors.

f. The skills and experience of committee members is commensurate with the mission, complexity, and workload requirements of each committee

Members and chairs have the backgrounds necessary to carry out the distinct responsibilities of the committees on which they sit. Chairs also tend to have relatively lengthier tenures, which gives the advantage of their company experience.

g. The split in the chairman/CEO roles reflects an effective management succession process at SJI.

The continuation of the former CEO as chairman has allowed SJI and SJG to make an effective change in leadership.

h. The backgrounds of the current chairman and the CEO are complementary and help to assure continued focus on utility operations.

The current chairman's experience rests more strongly on the utility side of operations. The current CEO has significant SJG management and executive experience as well. He also served as President of SJE from 2000 to 2003, before becoming SJG's President. Their combination offers long-time utility leadership at the most senior levels of SJI.

4. Recommendations

2. Eliminate the requirement that the Nominating and Governance Committee take counsel from inside directors in recommending committee chairs to the full board.

3. Restructure the Executive Committee's responsibilities to remove the inference that it serves as the primary source of recommendations on certain governance document, securities, and financial issues.

D. Special Audit Committee Requirements

1. Audit Committee

Audit committees comprise standard and critical elements of board structure. Their operation is subject to substantial external requirements. Liberty addressed the Audit Committee generally in connection with its examination of board and committee structure (reported in Section C. of this chapter. Given the breadth of the external requirements, however, Liberty examined this committee in more detail, which this section addresses.

These committees must have the power to set their own agendas, to see the information that they determine is necessary, and to have control over the outside expertise and resources necessary to

providing proper oversight and control. The SEC has issued rules implementing SOX requirements related to audit committees:

- Committee members must be independent; they may not;
  - accept any consulting, advisory, or other compensatory fee from the company or any subsidiary
  - Be affiliated with the company or any subsidiary
- The committee must have direct responsibility for the appointment, compensation, retention and oversight of the work of the independent accountants
- The independent accountants must report directly to the committee
- The committee must adopt procedures covering the:
  - Receipt and treatment of complaints regarding accounting, internal accounting controls, or auditing matters
  - Confidential, anonymous employee submission of concerns about accounting or auditing matters
- The committee must have the authority to engage independent counsel and other advisers it deems necessary
- There must be adequate funding to support what the committee deems necessary for:
  - Compensating the independent accountants
  - Compensating any advisers to the committee
  - Ordinary administrative expenses of the committee.

The Public Company Accounting Oversight Board is a non-profit corporation that, pursuant to SOX establishes auditing and related standards. It has issued standards for what independent auditors should assess in examining the effectiveness of an audit committee. They include:

- Member independence from management
- Clarity of articulation of committee responsibilities
- Committee member and management understanding of those responsibilities
- Committee involvement with inside auditors and independent accountants
- Interaction between committee and key financial managers
- Raising the right questions with management to show policy and issue awareness.

The criteria that Liberty applied in examining the audit committee structure and operation include:

- Whether the audit committee has the required independence
- Whether the committee acts sufficiently independently of management
- Whether it has sufficient skills, experience, and compensation
- Whether the committee has direct responsibility for the appointment, compensation, retention and oversight of the work of the independent accountants.

2. Findings

Committee Member Backgrounds

A number of Audit Committee members have significant financial experience. The member designated as the financial expert is a chartered financial analyst (CFA), and has about 25 years in analyzing equities of major corporations, including substantial experience in financial analysis

of utilities. The newest member brings over 20 years of corporate experience in banking and in pension-fund investment management. Her experience includes employment, approximately 15 years ago, for a utility holding company that held Canadian electric and gas investments and ownership of General Water Works, a major U. S. water utility holding company. Her work there included development of strategic plans for utility operating companies and consolidation of financial results and performance of analyses, including variances between performance and budget.

Audit Committee Operations

The Audit Committee members engage in a number of communications outside the meeting processes. Committee members generally meet with the internal auditors at lunch breaks during meetings. There are plans to do the same with the independent accountants. Committee members have also held a number of teleconferences in the past year, addressing SOX matters and coming Audit Committee meeting subjects. These meetings have included personnel from the independent accountants, management, and internal audit. The Audit Committee chairman, the CEO, and the CFO jointly set Audit Committee agendas.

Liberty tested committee member awareness of key issues, and found the members informed. One member, for example, showed knowledge of the expenses of compliance with SOX and the normal auditing expenses. He showed familiarity with the routine reports on the status of compliance activities and current progress against schedule. Interaction with the independent accountants has increased, primarily through between-meeting telephone conferences. The committee chair has a goal not met yet to meet with the partner in charge for occasional lunches/dinners.

SJI's independent accounts recently presented SJI a comprehensive list of the role of the Audit Committee, including significant information based upon the PCAOB standards. The outside firm stressed the need for assuring the depth, competency, and role of internal audit in testing internal controls.

The Audit Committee has focused major attention on development of the resources and role of internal audit over the past two years. A primary driver for strengthening internal audit was to move its scope beyond financial audits. There had traditionally been no program or system audits. Discussion of the subject dates back at least five years. Another Audit Committee member reported that the adoption of SOX served as a significant stimulus to these efforts to strengthen internal audit. He noted, however, that this issue has been a matter of continuing interest and priority for the Audit Committee for some time, even apart form this external stimulus.

A major outside accounting firm, not the company's independent accountants, played a key role in enhancing the role of the internal audit function. The firm performed a May 2003 *Business Risk Assessment and Strategic Internal Audit Assessment*. This assessment provided recommendations for:

- An internal 2003 and 2004 audit plan that arose from a structured business risk assessment process

- Restructuring, improving, and enhancing the role of internal audit
- "Co-sourcing" internal audit's work, which would allow supplementation of SJI resources by outside firms as internal audit developed.

SJI has responded by increasing internal staffing and using the outside firm to "co-source" internal audit work. Internal Audit directs such work. The board generally gets in November a preliminary audit-plan proposal from the internal auditors, showing activities and percentage of hours spent by item. The committee then discusses and approves the plan by February.

The 2004 audit plan that followed these recommendations noted the retention of a Director, Internal Audit and a new staff auditor. The plan was to rotate the existing staff of two auditors to other departments, but to make them available to assist with internal audit activities during 2004. Recognition of the large workload expected in 2004 also came in the form of an allowance of $100,000 for retaining outside resources as necessary. Internal Audit did significantly supplement its resources in 2004 by using outside expertise, particularly in performing the controls testing required by SOX. When the 2004 audit plan came before the directors in advance of their November 2003 meeting it made clear that SOX matters would dominate 2004 work efforts. The plan made clear the degree to which SOX work would dominate 2004 work. The plan made the following time assignments:

- 57 percent of expected available hours to SOX
- 17 percent to assisting the independent accountants, special projects, and follow-up on prior audits
- 9 percent (3 percent each) to ASB, Millennium, and Marina matters
- 3 percent to the spin-off of ASB to SJESP
- 15 percent to six other specific corporate or utility projects

Non-utility risks have been a matter of attention. An outside examination of SJRG produced recommendations that SJRG adopt a number of best practices, and develop a system installation and update procedure. The best practices recommended for adoption comprised: Management agreed, and reported informally to the Audit Committee on its progress.

D&T reported to the committee in May 2004 the results of its annual audit work. The audit found no material weaknesses, all its opinions were unqualified, and the management letter noted only three areas of improvement. Management agreed with these three recommendations, agreed to report back to committee on implementation, and reported to Liberty the implementation of actions addressing all three areas.

- Accounting department review of significant contracts before execution
- A documented SJRG policy regarding its margin account
- Additional controls on the quarterly and annual accounts payable cutoff process

Independent Accountant Selection

SJI has not solicited proposals from other audit firms for at least the past five years. The chair of the committee considers it appropriate to assess periodically the independent accountant alternatives available. The board the potential for changing auditors about five years ago, and solicited preliminary information. The Audit Committee has recently begun to discuss auditor

rotation. The committee will address whether to solicit formal proposals from competing firms, as part of their next selection process in August 2005. Using another firm to assist in the assessment of internal audit gave them some exposure to the other large firm with a strong utility auditing business.

The firm that SJI has used across this period submitted in May of 2003 a proposal for providing audit services for related to that year's financial statements. The proposal estimated total fees at $269,500. The proposal showed the changes in fees (and amounts assigned to the various SJI entities) for recent years. A following table shows that information.

Table II-1. Summary of SJI Outside Audit Fees

Service	2003	2002	2001	200
Annual Audit Fees				
Total	$269,500	$240,500	$201,000	$189,000
Yearly Increase	$29,000	$39,500	$12,000	$3,700
Percent Increase	12.0%	19.7%	6.3%	2.0%
Breakdown of Annual Audit Fees				
SJI	$83,000	$79,000	$61,000	$60,000
Percent of Total	30.8%	32.8%	30.3%	31.7%
SJG	$115,000	$112,000	$110,000	$108,000
Percent of Total	42.7%	46.6%	54.7%	57.1%
SJE	$17,000	$11,000	$10,000	$7,400
SJRG	$35,000	$30,000	$14,000	$6,600
Marina	$15,000	$4,000	$0	$0
E&M	$3,000	$3,000	$4,000	$5,000
SJ Fuel	$1,500	$1,500	$2,000	$2,000
Total Non-Utility	$71,500	$49,500	$30,000	$21,000
Percent of Total	26.5%	20.6%	14.9%	11.1%
Other Services				
Pension Plan	$24,000	$22,500	$21,750	$21,300
Securities	$7,500	$7,000	$6,750	$6,500
Total	$31,500	$29,500	$28,500	$27,800
Yearly Increase	$2,000	$1,000	$700	$550
Percent Increase	6.7%	3.5%	0.0%	2.0%

3. Conclusions

a. **The structure and governing documents of the Audit Committee give it sufficient independence, and its operations have shown strong attention to short-and long-term company priorities.**

The members are all outside directors. The committee has been active in setting its agenda, determining its information requirements, setting the format required for outside and internal audit reports, selecting the independent accountants, determining audit fees, and limiting other work by the auditor. SJI's ability to comply with SOX requirements on a timely basis depended greatly on the active oversight of the Audit Committee.

Committee members do not accept any consulting, advisory, or other fees from SJI and they are not affiliated with any SJI entity. The committee may retain outside expertise at its own discretion. Committee members have sufficient informal communications paths and dialogue with the independent accountants, particularly given the plan for the chair to arrange meetings with the partner-in-charge on a recurring basis. It is important that the plan for these meetings be executed.

The Audit Committees' actions in the past years have shown engagement in the right kinds of issues and at the right level of detail. SOX compliance, the substantial strengthening of Internal Audit's capabilities, a more comprehensive approach to risk identification and planning, and the audit of controls at SJRG, SJI's energy trading subsidiary exemplify the Committee's engagement and understanding of controls needs.

b. The Audit Committee has sufficient skills and experience.

Membership includes a number of long-standing board members and newer members with strong financial experience.

c. The Audit Committee has direct responsibility for the appointment, compensation, retention and oversight of the work of the independent accountants.

d. There has not been a formal consideration of alternative firms for providing independent accounting services for too long a time.

The committee chair recognizes the value in rotation and in solicitation of bids for such services, but SJI has not done so for an extended period. Outside fees have been rising substantially. Certainly the added workload of SOX compliance has created more work. Nevertheless, periodic solicitation of proposals from other firms remains an important way for assuring that services are provided at best cost. It is not necessary that a different firm be selected, although periodic rotation of auditors has many advocates and for sound reasons. Liberty's concern here, however, focuses on demonstrating that cost is a factor, and the Company will consider it, to the point potentially of changing firms.

4. Recommendations

4. Formally solicit competitive proposals for providing outside audit services.

E. Composition and Selection

1. Summary of Audit Activities

Board Composition

It is important for the SJI and SJG board to have a workable size, a broad array of backgrounds, senior experience, numerical dominance by outside directors, de minimis interlocking, and freedom from significant conflicts of interest. This portion of Liberty's work examined the board's composition in light of these expected characteristics. The criteria that Liberty applied in performing this examination included:

- Whether the board has sufficient numbers of outsiders.
- Whether the board's mix of backgrounds is suitable to the needs of the enterprise.
- Whether there are adequate methods for requiring the disclosure of any connections that may compromise director independence.
- Whether the business and personal connections among directors, between directors and executive management, and between directors and the companies that form SJI display a material potential for compromising independence.
- Whether expansion in the skills and experience of board members over the recent past has been commensurate with increasing business scope and complexity.
- Whether board tenures reflect a sufficient emphasis on director rotation.

Member Selection

The process for selecting board members contributes directly to the creation of an effective mix of skills, experience, and behavioral traits, which is necessary to sound board functioning in major corporations with complex and varied business operations. Many see increasing the percentage of outside directors as a single solution. That notion, while constructive and important, cannot be viewed as sufficient. Tyco, for example, stands as a principal recent example of failed corporate direction and control. Its board consisted entirely of outsiders, with the single exception of its CEO. As significant as independence is the question of whether board members bring to the corporation a collective set of skills, experience, and background that is as broad as those of the corporation's business operations. It is also important to bring a diversity of roles.

It is also important to avoid a board with too strong a tendency to see all things the way executive management does. One way to mitigate this potential is to give the board, vis-à-vis executive management, a stronger role in identifying and recruiting candidates. This process-based means of encouraging independence should be complemented by a sufficiently broad view of what independence means. It is more than a matter of whether a director is employed by or has substantial business dealings with the corporation, although those are certainly important aspects. Interlocking directorships or personal dealings between the corporation's executives and directors, on the one hand, with board member's or their employers, on the other hand, are also significant. Even ties involving foundations or charitable organizations can, if too entangling, begin to compromise director independence.

Finally, while subtle, the ability of a director to challenge management without becoming antagonistic or routinely out of step with its proposals, plans, and actions is extremely important. A failure in the first place to select directors with the ability to do so in an environment that must remain collegial to be successful in the long run is likely to threaten important corporate or public values at the time they are most in jeopardy.

The criteria that Liberty employed in this portion of its audit work include the following:

- Whether the board takes a major role in the identification and selection of board candidates.
- Whether the candidate selection process is robust in identifying a range of candidates from multiple sources.
- Whether there is a thoughtful process for identifying what skills and experience sets are necessary and appropriate for the board.

2. Findings

Board Composition

The following table summarizes the backgrounds of the current board members.

Table II-2. SJI Board Member Backgrounds

Name	Background	Age	Tenure	Comm.
Billings SJG	PhD.; teaching and school administration, business-line and human relations development at Honeywell; currently a corporate and education consultant.	63	1983	Ex, MD, N/G, C/P(Ch)
Biscieglia SJG	37 years at SJG; from accounting/auditing to customer center manager, to commercial operations, to SJG president, to CEO, chairman of the board 2000-2004, consultant to Board/CEO	59	1998	Ex, Ev, MD, COB
Bosley SJE	Head of private firm; provides planning, financial management, insurance services to government, health care, financial services, insurance companies.	56	2004	A, C/P
Bracken SJE	Bank president	56	2004	A, C/P
Campbell SJE	Chairman, Salem, NJ floor covering manufacturer	49	2000	Ev, N/G, MD
Edwards SJE	Lawyer, state legislator, NJ Attorney General	59	1990	Ex, MD, Ev, C/P(Ch)
Graham SJG	Current CEO; accounting	46	2004	Ex, Ev, MD
Hartnett/ Devlin SJG	Former executive and equities strategist; equity portfolio manager; examining utility/energy sector	45	1999	A, C/P, N/G
Hughes SJG	10-term Congressman, contributor to offshore G&O legislation; ambassador to Panama; marina, warehousing, land development, 25 years of legal experience	71	2002	A, N/G
James SJG	College professor, sociology and higher education, analysis of complex organizations; college administration, president	60	1990	Ex, C/P, MD, A(Ch)
Raring SJG	Life-long Atlantic City area resident; operates plumbing/heating supply business (home building focus); large SJI stockholder	66	1995	Ex, A, N/G, Ev(Ch)

None of the directors holds a directorship with any other major, publicly-owned corporation. These directors sit on a number of charitable, foundation, and education boards. There is not significant overlap even among these memberships, except that a number of directors, including both inside and outside directors have significant connections with Rowan University:

a. Rowan University Foundation Treasurer
b. Former President of Rowan University
c. Rowan University Trustee
d. A former, long-time chairman and CEO, helped Rowan set up its first foundation.

Nine of the 11 directors are outsiders, but one of them has what one outside authority considers a significant connection with SJI. *Institutional Shareholder Services* (*ISS*) describes itself as the leading provider of proxy voting and corporate governance services, claiming more than 1,000 institutional and corporate clients. Its core business consists of analyzing proxies and issuing voting recommendations for some 28,000 companies. ISS considers one of the outside directors to be affiliated. This organization issued a recommendation that shareholders withhold votes for his election. The reason for the affiliation is that the director's employer provides banking and lending services to SJI. Another director's firm bid to become SJI's pension fund custodian in 2001. The firm won the business; it left the role later, after deciding to exit the custodian business. Another director is a senior executive with a corporation that has significant business relationships with both SJE and Marina.

SJI's *Corporate Governance Guidelines* express the policy of maintaining a board whose majority consists of outside members, as defined by the rules of the New York Stock Exchange. Rule 303A.02 of the New York Stock Exchange (as modified on November 3, 2004) provides that:

> *No director qualifies as "independent" unless the board of directors affirmatively determines that the director has no material relationship with the listed company (either directly or as a partner, shareholder or officer of an organization that has a relationship with the company).*

The rule notes that commercial, industrial, banking, consulting, legal, accounting, charitable and familial relationships may constitute material relationships; however, the ownership of even significant stock amounts does not, because independence from management is the goal of the rule. Certain specific factors disqualify a member as independent:

- Employment within the past three years.
- Receipt by the director or an immediate family member of more than $100,000 in direct compensation (apart from regular director compensation) in any 12-month period out of the preceding three years.
- Certain associations by the director or an immediate family member with the outside audit firm in the past three years.
- Employment connections within the past three years by the director or an immediate family member with another company where there is membership on the compensation committee of that other company.
- Annual receipt or payment by a director's employer of more than a specified amount (*i.e.*, the greater of $1 million, or 2% of that employer's consolidated gross revenues, if they exceed $50 million annually) within the last three years.

The NYSE has reduced the three-year look-back period for these factors to one year through 2005 roughly, in order to phase in their application.

Directors must tender resignations to the committee upon a material change in principal occupation or business association. The Nominating and Governance Committee then makes a recommendation for the full board's decision regarding acceptance or rejection a proffered resignation.

All of the outside directors, except for one who hails from Ohio, have their strongest geographic roots in the region (all in New Jersey, except for one from the Philadelphia and one from the New York metropolitan area).

The directors have a stake in the company as shareowners. The median for outside director share ownership is about 4,300 shares, which increases to about 4,700 shares if the directors elected in the last year are excluded.

Directors may not, absent the existence of unique qualifications, stand for election upon reaching the age of 72, but may finish an existing term beyond that age. Retirement at the required time is the nearly universal reason for director departure from the boards. This factor, however, has not currently produced a board over-represented by long-tenured directors, because of several recent retirements and an increase in board sizes. For the present, the boards draw strong benefits from the long tenures of many members, while having the benefit also of fresh insights from new members with strong capabilities.

Member Selection

The Nominating and Governance Committee has the responsibility to consider candidates for open positions. The committee has the responsibility to conduct an annual review comparing existing member skills and characteristics with those deemed appropriate. SJI's *Corporate Governance Guidelines* list judgment, diversity, and age as specific factors, among others.

The board has completed an annual profile of member skills and experience since 2000. This matrix allows directors to self-identify their professional experience by: age, sex, ethnicity, geographic region, business type (*e.g.*, corporate, government, education), profession type (more than 25 categories). SJI then aggregates the data to produce a composite board profile. The directors have used the information to identify skills and experience that would complement current strengths. One of the directors who led the effort to institute the board profiling process noted that a major purpose was to get an unbiased view of "who the board is," what their backgrounds are, and where there are unmet skill/experience needs. Age spread has also become one of the criteria to be applied in producing a diverse board. Another issue, at least to certain members, is increasing he geographical diversity of the members.

SJI used to have, but no longer has, a Stone & Webster person on the board. A number of utilities have had representation from major architect/engineering/construction management firms in this role. Approximately two years ago, a board member who also served in an interim executive role after the death of the then SJI CEO, also left. Prior to these two departures, SJI had significant utility industry experience on the board. Board members recognize the replacement of utility industry experience as important. Members feel that recent additions have brought substantial added financial expertise to the boards. Continuing Nominating and

Governance Committee examination of remaining needs has focused on energy and utility experience, particularly in the area of operations, recognizing that even the two inside members of the board came from the accounting and auditing groups of the Company. The current chairman cites specifically as needs the areas of gas operations and procurement, which form the most important aspects of utility operations.

SJI has used outside organizations to assist in director recruitment. For example, SJI identified a recently-elected director, first contacted by the SJI chairman, through the Forum of Executive Women in Philadelphia. One of the forum's goals is to promote women for corporate board memberships. SJI contacted the Forum looking for candidates. The SJI director first contacted this director, who then met with him and with the CEO. She met a month later with the chair of the Nominating and Governance Committee. She then sat in on a June 2003 board meeting. Her first appointment was to the SJE board in August of 2003. She joined the SJI board effective February 1, 2004.

A director elected somewhat earlier also had his first contacts with the chairman and other senior executive management representatives. He also met next with the chair of the Nominating and Governance Committee before appointment. This director joined the SJG board first, and then won election to the SJI board at the annual shareowners meeting the following April. This director sat in on SJI board meetings between joining the SJG and parent boards. A director with tenure in the range of five years first became acquainted with SJI through a director, at a time when SJI was looking for financial expertise. This director's first interview came with the chairman and a committee chair. The director then met with SJG's board members and senior managers. This director first came to the SJG board, and won election about a year later to a seat added to the SJI board.

Another director with similar tenure got his first SJI contact from the chairman. This director later met together with a committee chair and the chairman. This director first went on the non-utility board, and then was elected to SJI Board at the next shareowners meeting.

This more recent approach differs from historical practice. A director whose tenure is in the range of 10 years observed that his first contact came from the CEO, under a process that the director described as more "relaxed."

3. Conclusions

<u>Board Composition</u>

a. **SJI/SJG have boards are sized to operate effectively, and consist of sufficiently senior, experienced individuals.**

b. **As the board recognizes, adding utility industry experience to the boards is a matter of importance.**

c. **There are a sufficient number of independent directors on the boards.**

d. Consideration of potential director conflicts has not led to a compromise in the overall independence of the board, but the Company does not employ a sufficiently rigorous standard.

e. Even though no near-term changes are needed for this reason, the failure to provide for director departure other than through retirement is not a good policy.

<u>Member Selection</u>

f. Historically, director candidate identification was largely within the province of the CEO of SJI, but over recent years, the board has taken a more substantial and a sufficient role.

g. The adoption of a Nominating and Governance Committee and the structure and role it has adopted and carried out fully support the board's lead role in director candidate selection.

h. The boards of SJI, SJG, and its non-utility entities have expanded their skills and backgrounds over recent years.

i. The boards have added substantial financial and controls skills, but, as they recognize and are committed to addressing, continue to lack sufficient gas industry expertise.

j. The boards consist of senior, talented members with a collective predisposition for questioning and challenging management, while maintaining an atmosphere conducive to prompt, collegial, and effective decision making.

k. The boards use effective means for identifying interconnections that have the potential for compromising director independence.

l. The business connections between the enterprises where directors work and SJI entities have become more substantial; they have reached the threshold where concern should begin.

4. Recommendations

Because of the commonality in its conclusions addressing composition and member selection, Liberty jointly offers its recommendations on these inter-related subjects.

5. Make the addition of industry experience a priority in board member recruitment.

There is a shared belief that there is a need to add gas industry experience to the boards. Liberty shares this conclusion, and believes that adding such experience should be a priority. Experience in gas transportation and storage, trading, LDC operations, and state-utility regulation comprise the particular areas of importance. Over time, two members combining very substantial experience in these areas would be appropriate.

6. Emphasize more frequent rotation in directorships.

The best time to establish such a policy is when, as is the case now, it is clear that it carries no suggestion that any incumbents have remained too long or that the boards have an overabundance of long-tenured members.

7. **Adopt a lower threshold for the level of business dealings that may be permitted enterprises that board members are associated with, on the one hand, and SJI entities, on the other hand.**

F. Board and Other Committee Operations

1. Audit Guidelines

Agendas and Meetings

It clearly takes more time to be an effective director in the increasingly complex and high-risk world in which companies in the energy business operate. A superb structure filled with the most able people still needs hard and dedicated work to succeed. A board characterized by brief meetings dominated by routine action items, infrequent committee meetings, little time in ongoing training and education, and desultory attention to financial and operational information must eventually stumble, given enough time.

To some extent, increasing time demands have had the unfortunate consequence of making it more difficult to find candidates willing to spend the necessary time. Nevertheless, it remains important not to sacrifice commitment for credentials. A company should elect directors who can provide assurances that sufficient competing responsibilities will not prevent them from committing the person-month of effort (measured by 8 hour days) it may take to serve as a regular director and the perhaps doubled effort that will be required of members who serve on a labor-intensive committee such as the Audit Committee.

Liberty applied the following criteria in evaluating the time commitment shown by SJI and subsidiary directors:

- Meeting schedules and agendas should be commensurate with the work effort required of the board as a whole and its committees.
- Board members should prepare for meetings through review of materials and pre-meeting communications among themselves and, as appropriate with management.
- Meeting frequency and duration should support full and timely consideration of matters requiring decision and promote open-ended discussion of emerging issues and corporate strategy.

Executive Succession

Executive succession comprises another important board role. The CEO and other top executives need the flexibility necessary to deploy an executive and senior management team in which they have confidence and with which they can work effectively. It is also necessary for the board to have a CEO and top executives with whom they have a similar relationship. The existing senior management executive talent pool generally comprises the primary source for identifying future top executives. There needs to be an environment and a structure that allows top management the

flexibility to assemble its "team," while at the same time giving the board comfort that it has sufficient involvement in executive ascension, so that it will continue to have strong candidates for the positions with whom it will have the greatest interaction. Executive succession usually takes place through a structured process. It therefore becomes important to consider how and when the board should participate in it.

Liberty applied the following criteria in evaluating the board's participation in executive succession:

- Whether SJI uses a structured executive succession process that specifically incorporates director involvement
- Whether there is a balance between developing internal candidates and bringing in outside expertise to produce a senior executive team with which the board can work effectively.

Information and Communications

Providing directors with a steady flow of timely comprehensive financial and performance information and a clear, written description of major new plans, initiatives, or activities before the corporation commits to undertaking them comprises an important element of effective performance. It is important that directors have the ability both to set the agenda and to identify their information needs in order to assure that they obtain access to all the information that they need. Board members need to assure themselves that they get the information that they feel is necessary. Where a board has proper training and a suitable level and mix of skills and experience, there is little chance that they will send management after information that has little value.

It is proper for management to identify routine, standardized information packages, and to assemble what it feels is necessary to address special or nonrecurring issues requiring board attention. However, this approach needs to be accompanied by the ability of directors to request supplemental data and to receive it on a timely basis. Moreover, as no executive management team is perfectly prescient, a good indicator of effective board performance is a track record of the board actually using this ability, particularly when it faced particularly important or difficult opportunities, risks, or key decisions.

Liberty applied the following criteria in evaluating the process of supplying information to directors:

- Whether standard information packages for board and important committee meetings show sufficient scope, depth, adequacy, and usability
- Whether unique or major decisions have generally been accompanied by appropriate supplementation of standard board information packages
- Whether the board members have demonstrated a propensity for making supplemental information requests and whether management has made timely and sufficient responses to them.

2. Findings

Agendas and Meetings

The chairman and the CEO establish the board meeting agendas; individual directors may suggest additional items for inclusion. None of companies has made significant use of executive committees in the past two years. The Audit Committee met five times in 2003 and three times through August of 2004. It commonly held at these meetings separate sessions with management, the independent accountants, and the internal audit director. The Compensation/Pension committee met three times in 2003 and two times in 2004, through August. The Environmental Committee did not meet in 2003, but met twice in 2004, through August. The Executive Committee met twice in 2003 and it met once in 2004, twice with the Nominating and Governance Committee and once with the compensation and pension committee. Its principal role in the past several years has been executive succession planning. Those efforts began with the CEO, and then extended to other officers. The Nominating and Governance Committee met four times in 2003 and three times in 2004, through August.

Board Planning Role

The board participates every spring with management in a two-day planning retreat. This session provides education for the board and an opportunity for it to contribute the strategic plan. Chapter III of this report addresses strategic planning processes and activities in detail.

Separate Meetings of Independent Directors

The governance guidelines call for independent directors to meet in executive session twice per year. The chairman of the board presides over these sessions, provided that the chairman and CEO are separate persons. Otherwise, the chair of the committee responsible for the matters being discussed has presided. The guidelines also call for a session with the CEO following these meetings of independent directors. There have been two separate meetings of the independent directors in the past year. The Audit Committee chair led an August 2003 meeting that focused on SOX compliance and internal audit function and staffing. The independent directors spent an hour discussing these issues before a regular board meeting. The other session came before the May 2004 board meeting. The nominating and governance chair led that session, which focused on compensation. The directors plan to conduct three of these meetings per year. Governance will be the focus of the next one.

The directors do not participate in separate, informal gathering of outside directors. One member phones or e-mails committee chairs or other individual directors between meetings, perhaps two or three times per month. The directors used to stay at the same hotel, have dinner the night before, and talk among themselves, but such encounters have become less frequent.

Board Time Commitment

Liberty reviewed meeting schedules and agendas for the past two years. Members regularly received agendas and schedules in advance. The agendas contained sufficient detail, when combined with pre-meeting packages, to prepare members of the boards and their committees adequately. Liberty's interviews with board members confirmed that they consider thorough

review of pre-meeting materials to be important to effective operation. The members demonstrated familiarity with the standard monthly materials and they could recall key documents provided for their review as special issues came before the boards and committees.

SJI's boards and major committees have generally met six times per year over the past two years. Meeting lengths and minutes indicate an opportunity for full discussion of issues requiring immediate decision, as well as emerging issues, and major, ongoing work efforts (*e.g.*, SOX requirements) that have required ongoing board attention and oversight across defined, but reasonably lengthy periods.

Generally, the committees meet on Thursday and sometimes on Friday, prior to the commencement of full board meetings. The non-utility board meetings generally run from 8:30am to 9:30 or 10 am. The SJG board then meets alone, generally for an hour and a half or two. The full SJI Board then meets generally for an hour to an hour and a half. The boards generally finish meetings by 1:00pm. Reports from committee take much of the time at SJI board meetings. The reports address in some detail the information reviewed by the committees and the recommendations made to the board(s) as a whole. The committees meet in common; *.i.e.*, not separately for utility and non-utility boards, but their reports go to the parent, utility, and non-utility boards.

Executive Succession

The governance guidelines state that the board has responsibility for assuring an appropriate management team, including CEO succession. The guidelines state that the CEO should annually provide an assessment to the board of candidates who have the potential to fill all senor management positions. The guidelines state that the Executive Committee has responsibility for the boards' role in succession planning. The board as a whole, however, addresses CEO selection and succession planning; these issues do not fall under a particular committee for initial consideration. Other succession planning issues have been within the purview of the Management Development Committee. This committee has been for some time engaged in a substantial effort to enhance performance management and succession.

Information and Communications

The governance guidelines call for the submission of pre-meeting information at least five business days prior to board meetings. The guidelines also establish a policy supporting the distribution of presentations well in advance of meetings. The guidelines also offer board members free access to all members of the senior management team. Two directors noted that pre-meeting materials generally arrive on the Friday before meetings scheduled for the following Thursday (committees) and Friday (full boards), by express delivery. One considers the packages to be "quite comprehensive." Another noted that he generally as not seen reports for the first time at meetings; the important materials come in the pre-meeting packages.

Each year the board receives an organization-information document. It provides profiles and resumes for each officer and director, detailed organization charts for each affiliate, and a description of the purpose and membership of each management committee.

On committee chair noted that communications with senior management have become somewhat less frequent than the once or twice per week that used to take place. The current chairman, beginning when he was CEO, has sought to increase interaction between the board and senior management, changing the approach that had existed under a former, long-tenured CEO.

The pre-meeting packages vary in amount based on the agendas, but often run to two or three inches of material. The packages include routine monthly information and lengthier reports or presentations associated with specific agenda items. There is also a mailing in non-meeting months, but it generally contains fewer items.

3. Conclusions

a. **Board and committee meeting frequency and length have been sufficient to allow sufficient dialogue, interaction, thoughtful review, and informed decision making at SJI.**

b. **SJI has regularly issued agendas and schedules, supported by pre-meeting information packages adequate to support a full and complete discussion of matters requiring board attention and of background or emerging issues.**

c. **Board members demonstrated attention to reviewing prepared materials and preparing themselves adequately for coming meetings.**

d. **The board has focused on a sound set of issues, has closely followed major projects and schedules, and in general demonstrated strong *engagement* in performing their roles.**

e. **The board's plan for three meetings of the independent directors is sound, but the corporate governance guidelines do not conform to how it should operate.**

The chairman is not the CEO, but is the former CEO; he is not an independent directors. The guidelines should make clear that the chairman may participate only in the event that the chairman is an independent director. Liberty understands that this is the practice at SJI in any event. Moreover, the directors should not be required to report to the chairman following these meetings, but should be able to elect to do so at their discretion.

f. **Succession is not handled precisely as the corporate governance guidelines suggest, but has been conducted with focused and appropriate board leadership.**

In particular, the use of the Management Development Committee has broadened the board's involvement in an effort that is effectively integrating succession planning and performance measurement.

g. **The board has access to and makes use of information communication channels to support dialogue between the members and between members and management.**

4. Recommendations

Liberty has no separate recommendations in this area, but makes related strategic planning recommendations in Chapter II of this report.

G. Board Awareness of Key Issues and Information

1. Audit Guidelines

Member Knowledge of Key Issues

It would be helpful to be able to judge the quality of board operation through a post-mortem examination of how it reached decisions. The problem is that board minutes are a notoriously poor indicator of the specific dialogue (much of which often comes in preparation for, rather than at, meetings) and there is not generally an incentive for candidly sharing with outsiders (auditors or not) how decisions get made. Liberty did interview directors to determine how knowledgeable they appeared to be on key issues facing the industry, on prior decisions that they have made, and on important issues now working their way through the board/management dialogue and deliberation process. Liberty sought to determine whether the directors display sufficient knowledge of their companies' businesses, the gas industry, and regulation, to undertake their responsibilities on behalf of shareholders and utility customers.

Liberty applied the following criterion in assessing board awareness of key issues and information:

- Whether directors demonstrated conversancy with key industry parameters and issues, problems facing the companies comprising SJI, and knowledge of sufficient details to perform their roles effectively.

Utility Responsibilities

An effective utility holding company governance structure needs to consider overall corporate needs and to uniquely identify and respond to the specific needs of all subsidiaries. Because utilities have important public service responsibilities and monopoly franchises, their role in corporate governance requires special consideration. Liberty undertook this portion of the audit not per se to examine how well the governance structure generally and the boards of directors specifically respond to the needs of shareholders. The purpose here is instead to determine whether there has been an adequate focus on the service-quality, reliability, safety, continuity, and price requirements and expectations legitimately imposed on a family of enterprises within which utility service is provided. That said, it was also important that the audit not diminish the importance of shareowner interests, but rather to examine efforts to serve them, while, at the same time, paying adequate attention to public responsibilities.

The criteria that Liberty used to evaluate the adequacy of attention to public responsibilities included:

- Whether the board and executive management have a sufficient awareness of the tensions between utility and non-utility operations, and they have addressed them in designing and carrying out corporate governance.

- Whether there exists a sound process for resolving conflicts in goals, needs, and resource requirements at the board and senior executive level.
- Whether adequate consideration has been given to creating a structurally separate and sufficiently non-overlapping board structure for the utility.
- Whether adequate consideration has been given to creating a structurally separate and sufficiently non-overlapping senior executive structure for the utility.
- Whether the board and executive management structure provides a suitable structure and means for surfacing utility planning, resource commitment, or performance concerns, as well as timely and effective methods for resolving them consistently with public service requirements and expectations.

2. Findings

Member Knowledge of Key Issues

Director One showed a general awareness of utility industry competition growth and SOX requirement compliance, both of which Director One cited as examples of major issues recently addressed by the board. Director One also cited CEO selection and succession planning as important recent focuses.

Director Two showed interest and awareness of efforts by SJI to focus its non-utility growth efforts on areas closely related to its core competencies, as opposed to other utilities that had focused on diversification into areas new for them. This director also considered SJI's non-utility growth to be "measured," as compared with more aggressive efforts witnessed elsewhere. The director showed awareness of utility growth potential, its current contribution to overall corporate performance, and its targeted future contribution. The director thinks that SJI has been fortunate with respect to growth, due to the nature of the territory. Customers can choose others for supply, which is an "interesting" thing. The non-utility businesses have seen an ebb and flow; the director therefore finds it difficult to know where it is going.

Director Three conceded that the issues underlying the new Transco contract were not the director's strength. The director could not talk much about its purpose, design, or other key parameters. On the question of changes in the regulated business, this director noted has developed a "feel" that regulation is less constricting. There are fewer restrictions on what the Company can do. There has, however, remained accountability. The director says that the industry used to be much stodgier; success could be gained just by "following the dots." Now, the board must pay closer attention.

Director Four showed awareness that Transco was the main pipeline supply source, with Columbia also providing capacity. The director understood the SJG interest to be changing from secondary to primary delivery rights, which would provide for more security against interruption, and also increase delivery pressures. The director was aware of the magnitude of customer additions made in the past year, and that all major customer classes had contributed to that growth. The director understood the uncertain nature of competition development and supply pricing and availability to be important issues for the gas company, believing that these issues will eventually require federal legislation, because they are national, not state or local issues. The

director was also aware of SJE's decision to turn back more than 8,000 customers to SJG because it could not secure gas at prices needed to compete with the utility's tariff offerings.

Director Five recalled a number of occasions on which management has discussed the new Transco project with the board. This director showed familiarity with its construction and operating costs, and had a very general understanding of its purpose. The director also showed familiarity with the plan to serve an FPL generating unit, with Conectiv plans to shut down an oil-burning unit in the area, and with discussions about a new LNG facility in Philadelphia. This director was aware of SJG expenditures addressing *Integrity Management*. The director also knew of the recent 8,000 customer turnback to SJG by SJE, and expressed concern about whether SJE could withstand repetition of this phenomenon. The director has asked about the reasons for SJE's price advantage over SJG, but has not been able to completely understand management's responses.

Director Six considered the roughly 50 percent increase in gas prices since last year to comprise a major concern. The director noted that this increase has made competition development difficult. The director felt that prices might retreat to the $3-4 level, and expected significant growth in demand to continue, particularly in new residential construction. The director also showed familiarity with hedging goals and methods, and understood the risk management committee's approval requirements related to them. The director was familiar with the maximum guarantee reports submitted to the board, and understood that recent increases in guarantee levels arose primarily from increases in gas prices, rather than SJRG business volumes. This director considered Marina to be the biggest non-utility subject of board discussion on the board. The director was not aware that Marina was looking outside the SJI territorial footprint for business opportunities.

Director Seven believes that the company did well in the regulated environment, but saw some time ago that their traditional environment was changing. The company decided it had become necessary to become more creative and flexible in their thinking. The company has now positioned itself well to succeed in a "deregulated" environment. Marina's Borgata project is an example. This director feels that non-utility activities will bring an increasingly larger share of revenues in the future, with utility and gas revenues remaining relatively constant. The transition took a major period of tension, three to four years ago, to adopt a more entrepreneurial attitude. They still need to continue to develop that culture. Recently for example, the board discussed more ways that management is trying to incorporate a culture to be more flexible as new opportunities arrive. Director Seven saw the newspaper article on the turnback of 8,000 customers from SJE to SJG. The director is not concerned about that; residential energy and gas customers have fully "bought into" the competition process yet. Larger commercial or residential customers understand the benefits of it in terms of savings they could derive.

Director Eight has not seen any significant tensions between utility and non-utility operations. Having a non-utility side has helped the corporation continue to grow. The utility side is very steady, without the same growth potential. There exists both the choice of a stable, regulated price and the opportunity to shop. With gas prices high, some customers are able to move back to the regulated side, which provides flexibility. Financial results of the corporation show SJE and other subsidiaries have substantial growth in both sales and net income. This director expects

they will always see fluctuations in the price of energy. Whether people are conservative and want to stay at a set regulated price or are savvy and want to take advantage of potential changes is up to them. Consumers may become confused at times, but Director Eight thinks that it is healthy overall, especially for businesses where energy is a high portion of the cost structure.

Utility Responsibilities

The SJI board has the overall responsibility to make sure the utility has the resources to accomplish its goals. The SJI Board approves the capital budget plan, a large portion of which goes to utility infrastructure. The SJI board must consider non-utility needs as well. The separate SJG board allows for a governing body that focuses entirely on utility matters. As on member of the SJI board put it, the SJE (*i.e.*, non-SJG) members have confidence that the SJG board will ensure that the interests of SJG get full consideration in SJI board deliberations, when it comes to needed repairs and capital improvements. This member, although new, could think of no board denial of requested funds for the gas company.

The CFO coordinates management's capital planning efforts for SJE and SJG, which do their initial planning separately. The CFO ensures that together their requirements remain realistic. The capital budgets of each go first and separately to their individual boards, then to the SJI board, which has the final word on coordinating them and keeping them within the parent's means.

Management keeps the board informed of capital dollars required for non-utility growth by meetings focusing on capital topics or potential investments. One example of the board's early involvement was its request that management to seek a partner for the Marina Project. When that partner decided to withdraw, the board's response was to focus even more on projected returns, as it became clear that SJI would have to provide all of the investment dollars.

One of the SJG directors observed that the utility board delves into significantly greater detail on utility issues in the SJG meetings. This director has observed that the SJG directors take more time to query management on gas company matters. Management then summarizes for the non-SJG directors of SJI (at the subsequent SJI meeting) what transpired at the SJG board meeting, and identifies any required parent board decisions or deliberations involving SJG matters.

One director described the board's philosophy on capital allocation as one of routine and in-depth questioning. This director observed that management and the board members have focused on capital investments and operations at the subsidiary level, and down to the project level within subsidiaries. The board does not use a committee that focuses specifically on capital investments, but operates in the nature of a committee as a whole on such matters. In general all of the directors exercise an oversight role on capital investments at the holding company level. This director considered risk to be a principal focus of the board's consideration of capital decisions, citing Marina as an example. This director recalls significant persistence from the board in confirming that the Borgata project was a secure, profit-making venture before making large investments. At a more general level, this director noted that the Board focuses on each entity's likely contribution to the bottom line. Following commitments to non-utility activities, the board uses the risk management program to stay abreast of risk at the Parent and subsidiary levels.

The current chairman led efforts to get SJI out of its older non-utility investments. Those operations had grown on an ad hoc basis. The approach at that time was to begin anew in a more planned fashion, focusing on core strengths that would take advantage of demonstrated capabilities.

3. Conclusions

a. **The directors demonstrate a fairly strong and reasonably consistent understanding of the issues that SJI, SJG, and the non-utility affiliates have been facing in the past several years.**

b. **The directors showed awareness of major capacity, competitive structure, third-party supply issues, but as a group did not bring to them an evident confidence and expertise in addressing them at any meaningful level of detail.**

c. **Board structure and operations assure that SJG gets dedicated and specific attention; management routinely makes reasonably complete and detailed presentations on SJG specific financial and operational matters at board meetings.**

4. Recommendations

Liberty has no separate recommendations for this subject of its examination, but notes the related recommendation earlier in this chapter addressing the energy industry experience of the board.

H. Promoting Board Effectiveness

1. Audit Guidelines

Training and Education

An increasing number of companies recognize the importance of early training and of reinforcing it with continuing measures. A proper training and education process seeks to assure that board members have the background necessary to properly interpret key data, consider new opportunities and risks in light of corporate strengths and weaknesses, ask the right questions of management and interpret the answers properly, and give informed guidance to the corporation and its subsidiaries.

Liberty applied the following criteria in evaluating the training and education of directors:

- Whether there exists an identified list of orientation needs and information packages to assure new directors the necessary minimum background in all key areas of business activity
- Whether consideration is given to identifying and planning for ongoing training needs for more experienced directors
- Whether there is specific attention to requirements for director orientation and training regarding understanding and interpreting financial statements and data and key operating performance data

- Whether there is a program for promoting dialogue between individual directors and senior executives intended to give directors a direct source of background information necessary for exercising their responsibilities.

Performance Measurement

Management at all levels has become much more focused on routine and comprehensive performance measurement across the past decade or more. One major goal of such measurement is to instill a commitment to continuous improvement. It was historically less common to see structured evaluations of board performance, even though board performance is critical to corporate success. That gap has been closing. There is growing acceptance of the need for more than pro forma assessments of board and director performance on an ongoing basis, and that those assessments should be material factors in determining additional information and training needs and, where appropriate, in determining whether directors should continue to serve.

The criteria that Liberty applied in examining the issue of measuring board effectiveness include:

- Whether there has been a sound process for identifying the factors that executive management and board members consider to be the critical measures of success by senior executives and the board in governing the corporation
- Whether there has been regular and frequent assessment of performance by executive management and the board, using those factors
- Whether there is focused board responsibility for assessing the performance of the governance function in an organized, focused way.

2. Findings

Training and Education

Initial orientation for new board members includes a review of industry and SJI background, the code of ethics, the policy on buying and selling company securities, company locations, and organizational structure of all SJI entities. Members also receive updated manuals, called *Board of Directors' Handbook and Reference Material* subsequent to the annual meeting. This manual contains profiles of each SJI entity the by-laws, the board complaint handling policy, the corporate governance guidelines, stock ownership guidelines, the code of ethics, by-laws for each entity, the latest corporate reports (annual report, proxy statement, 10-K, quarterly report to shareholders, and prospectus), SEC rules and reporting requirements, schedule of board member fees and other benefits, and the *Corporate Director's Guidebook*.

A director elected in the past year participated, shortly after appointment, in two half-day sessions with senior executives responsible for finance, administration, SJG operations, marketing, and SJE. A director elected in 2002 underwent two days of orientation when beginning board service, including a half-day meeting with the executive in charge of utility gas operations. Members of management have made a number of educational presentations to the board between September 2001 and the present. Board member polling drove the selection of the topics, which included:

- Natural gas pricing
- Natural gas pricing and trading basics

- Natural gas markets for SJI companies
- Mechanics of a rate case.

A director confirmed that the board also strives to dedicate a portion of its meeting time to educating members on topics of interest to members.

SJI also uses outside training programs. It has sent directors to the one-day AGA/EEI program (spread over two calendar days), *Beyond the Board Room: Understanding the Energy Industry*, as a method for providing supplemental training and education for board members. Six of the nine outside directors have attended this program since March 2003. SJI has plans for an educational session as part of the March 2005 strategic planning meeting. Seminars by the independent accountants, the Directors Roundtable, and the Conference Board are among the alternatives now under consideration.

Performance Measurement

The corporate governance guidelines call for annual, full-board assessments of performance. The corporate counsel has the responsibility for facilitating this assessment by both the board and management. The directors use a comprehensive a self-assessment process annually. It includes the following modules, each of which the directors assess by responding to one question or a series of specific questions, each of which allows a series of graded, numerical responses (generally a least to most). The survey also includes an open-ended question seeking the identification of any areas of potential improvement. The modules of the board survey include:

Company Performance and Effectiveness

- Execution of company mission
- Company health
- Ability to capitalize on opportunities
- Ability to respond to market threats
- Clarity of strategy
- Achievement of market goals
- Achievement of financial goals
- Progress on organizational and human resource issues

Board Governance Effectiveness

- Focus on strategic issues and end results
- Guiding strategic outcomes
- Monitoring management outcomes
- Addressing independence, conflicts, encouragement of dissent
- Structure and delegation
- Advance information
- Effectiveness of meetings
- Staff presentations at board meetings
- Use of executive sessions

The survey processes uses separate questionnaires to examine the effectiveness of each of its committees. The questionnaires that form the basis of the evaluation pay only very general attention to the treatment of public governing bodies as stakeholders and they do not at all

address the special status of SJG as a public utility. The assessment, in fact, focuses on the SJI level and it does not separately address at all any issues specific to SJG's status as a public utility.

For 2004, the outside consultant who facilitated the self-evaluation process prepared a report summarizing the self-evaluation. This report also compared 2004 responses to those provided as part of the 2003 process. Nine days after the distribution of this report, the consultant facilitated a discussion at a directors meeting, at which issues of concern or potential improvements in board effectiveness were scheduled to be discussed for 45 minutes. The issues raised in the most recent self-evaluation focused on the articulation of a clear strategy, company positioning to address market threats, and the use of the Executive Committee (versus the Nominating and Governance Committee) to recommend committee chairs, a reduction in the interaction among directors. The Board generally expressed confidence in knowledge of and handling of SOX, independence, ethical, and financial issues, and in promotion of "loyal dissent."

SJI has achieved strong corporate governance rankings from ISS. Its core business consists of analyzing proxies and issuing voting recommendations for some 28,000 companies. The ISS analysis of a company's proxy includes what it terms a *Corporate Governance Quotient*. This *CGQ* reflects a composite scoring based on a large number of objective factors. The ISS voting recommendations for the April2004 annual meeting gave SJI a CGQ of 93.3, which means that, according to ISS, it "outperformed" 93.3 percent of companies in the Russell 3000 and 76.1 percent in the utilities group. Many of the factors measured by ISS in assigning its CGQ, while of substantial importance to those voting shares at an annual meeting, do not have substantial significance to meeting public service responsibilities. Nevertheless, the overall ranking of SJI does reflect first quartile performance against utility peers. The recent ranking compares to a 97.8 overall CGQ (exceeding 90.1 percent of the utility group companies) for the 2003 annual meeting.

3. Conclusions

<u>Training and Education</u>

a. SJI provides adequate orientation and appropriate updates of baseline materials to directors.

SJI uses a standard package of information to orient new directors and to update all directors each year. The package contains sufficient information about company structure and operation. SJI provides regular updates to this background material.

b. SJI uses an effective mix of inside and outside sources to provide director training and education.

Initial orientation includes sessions with key executives and managers and the board seeks to make in-house educational sessions an occasional subject of board meetings. Dialogue with management is promoted. SJI's extensive use of the AGA/EEI program is proper.

c. Gas-industry issues training has not been a strong focus at SJI, but plans to bring outsiders in to board sessions present an opportunity for adding this element.

An earlier section of this chapter addressed the addition of gas-industry experience to the board. The training and education documentation and outside sessions that SJI has provided have focused more on governance *per se*, than on the unique regulatory and operating characteristics of gas industry participants. The AGA/EEI program provides only a brief treatment of gas industry issues. It combines electricity and gas issues, devotes an hour to an overview of the gas industry, and allots an hour and a half to a combined treatment of federal and state regulatory issues.

d. Financial training has not been a focus, but SJI has added directors who already have a strong background in this area.

The addition of directors with extensive financial experience obviates the need for training existing members extensively. Consideration is given to identifying and planning for ongoing training needs for more experienced directors.

Performance Measurement

e. The SJI self-assessment process is well structured at the holding-company level, and the SJI board carries it out with diligence and on a timely cycle.

The process is comprehensive and the board carries it out annually. The board discusses results and uses them to identify and meet governance needs. The process uses an organized and specific set of factors, and relies upon measurement of responses.

f. The SJI self-assessment process's focus on operations at the holding-company level diminishes its effectiveness in assuring that the Board effectively evaluates its performance specifically with respect to utility operations.

SOX compliance has absorbed boards across the country for two years. SJI is no exception. The self-assessment processes to date address baseline issues, which has been appropriate during this period. There has not to date been a focus on how well the boards perform, however, in focusing on utility-specific responsibilities.

4. Recommendations

Training and Education

8. Incorporate gas-industry issues training into plans to bring outside experts to board meetings for educational purposes.

SJI already plans to use outsiders as sources of training and education at board meetings. The resources under consideration, however, appear to focus on governance and finance issues. These subjects have significant importance, but comprise topics otherwise addressed in significantly more detail than are gas-industry issues. SJI should dedicate a minimum of eight hours per year to structured, scheduled, and organized training on gas industry operations and

regulatory issues. The Nominating & Governance Committee should have responsibility for planning and assuring the delivery of such training.

Performance Measurement

9. **Add a utility-specific module to the annual board performance measurement process and use it separately for both the SJI and SJG boards.**

This module should tailor the structure of the one already in use to utility-specific issues, and should explicitly incorporate measures related to principal New Jersey requirements for utility service and operations. It should also recognize and respond to the different, but complementary roles that the SJG and SJI boards have with respect to utility strategy, structure, and operations.

III. Organization

A. Background

This chapter addresses the following topics:

- The corporate structures of South Jersey Industries
- The structure the principle subsidiary South Jersey Gas
- Services provided from the parent to the utility

B. Findings

SJI has a slate of officers, who may also be senior officers of subsidiary companies, heads of corporate functional units, or both. The following table lists the senior officers of SJI, SJG, the other active subsidiaries, and the functional responsibilities at AJG.

Table III-1. SJI Officers

SJI Position	SJG Position	Other Subsidiary Positions	SJG Functional Responsibility	Officer Level Direct Reports
President and CEO (Graham)	Pres & CEO	Pres, SJ Resources Pres, Marina Energy	All	Renna (SJR) Kindlick(SJG) Ruggiero(SJG,Marina) DuBois(SJG) Jackson(SJG) Walker(SJG, SJR, Marina) Lynch DePriest(SJR) Robbins(SJR, Marina)
Vice President (Renna)		Pres, SJ Energy VP, SJ Resources	None	Kelly(SJE) Robbins(SJE) Rodio (SJE)
Vice President (Ruggiero)	Exec VP & CAO	VP, Marina Energy	Corporate Communications, Administrative Services, Information Services, Customer Services	
Vice President and CFO (Kindlick) –	Exec VP & CFO		Treasury, Comptroller, Rates & Regulatory Affairs	
Vice President (Dubois)	Sr. VP		Gas Supply, Delivery & Sales	
Vice President (Jackson)	Exec VP & COO		Engineering, Pipeline and Distribution Operations, Technical Training, Safety, Regulatory Compliance	
Vice President, Corp Secretary & Counsel (Walker) –	Sr. VP, Corp. Counsel, & Secretary	Gen Counsel & Secretary, SJ Resources, Marina Energy	Environmental Affairs, HR, Labor Relations	

The following SJI employees lead units that provide services to SJG and that report to the senior SJI officers listed above.

Table III-2. SJI Service Groups

SJI Title	Reports to:	Other Responsibilities
Director, Marketing Planning & Forecasting (Scheufele)	VP, SJI (Renna)	
Director, Strategic Business Planning (Moschella)	VP, SJI (Renna)	
Treasurer (Clark)	VP & CFO of SJG (Kindlick)	
Ass't Corp Sec &Ass't Gen Counsel (Kelly)	VP, Sec & GC (Walker)	Corp Sec, SJ Energy
Director, Internal Audit (Lynch)	Pres & CEO, SJI (Graham)	

There are also a number of service groups that report to the senior SJG officers listed above are the following SJG employees.

Table III-3. SJG Service Groups

SJG Title	Reports to:	SJI or Affiliate Responsibilities
SR VP, Corp Comm. & Admin (Nickels)	EVP & CAO (Ruggiero)	None
VP, Engineering (Dippo)	EVP & COO (Jackson)	None
VP, Rates & Reg Affairs (Pignatelli)	EVP & CFO (Kindlick)	None
Controller (Kavanaugh)	EVP & CFO (Kindlick)	None
Treasurer (Clark)	EVP & CFO (Kindlick)	None
VP, Information Svcs (Finnigan)	EVP & CAO (Ruggiero)	None
VP, Customer Services (Bornstein)	EVP & CAO (Ruggiero)	None
AVP, Distribution Ops (Gerstel)	EVP & CFO (Kindlick)	None
AVP, Human Resources (Pennington)	Sr VP, Corp Sec'y & Gen Counsel (Walker)	None
Director, Gas Supply & Off-System Sales (Rundall)	Sr VP, Gas Supply, Delivery & Sales	None
Director, Sales	Sr VP, Gas Supply, Delivery & Sales	None
Director, Eastern (Fiedler)	AVP, Dist Ops (Gerstel)	None
Director, Western (Zuccarrino)	AVP, Dist Ops (Gerstel)	None
Gen Manager, Gas Control (Unger)	AVP, Dist Ops (Gerstel)	None
Manger, Environmental Affairs (Halter)	Sr VP, Corp Sec'y & Gen Counsel (Walker)	None

Some utility officers hold positions in subsidiaries, which means that some non-utility functions report to officers whose primary function is a utility function.

C. Conclusions

a. SJG is organized primarily along functional lines, which is a common utility industry approach.

SJG's organization structure includes five principal groupings:

- Engineering and Distribution System Operations
- Treasury, Accounting and Regulatory Affairs
- Customer Care and Administrative Support
- Gas Supply, System Delivery and Control, and Sales
- Corporate Services and Environmental Affairs.

b. SJI provides certain corporate level services to SJG, as is typical of holding company arrangements.

Services provided by SJI, the parent company, to SJG include:

- Marketing (the organization charts refer to the organizational unit as Market Planning & Forecasting, but in fact for SJG it only provides high level demographic analysis and targeted marketing campaigns)
- Risk Management
- Strategic Planning
- Financial Planning and Reporting
- Shareholder Services
- Internal Auditing

c. Some SJG officer positions raise issues of conflict, because they combine utility executive responsibilities with high level direction of subsidiaries that compete directly with or supply SJG.

The Director of Strategic Business Planning at SJI, reporting to an SJI Vice President, is responsible for collecting and compiling the individual subsidiary plans. He also has access to utility marketing plans and information. Liberty's companion reporting addressing *EDECA Affiliate Standards* addresses this subject in detail. That SJI Vice President also is also the President of SJE and Vice President of SJR. SJE directly competes with SJG in gas sales, and SJR directly competes with other wholesalers who attempt to procure off-system sales or capacity releases from SJG. Similarly the Director of Marketing also reports to the same individual. Marketing may be developing for SJG information, analysis, or campaigns of interest to any marketer doing or potentially doing business on SJG's system, including SJE.

Additionally, a Director of SJI who is also a Vice President of SJR reports to a Vice President of SJI who is also the Senior Vice President of SJG Gas Supply, Delivery & Sales. As stated above, SJR directly competes with other wholesalers who attempt to procure off-system sales or capacity releases from SJG. Liberty's companion reporting addressing *EDECA Affiliate Standards* also addresses this subject in detail.

d. The SJI and SJG complement of officer level positions appear to be reasonable for a company of its size and scope.

At the SJI level, the company has six officers reporting to the president CEO, four vice presidents, a vice president and CFO, and a vice president, corporate secretary and corporate counsel. At the SJG level, the senior officers include all but one of those individuals, albeit with somewhat different titles. Five senior officers report to the president and CEO, the Executive Vice President and COO, the Executive Vice President and CFO, the Executive Vice President and CAO, a Senior Vice President, and the Senior Vice President, Corporate Counsel and Corporate Secretary. SJG also has one additional senior vice president, reporting to the Executive Vice President and CFO.

e. SJI's And SJG's spans of control at the officer level appear to be reasonable.

Most of the reporting relationships at the senior and middle management levels of the Company fall within the 3 to 7 range for span of control generally considered reasonable for this type of organization. While many of the officers also have responsibilities for other, unregulated subsidiaries, the total still falls within that range and does not appear to be burdensome to the officers.

D. Recommendations

10. Realign officer functional responsibilities to avoid conflicts of interest.

Liberty has no separate recommendations from its examination of organization, but notes that there are related findings about conflicts in officer positions in its companion reporting addressing *EDECA Affiliate Standards*.

IV. Strategic Planning

A. Introduction

South Jersey Industries, Inc (SJI) is an energy services holding company that provides a variety of products and services through the following wholly owned subsidiaries:

- South Jersey Gas Company (*SJG*)
- South Jersey Energy Company (*SJE*)
- South Jersey Resources Group, LLC (*SJRG*)
- South Jersey Energy Service Plus, LLC (*SJESP*)
- Marina Energy LLC (*Marina*)
- SJI has a joint venture, Millennium Account Services, LLC (*Millennium*).

SJI groups these subsidiaries, including additional sub-segments, generally as follows:

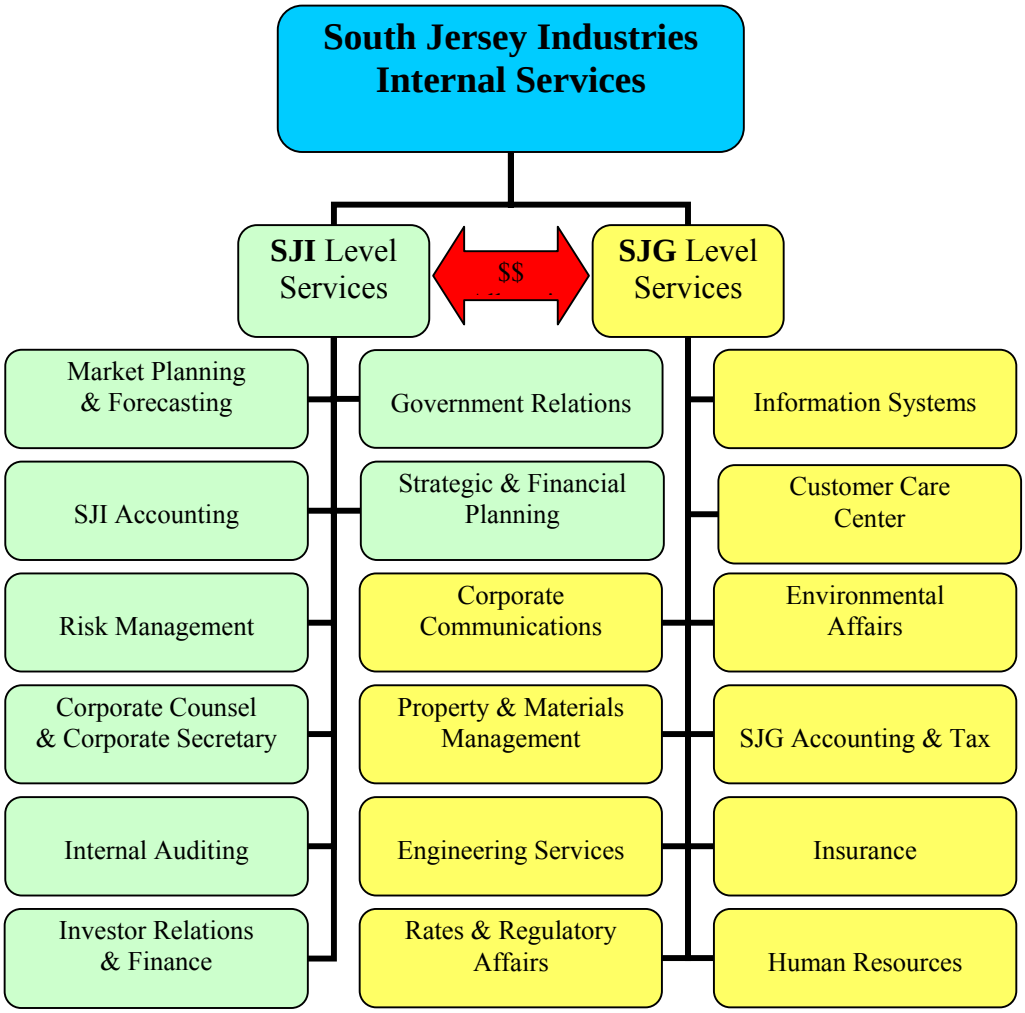
- SJG Businesses
  - Regulated Gas Sales and Delivery
  - Off-System Sales
- SJE Businesses
  - Retail Gas and Electricity
  - Energy Services
  - AirLogics
- Other Businesses
  - SJRG
  - SJESP
  - Marina
  - Millennium.

SJG, the regulated natural gas utility, is by far the most significant part of SJI, and serves rate-payers in the seven southernmost counties of Jew Jersey, sells natural gas and pipeline transportation capacity (off-system sales) on a wholesale basis to various customers on the interstate pipeline system, and transports natural gas purchased directly from producers or suppliers for its own sales and for some of its customers. SJE acquires and markets natural gas and electricity to retail end users and provides total energy management services to commercial and industrial customers. SJE also markets an air quality monitoring system through AirLogics, LLC, which is equally owned by SJE and GZA GeoEnvironmental, Inc., an environmental consulting firm. SJRG markets wholesale natural gas storage, commodity and transportation in the mid-Atlantic and southern states, and also conducts price-risk management activities. SJESP services appliances and was part of SJG until mid-2004. This repositioning of business segments is an on-going process within SJI for improving efficiencies, and will be a common theme throughout this strategy discussion. Marina develops and operates energy-related projects in southern New Jersey, and Millennium Account Services, LLC (*Millennium*) is a joint venture

investment with Conectiv Solutions, LLC (related to the Delaware LDC) and provides meter reading services to SJG and Conectiv Power Delivery in southern New Jersey.

SJI has grouped common services to achieve efficiencies, and these service groups perform services for the business unit in which they reside and for other businesses. The following chart shows this service structure.

Figure IV-1. Common Services Structure



SJI has continued to adjust its common-services alignment over time. Within the last year and a half, for example, Internal Audit moved from SJG to SJI, Financial Planning moved from SJG to SJI as Strategic & Financial Planning, and SJG External Relations divided to become Government Relations in SJI and Corporate Communications in SJG.

SJI had only five-year financial plans from 1996 to 2000. SJI then added integrated business and service plans to its financial plans. SJI's practice since 2000 has been to prepare a five-year integrated strategic plan every three years. SJI performs updates in the intervening years. These efforts include a brief update to the five-year strategic plan along with corresponding annual business and service plans. SJI also performs in August of each year a short mid-term correction

or update called a performance report. Each year since 2000, SJI also continued to do a five-year financial plan. SJI is considering changing the five years in the financial and strategic plans to three years.

B. Strategic Planning Framework and Process

1. Summary of Audit Activities

Liberty examined SJI's most recent five-year *SJI Strategic Planning Report, March 2003*, along with the *SJI Strategic Planning Update Report, March 2004*, the *SJI Mid-year Strategic Performance Report, August 2003,* and the *SJI Mid-year Strategic Performance Report, August 2004.* The *SJI Strategic Planning Report, March 2003* contained relevant information from the 2000 strategic planning report and its updates, and compared the planning assumptions in 2000 against what had actually happened from 2000 to 2003, in order to put into context the planning assumptions for 2003 and going forward. This approach allowed for an understanding of significant changes from 2000, before which no strategic planning existed, through the most current documentation reflecting substantial changes in the company's approach to planning.

The criteria Liberty used to judge the effectiveness of the strategic planning process were:

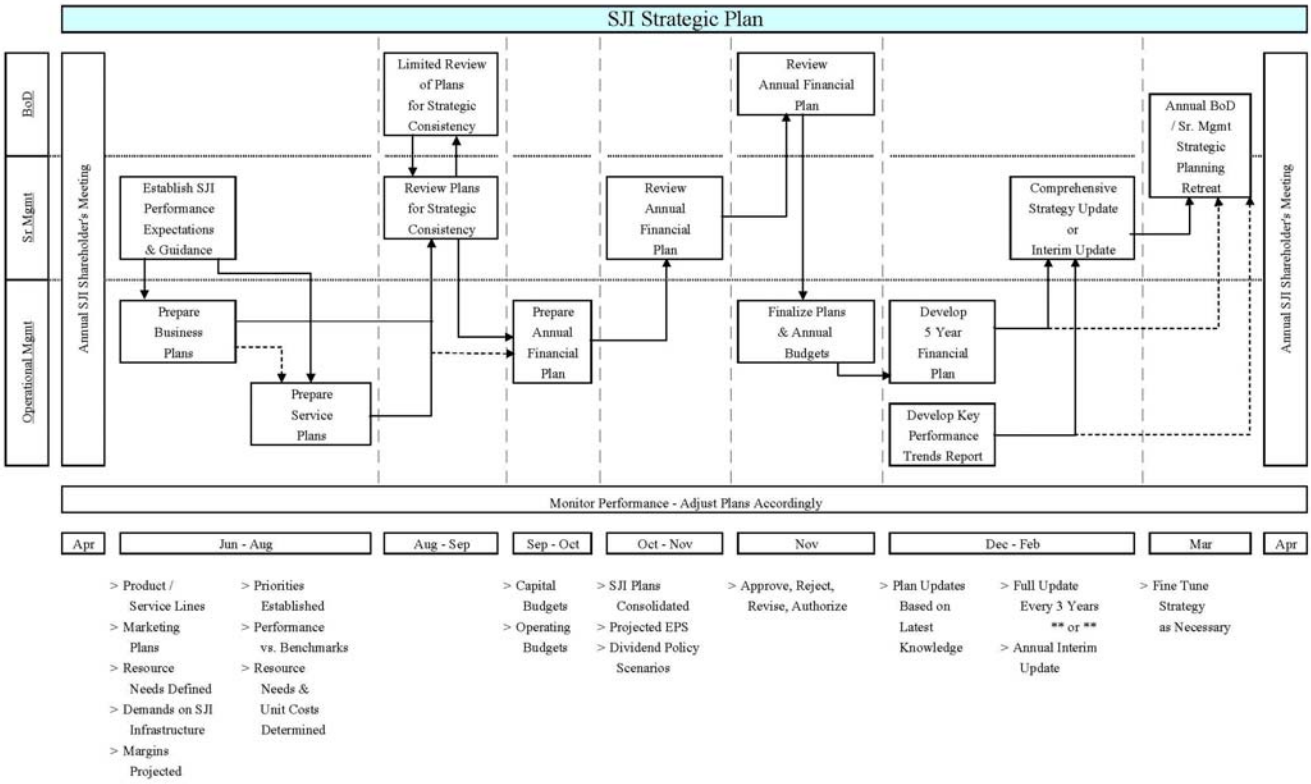
- Existence of an effective strategic planning process.
- Completeness and comprehensiveness of strategic planning framework used.
- Appropriateness of framework and specifics to SJI and its affiliates, including SJG.
- Broad involvement of executives and managers and the Board of Directors in contributing to the overarching corporate strategy, and appropriate broad involvement at the operations level for supplying appropriate strategic and tactics specifics.
- Successful implementation of the process.

2. Findings

Planning Process and Procedure Overview

The following chart depicts the comprehensive strategic, business, and financial planning process that SJI instituted in 2000.

Figure IV-2. SJI Strategic Planning Process



SJI organized the planning process to form a continuous cycle, with important inputs and analyses occurring throughout the year. The Director of Strategic and Financial Planning views the "new year" as beginning for planning purposes after the Boards of Directors review plans at their annual March *retreat*. SJI is now four years into its combined strategic and financial planning process. It now involves all of senior management at the strategic level, and has been expanding to include more individuals at the operational management level. The director believes that SJI is far along, but not complete in securing optimum managerial involvement. He considers the business plans to be in better shape than are the service plans. The service plans need more development of their financial portions, which SJI should be better able to support after full implementation of the new Lawson system (discussed in Chapter V. of this report).

The five-year strategic plans begun in 2000 have arisen from a typically classic flow, which considered business environmental influences, planning framework, and senior management expectations. Senior management has established those expectations in the period from June to August, which has served to stimulate plan development by providing expected performance and environmental and other guidance. Operations management uses such input to prepare their business plans and service plans. Each of the business units then determines the impacts of the environment and trends on their specific business, and, mindful of senior management expectations, priorities, and guidance, delineates their plans. Examples of considerations at this phase of the planning cycle include product and service lines, marketing plans, resource needs, demands on SJI infrastructure, projection of margins, establishment of priorities, performance *versus* benchmarks, and unit costs.

The August to September portion of the planning cycle includes review and discussion of these specific business and service plans with the CEO other senior executive management, to assure consistency and appropriateness. Following acceptance by the CEO, the boards of directors perform a limited review for strategic consistency. The short, annual mid-term correction or update on the current year takes place in August, and is reviewed with boards. This board review also includes discussions of progress against current five-year goals and the major factors influencing their achievement.

Operational management prepares their annual financial plans after the board review. This September and October activity includes the development of initial capital and operating budgets. Senior executive management reviews these annual financial plans in October and November. Examples of the factors considered in this review include consolidation of SJI plans, projection of earning per share, and various dividend scenarios. The consolidated and individual annual financial plans that result from this executive review cycle go before the appropriate board of directors, generally in November. There is a parallel and thorough calendar-year budgeting process that starts around August. The appropriate boards approve the capital budgets and review operating plans for the next year. The board approvals are for separate capital budgets for the utility and non-utility sectors. After November board approval, operational management for each business revises and finalizes their annual business and service plans, typically through dialogue between themselves and senior management.

Operational management develops their individual five-year financial plans between December and February, and prepares key performance trends reports on the basis of latest information. These plans and reports become, as appropriate, part of a five-year comprehensive strategic report (done every three years) or the annual interim strategic update (done in the off years). This information assists senior management in testing the performance assumptions underlying the existing plans. Senior management provides the five-year or the interim year update information to the board at the March *retreat.*

Some activities have on occasion slipped in relation to the typical schedule, but SJI has not failed to complete any of the activities that it has made part of its planning cycle. For example, the business units received permission to finalize their 2004 business and service plans by the end of February 2005, rather than in November 2004. This new date still left sufficient time for the rest of the work to be done prior to the March meeting with the boards.

The boards of directors get regular updates on performance against plans at their six regular meetings each year, in addition to the special day and a half strategy planning *retreat* in March. For the six regular board meetings, morning discussions were conducted in parallel for the SJG Board and the non-regulated Board. The board meetings include approximately 10-minute updates from each business unit leader. Chapter I. of this report discusses the performance information that the board members routinely receive in advance of these meetings.

Overarching Strategic Considerations

A statement from the executive summary of most recent five-year comprehensive strategic plan, done in 2003, succinctly summarized SJI's overall sense of where it stood strategically:

> *Since the last comprehensive update to the SJI strategic plan, our company has taken positive steps toward the aspiration we enunciated in March 2000 … to be the energy company of first choice for investors, customers, and employees.*

SJI has used what it calls three *Threshold Questions* to frame strategic considerations:

- Where should we put our efforts and why?
- What do we bring to the table?
- Do our capabilities suit our position?

SJI's response to its first question calls for significant investments in the core utility, developing value-added niches in the energy business, such as Marina, SJE Energy Services, Millennium, and AirLogics. SJI has emphasized over the last three years that the southern counties of New Jersey continue to offer a myriad of opportunities.

SJI's response to the second question included:

- Recognizing the value of their brands
- Corporate reputation
- Quality of products and services
- Industry position and relationships
- Possessing "know how"
- Learning to better appreciate and advantage the talents of staff and partners
- Becoming better able to conceive, design, economically offer, deliver, and manage a broader ranger of energy solutions to a broader range of customers.

Management's comments on the final question demonstrated a feeling of adequate progress to date, recognizing that SJI had added internal and external competencies to match market needs and deliver customer satisfaction, developed new competencies, and balanced product and service expansion with resources. Management in summary felt that it could achieve the expected five-year financial performance called for by the *2003 Strategic Planning Report*.

SJI has used vision, mission, and values statements. SJI's strategic vision is: to be the energy company of first choice for customers, shareholders and employees, and to be an energy industry leader in

- Growth, innovation, service

- One-stop energy shopping
- Entrepreneurial leadership, strategic alliances, empowered employee base
- Serving the collective good of customers, shareholders, and employees

SJI's Mission is: to create value through customer-focused energy solutions. This includes maximize long-term shareholder value through:

- Expanded menu of products and services
- Competitively priced, innovative, and high quality
- Improved growth of stock
- Value added provider of energy solutions
- Returns exceeding traditional regulation

SJI's Values are: to live up to commitments and conduct their business guided by the highest set of principles. This is summarized as commitment to customers, shareholders, employees and community with respect to:

- Integrity
- Highest standards of safety
- Innovation
- Performance
- Respect

General Environmental and Competitive Assumptions

The most recent comprehensive strategic planning document completed in March of 2003 reviewed the key environmental assumptions used in 2000 and compared them to the then current situation. The following list provides examples representative of the types of environmental, competitive positioning, and corporate culture assumptions discussed in preparation for the 2003 strategic plan:

- Deregulation at the retail gas and electric level unfolded far more slowly than anticipated.
- SJI growth is driven by economic vitality of the region, which is driven by jobs.
- SJI cited importance of having a better knowledge of markets and customers, and slowed industry consolidation.
- A possible obstacle cited was the lesser than anticipated importance of strategic business partnerships.
- SJI viewed M&A activity as a non-factor in the current energy industry, and viewed SJI as a potentially attractive consolidation candidate, but capable of competing on its own.
- SJI examined its competitive positioning by segmenting primary markets into Large Commercial & Industrial, and Small Commercial & Residential, and summarized each segment for competitiveness and strategies being used by competition compared to SJI's market strategy, market positioning, and comparative financials.
- SJI determined that it was better at branding, and remained competitive in the market, having outperformed the S&P Utility Index and its executive compensation peer group.
- SJI noted performance trends for customers, market share, and services.
- SJI cited the ongoing transformation of corporate culture characterization. In 2000, SJI wanted to change from a "reactive, process focused, lumbering" utility model to a

"proactive results focused and agile" entrepreneurial model, and that "true integration of strategic, business and financial planning process are in place for the 2004 cycle."

The *SJI Strategic Planning Report March 2003* contained abundant listing of national economic trend assumptions typical of strategic plans. Economic assumptions included readily available consensus projections items; for example, the US Gross Domestic Product, spending and savings rates, auto sales, interest rates, and the directional tone of the economy, and national labor trends. SJI gave special attention to New Jersey conditions, especially the Governor's "Smart Growth Plan" and concerns that it could curtail growth for residents, industry, and the casinos in the state of New Jersey. SJI's assessment for the energy industry and national, state, and local issues included, for example:

- National issues of tight gas supplies, possible consequences from Enron fallout, and low interest rates affecting corporate pension plans
- New Jersey regulatory, tax, and environmental issues.

SJI's list of internal issues included:

- Need for more city gate capacity and anticipation that third party transmission and LNG would make up the shortfall
- Infrastructure capital spending and permitting
- Challenges from the need for capital and investor confidence
- Importance of cost control particularly for health care costs
- Security, safety, regional social programs.

The SJI objectives and budget forecasts appear consistent with the stated economic and business environment indicators, but did not include statements about the numerical values in areas such as GDP or monetary policy, new housing starts, or jobs creation needed to underpin financial and growth objectives.

Market and Competitor Assessments

The strategic plan stated that 2002 saw the creation of a marketing function leading to customer-focused activities. SJI characterized its businesses, the type of customers served, competition, market strategy, and market position for the segments into which it divided its customers: Large Industrial and Commercial, Commercial and Residential, and Other Non-Retail Business Lines.

SJI listed the typical competitors by type, and summarized their strategies, strengths, and possible impacts on SJI, the last of which included for Large Industrial and Commercial, loss of firm gas sales income, margin compression, an increase in bypass, and loss of cross-selling opportunities, and for Commercial and Residential, increased pressure to spin-off utility services in addition to margin compression and loss of cross-selling opportunities. SJI documented its market strategy, and identified the kinds of employees, affiliate cooperation, and subcontractor relationships needed to make it work. SJI summarized its current position in 2003, and listed key changes in the size and shares of its operations in a number of markets.

Current SJI Strategy

The 2003 strategic plan included an assessment that the 2000 plan had served the company well, and that results in each year of its existence had exceeded forecasts. The 2003 plan also noted that the key elements of the 2000 plan remained largely in place, but that accountability for producing continued enhancement to shareholder value had moved to business and service line leaders. The 2003 five-year plan contemplated greater efficiency and effectives throughout the organization. SJI contemplated investing significant capital in utility infrastructure, and also providing funds to improve customer service, information and business process infrastructure. The plan assumed that the tools of applied technology would help significantly to mitigate labor costs, particularly in years 2005 to 2007.

The 2003 plan reflected an SJI belief that it has had gained greater market recognition and greater confidence in its capacity to assess and manage risk since 2000. The 2003 plan reflected a growing emphasis on non-utility growth, noting that:

> *Our success in the non-regulated area, coupled with the uncertainty and vagaries innate to the regulated sector continue to drive us to the competitive model. Said another way, the risk of competition is preferred to the risk of regulation.*

SJI pointed out the creation of Millennium and the petition to spin-off the Appliance Service Business from SJG to SJESP in this context.

The Balanced Scorecard

SJI introduced what it termed the *Balanced Scorecard* in 2002, to provide a better link between individual and corporate performance. The 2003 Strategic Plan offered a *Balanced Scorecard* draft for business units to complete and include in their business and service plans. A central goal of this scorecard is to recognize and monitor all the key drivers of business success, not just financial data or some other narrow metric. SJI's *Balanced Scorecard* encompassed four areas to be monitored: Financial, Customer, Internal Process, and Leaning & Growing. Each area includes three or four specific metrics.

Corporate Culture

SJI's strategic planning explicitly cited the importance of internal development in serving its corporate strategies. The current plan cites three years of proactive steps to facilitate a change to the corporate culture. While acknowledging the need for significant additional work, the plan noted that leadership had gained a better understanding of what mattered to them and their respective constituencies. The plan cited the importance of effective communications with the work force and its formal and informal leaders. The plan specifically noted progress in assuring better and more frequent communication with employees to achieve buy-in, and alter individual and team behaviors and performance. The balanced scorecard and an emphasis on managerial and staff training and development characterized the Company's current approach. The plan also noted that an ongoing examination of policies, procedures, and decision-making and approval levels would enhance this process.

Board Review of Planning Documents

It was intended that the *Recommendations and Conclusions* section of the strategic plan, be written after meeting with the Board. Liberty observed that this section was blank. The Director of Strategic & Financial Planning said that after discussion in March, the Board accepted the Strategic Plan and its companion documents as written.

Plan Updates

Liberty reviewed the three major updates to the 2003 plan. The *SJI Mid-Year Strategic Performance Report, August 2003* included:

- Economic environment updates (*e.g.,* Federal monetary policy did not increase interest rates, the economy was recovering slower than expected, a significant increase in natural gas prices was expected)
- Business updates of a page or two for each business; examples of key strategic issues discussed included the SJG base rate case, gas supply, the Lawson accounting system project, and progress on SJI's culture change initiative
- Key financials update and Balanced Scorecard (*i.e.,* listing of financials updates along with status and projections on scorecard).

The *SJI Strategic Planning Update Report, March 2004* presented a similar, but briefer report as compared with the August 2003 version. It also provided some 2002-2003 historical information, confirmed a 6-7 percent EPS growth rate, and noted that the 2003-2008 compounded annual growth rate was percent. The four-page *SJI Mid-Year Strategic Performance Report, August 2004* announced that SJI expected to achieve or exceed its 2004 financial plan. This report noted that the key strategic issues facing SJI today were those related to SJG issues; *i.e.*, regulatory affairs, customer growth prospects, and labor relations. This report commented favorably on the completion of the base rate case and the securing of approval to transfer the Appliance Services Business from SJG to a non-utility affiliate.

3. Conclusions

a. A generally effective strategic planning process, begun in 2000, exists at SJI.

This strategic planning process was instituted in 2000 to integrate with the already existing five-year financial planning that SJI was doing annually. The intent of this strategic planning process is to integrate comprehensively the strategic and business, service, and financial plans, and to do a comprehensive five-year plan every three years, annually updating in the off-years, and providing a mid-year performance report each year. Doing a comprehensive five-year strategic plan every three years for a five-year time span, with off-year updates, is one reasonable approach. Each unit, including SJG, prepares its own plans. This approach allows for detailed focus on utility needs from the earliest stages of the process.

SJI uses a classically framed process in examining its economic, political, and competitive environment and in attempting to determine how that environment will change going forward and identifying the issues. SJI makes the typical use of mission, vision, and value statements, and segments its business lines, views customer needs, performs a strengths/weaknesses assessment *vis-à-vis* its competitors, assesses its competitors strategies, and determines the strategies SJI

needs to employ to compete successfully. The broad range of economic indicators cited were the ones typically available from Federal agencies and independent organizations like The Conference Board or financial houses. Incorporating corporate culture, relationship building, credibility, branding, and visibility dimensions as plan elements demonstrated the appropriately broad and comprehensive view that SJI takes of planning needs and uses.

b. SJI uses a generally appropriate time horizon for planning.

Currently, SJI is using a five-year planning horizon for both the financial and strategic planning. Anything from a three-year to a seven-year time horizon is reasonable for the type of comprehensive strategic process SJI was using. If SJI decides to change to a three-year planning horizon, as they are considering, it will remain important to perform at least a five-year-trends assessment, coupled with a consideration of broad strategic and financial implications to guard against the possibility becoming too short-term focused. If SJI decides to change to a seven-year planning horizon, it will need to remain cautious about the degree of reliance that can be placed in detailed information for the out-years. For such long cycle, at best, only general directional trends can be discerned, and those would have ever increasing ranges of uncertainty as one moves outward in the time line.

c. Plans do not provide a quantified sense of the dependence of targeted business results on important underlying national, regional, local, and internal factors.

Cause and effect relationships were given for "situational" items, such New Jersey's *Smart Growth* initiative and the pace of deregulation, but not for the economic indicators, except in the broadest directional sense; *e.g.*, a *good*, *recovering*, or a *weak* economy. The SJI objectives and budget forecasts appeared to be consistent with the stated economic and business environment indicators, but there was no linkage between expected results and what numerical level or directional momentum key indicators needed to show to support those results.

d. SJI's current strategic planning documents tie well to predecessors, which helps to establish continuity.

The 2003 strategic planning document contained sufficient information from the 2000 document to explain what had happened with respect to previous assumptions, activities, results, and the reasons for performance variances. One can learn from SJI planning documents and from the efforts made to discuss and evaluate them inside the company that SJI undertakes a significant and appropriate effort in using past experience in improving the effectiveness of assumption projects and plans going forward.

e. The content and detail of SJI's strategic planning documents makes them particularly useful to business unit management and staff *at the present time*.

The "*tutorial*" quality of the strategic planning documents provides material assistance to operational managers and staff in guiding them in the development of their own business and service plans. Liberty also found particular strength in the use of the three overarching questions that SJI planning documents ask and answer; *i.e.*, where should SJI place their efforts, what does SJI bring to the table, and are SJI's capabilities sufficient, are a good set of questions to ask continually.

Liberty found the vision, mission, and values statements to be realistic and appropriate. In addition, the documents show a good understanding of the key strategic issues faced by SJI, and a reasonable understanding of SJI's capabilities and how the SJI businesses fit into the marketplace. The documents exhibited good articulation of SJI's key strategic issues along with what SJI businesses were supplying to what parts of the market, and thoughtful considerations of where opportunities might exist.

As SJI develops more experience with the integrated strategic, financial, business, and services planning process, Liberty would expect the documents to become more focused and crisp and less tutorial and descriptive, and to employ an exception reporting approach for the off-year updates and mid-year progress reports. An evolution to briefer and crisper documents will enable a clearer focus on the strategy and strategic issues. In addition, unless the business and the business environment change so drastically as to make exception reporting meaningless, an exception reporting approach can be an efficient way to prepare updates and mid-year reports, as well as to focus attention on what actually did change, and where it is important to concentrate.

f. The planning documents indicate a general assessment of customer classes and the general characteristics of competitors, but no in-depth study.

All of the competitor information within the strategic plan was qualitative and general, characterized by statements that the competitor existed, brief descriptions of the competitive posture taken by that class, size or type of competitor, no projections for individual competitors' possible future actions, no insights to how their CEOs and senior management make decisions, and no assessment of these competitors' respective customers, suppliers, resources (other than size), and potential vulnerabilities. The type of information included in the strategic plan was typical of the type of descriptive information anyone working in the area would learn over time through observation, and not typical of the in-depth, specific information obtainable through diligent market, marketing, and competitive intelligence research organized with strategic intent.

Similarly, the customer information within the strategic plan was also qualitative and general. It, too, was characterized by brief summaries of broad classes of customers and their collective nature. This has value to a point, but is not as helpful or valuable as having specific data on specific potential customers to target so that specific actions can be taken. Various individuals probably know additional competitor and customer information, but a systematic approach for targeting potential specific customers and competitors was not present.

g. SJI involves an appropriately broad range of operational management in strategic planning, but director involvement appears to take place at a very high level.

It is clear that senior SJI management was involved with the strategic planning process. The specificity of the plan in addressing SJI's various businesses demonstrates significant involvement by operational management as well. This breadth of involvement supports SJI's sound endeavor to make operational management more accountable. The Board, however, did not make any comments or recommendations to the voluminous documents it examined. Liberty's interviews with board members also did not indicate that detailed examination of planning or plans is a major focus of directors.

h. Liberty saw no formal contingency planning, rolling-forward 12 or 18 month forecasts, or ranged scenarios (optimistic-pessimistic).

No formal contingency planning showed in the strategic planning documents. The Director of Strategic and Financial Planning stated that contingency planning was done *ad hoc* as part of monthly meeting on results and forecasts. He also confirmed that forecasts are presented to the end of the year, rather than being a rolling forward 12 or 18 month forecast. The plans also do not show how baseline targets or results will or should be affected by variations in the key assumptions underpinning them.

i. SJI's peculiar consideration of utility regulation as risk has led it to a number of questionable actions about structuring resources to provide utility service.

Utility regulation certainly has a substantial impact on the operations of companies such as SJI, which gain both substantial benefit and burden from having a public utility as their most significant component. What Liberty finds peculiar in SJI's thinking is that a preference for non-utility operations should serve as a cause for unilaterally taking core utility functions and move them to non-utility status. This is what SJI did in the creation of Millennium earlier and it is what it has done in the formation of MSI Northeast. Chapter II.G. of Liberty's companion reporting on *Cost Allocations and Affiliate Transactions* discusses these circumstances and affiliates in detail. Liberty recommended there that SJI undertake no further efforts to transfer utility-type services for SJG to an affiliate.

4. Recommendations

11. Focus on the specific economic environmental indicators most meaningful to SJI and its affiliates, and attempt to ascertain cause and effect linkages, along with numerical levels of economic indicators needed to underpin specific business objectives or growth targets.

The economic indicators cited were the ones typically and universally available. It is not clear how SJI plans derive benefit from the use of indicators that have no clear relationship to SJI's businesses, for example, new car sales. It would be better to focus on a small number of key indicators that SJI can use meaningfully and where possible quantifiably in making projections and setting targets.

SJI planning personnel in concert with the business unit personnel should move toward determining what numerical level or directional momentum specific key national indicators, such as GDP or monetary policy, must have to support projected results. The same should be done in determining what quantified levels in key regional and local indicators, such as new housing starts or jobs creation are needed to underpin specific business' financial and growth objectives.

SJI should also use analysis of this type to help establish optimistic and pessimistic financial and growth objectives. Inclusion of a range of scenarios will sharpen operational management's appreciation for cause and effect relationships and force a deeper and more thorough assessment of the business environment and potential risks and opportunities.

12. Include formal contingency planning, and generate 12 to 18 month rolling-forward forecasts to enhance the ability to assess the realism of future expectations.

Formally identifying the greatest risks and identifying possible means for addressing them is a component of strategic and business planning. Use of a 12 to 18 month rolling forward way of viewing forecasts, rather than simply viewing the current year, can be helpful in assuring that management continues to spend focused attention on *looking over the horizo*n even when near the end of the *life* of any particular planning document.

13. Selectively conduct more in-depth competitive assessments.

Understanding how individual competitors or how classes of competitors behave provides useful information, but does not replace in-depth competitive assessments or knowing how an important competitor or customer thinks and makes decisions.

14. Encourage more detailed director involvement in the planning process and its key documents.

The March retreat is appropriate. Director involvement, however, must remain more than a matter of sign-off on management-created plans and documents. SJI has a dynamic and capable board. The Company needs to assure that it takes early input from its directors at a time when discussion is not constrained by the use of documents that have too final an air about them. At the other end of the process, the board's final review of plans should not become so abbreviated that it fails to allow for a discussion of important internal and external changes happening during the planning cycle or to allow for assurance that plan details conform to broad directions and strategies that the board has helped to develop at the front end.

15. Assure that the financial plans do not *lead* the strategic plans.

SJI's planning process is a continuum, and the Director of Strategic & Financial Planning thinks of the new cycle as beginning just after the boards have given their input in March to the strategic, financial and business plans. However, the schedule has the five-year financials being prepared just prior to the five-year strategic plan or annual update. This sequence has the potential for creating the sense that the five-year strategic plan's purpose is to put verbiage around the five-year financial plan. Moving preliminary five-year strategy plans into an earlier portion of the cycle, for example in the August-September period, after the business and service plans have been prepared, but before financial plans are done may avoid inadvertent constraints on the openness of thinking that should guide plan development.

C. Business and Service Plans

1. Summary of Audit Activities

Liberty examined in detail the 2004 *Business Plans* and *Service Plans* in order to assess how the businesses and services interpreted, developed, and integrated the corporate strategic planning intent, guidance, focus, and metrics into their individual business and service plans. SJI completed its second comprehensive strategic planning process 2003. Liberty therefore expected there to have been opportunity for the 2004 business and service plans to be largely in-step with

and reflective of the strategic plan guidance. The 2003 strategic plan in fact notes that, "True integration of strategic, business and financial planning process are in place for the 2004 cycle."

The criteria Liberty used to judge the effectiveness of the strategic planning delineation and performance throughout the businesses and service lines were:

- Evidence that the business and service plans reflected the philosophy, scope, specifics, and guidance from SJI's strategic plan.
- Evidence that the business and service plans tailored and augmented the input from the strategic plan to suit their individual situations and needs.
- Evidence that the specifics articulated in the business and service plans were thoughtful reflections of each business, and were using information and considerations specific to that business or service line.
- Evidence that a breadth of operational executives and managers were involved with the development of their own business and service plans.
- Consistency of implementation throughout the corporation.
- Successful implementation of the process.

2. Findings

Use of SJI Planning Assumptions and Framework by the Businesses

As was true for the strategic plans, Liberty found that the individual businesses did not generally offer specific links between the economic indicators and the projections for their business except in the broadest directional sense. Liberty did find some linkage between regional or local business and competitive conditions and situations to their past, current and anticipated performance; for example:

- Announced casino growth in Atlantic City presenting new opportunities for Marina
- Strong housing starts being opportunistic for additional utility customers
- Additional commercial building being opportunistic for SJE.

Liberty found evidence that the business units took seriously SJI's corporate-wide focus on how to treat customers and employees, and on where new opportunities might be, for example:

- Internal groups were more sensitive to their service dimension (*i.e.*, their work for affiliates)
- SJG segmented customers to better understand particular characteristics and needs, to better serve existing customers, and to gain new ones
- The success of the Borgata project had led to additional opportunities and gained a team of subcontractors seeking out new Marina opportunities.

Unit business plans reflected the SJI strategic plan's statement of mission, vision, and values. SJG adapted the mission statement to its Regulated Gas Sales & Delivery operations, for example.

SJI sought to apply its Balanced Scorecard used throughout the businesses, to establish specific objectives for each business, and to measure unit performance. Only three, all of them with significant utility connections, included balanced scorecards:

- SJG (for Regulated Gas Sales & Delivery, but not for Off-System Sales)
- SJESP
- Millennium Account Services.

The scorecards for these three businesses contained many quantitative metrics. They also demonstrated a focus on making internal and productivity improvements, providing better service to customers, acquiring new customers, and producing higher margins and income. Although the remaining businesses did not use an explicit Balanced Scorecard, they did generally describe their business, including varying degrees of market and competitive information, and their nearer term plans (sometimes with specific goals), and presented summaries of their financial plans. SJG Off-System Sales, SJRG, and Marina even provided brief summaries of possible future scenarios.

SJG Regulated Gas Sales & Delivery Business Plan

The business plan states that SJG expected to provide more than 75 percent of the earnings potential for shareholders of SJI. SJG states its business plan is driven by an innovative, efficient, customer-focused management style to motivate an empowered workforce. SJG's Gas Sales & Delivery Scorecard does not have measures for all of these characteristics. SJG summarized their four challenges for this part of their business as:

- Increasing financial performance by being a leader in cost structure
- Meeting/exceeding service delivery expectations of customers
- Effectively managing human resources to meet operating needs of the future
- Supporting Gas Sales by enhancing the work force's level of knowledge, efficiency, professionalism and high quality output.

The regulated gas sales and deliver business plan stated that this segment aggressively pursues market share, which Liberty noted is not a metric in the Scorecard. The business plan further stated that this segment would ensure customer satisfaction by providing safe and reliable gas facilities to customers quickly and economically, and would achieve long-term stability by maintaining and expanding the distribution system. The Scorecard addressed most of these areas.

The business plan segmented its market into Residential, Commercial, Industrial and Large Commercial categories and described different characteristics, goals, activities, and competition for each.

The plan observed that more competitive research and analyses were needed to define the true market potential for SJG and to determine the correct market approach. The business plan stated that other corporate priorities had precluded such study. The business plan further stated SJG has established a short-term list of actions for additional residential gas load requests. The 2004 actions identified included:

- Continuing to design and produce awareness bill inserts and envelope messages on new natural gas appliances and enhancements to existing product lines
- Seeking to design a method for capturing appliance penetration of the existing customer base
- Updating SJG residential usage

- Performing market research designed to increase usage and the number of gas appliances.

The sales analysis and market plan contained current information about the numbers and ratios of existing-customer gas conversions versus new customer additions, the need for observing "anti-sprawl" sentiment, the number of new home additions considered to be realistic, a profile of those homeowners considered to be likely gas conversion candidates, an estimate of the number of homeowners in that category, and the cost and time barriers to conversions. The plan assessed the weaknesses of SJG in pursuing its goals, discussing subjects such as, the failure to capture market intelligence available within the Company, reaction times, clarity of priorities and roles, and high up-front costs for converting to gas. While identifying weaknesses, the plan did not discuss how to meet them, except that employee-related measurements did get included in the Balanced Scorecard.

The marketing plan made assumptions about the continuation or change of key underlying assumptions, and laid out a strategy for capitalizing on SJG's brand value through conversion-support efforts, prospect screening through the use of databases, a media awareness program, and research into industry best sales and marketing practices.

Further Delivery System Analysis incorporated comments that influences included customer requests, work force, technology, condition of distribution system, shareholder and financial expectations, the economy, competition, job site, paving restoration, and work-site traffic control. Processes affected by new construction included asset management, systems operations and maintenance, utility services, human resources management, employee safety, and external relations. The costs of regulatory compliance were noted. The plan additionally listed a number of initiatives underway that appeared to be part of the usual, routine business activities.
The SJG plan including staffing and financial elements that took account of union contracts, accounting for capital versus O&M expenses, structure and methods for field service activities, improvements in work completion times, and success in reducing O&M expenditures. The Balanced Scorecard for SJG's Regulated Gas Sales & Delivery business line included separate versions for the Eastern and Western regions. Each version followed the SJI model, and included financial, customer, process, and development goals with specific goal items identifying measurable criteria and responsible positions for meeting them.

The financial goals did not include any of the financial measures called for by the SJI model. Customer goals for both regions focused on completion time, compliance work, and conducting surveys. There were no metrics for percent satisfied or for percent market penetration, which the SJI model outlined, and which would have been more consistent with the SJG expressed in the utility plan. There were goals for developing a contact list for and relations with for municipalities, but no milestones, completion dates or measures. Process goals for both regions focused on productivity and safety, similar to the SJI model.

Development goals in the Eastern region focused on leadership training and training in the new culture, participation in personal development and process improvements committees, and development of recognition programs, again with no measures. Development goals in the Western Region focused on having an employee rodeo and on participation in industry meetings.

Both sets of Development Criteria were directionally in-tune with the SJI model, but lacked specificity and measures. Both regions included identification of the individual accountable for each goal.

SJG Off-System Sales Business Plan

The business plan describes this activity for off-system sales (OSS), which remarkets assets of not needed pipeline capacity, storage capacity, and supply contracts as a separate business line in the Gas Supply Department of SJG, as resulting from customer migration from sales to transportation. Its primary market is in the Northeast, but also has significant business in the Mid-Atlantic & Gulf Coast regions. The value of the gas supply assets fluctuates considerably with current conditions. The market research indicated the wholesale energy sector continued to be volatile, complicated by the existence of a limited number of credit-worthy trade partners. The marketing plan was to find viable counter parties, to use current relationships to become aware of new entrants, and to expand volume as credit allowed with current customers.

The financial plan projected the gross margin in [redacted] in 2004 at $[redacted], and for 2005 to 2008, projected net margins at $[redacted], $[redacted], $[redacted], and $[redacted], respectively. The plan stated it was difficult to predict future prices, noting:

> *All costs relating to gas supply assets are essentially sunk costs (except commodity) that will be charged to the BGSS clause.*

The plan identified and set forth two scenarios that included the transportation market continuing to expand, and natural gas prices dramatically increasing.

SJE Business Plan

The *SJE 2004 Business Plan* (March, 2004) set forth specific customer growth targets for each gas and electricity customer class and for commodity and services sales. The plan estimated $[redacted] in gross margins (before the payment of commissions). Natural gas was [redacted] of the total. The following table shows plan projected net income compared with 2003 results, split into electricity and gas components through 2007.

Table IV-3. Projected Retail Net Income

	2003	2004	2005	2006	2007
Retail Gas	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Electricity	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Thousands of Dollars.

The plan specifically address market exit. It called for at least annual reviews to determine whether the market for competing offers significantly changed. The plan identified current market share, the goal for 2004, and major competitors. The plan addressed new markets in central and northern New Jersey, and described distinct marketing strategies and resource needs for the existing residential, commercial, and industrial markets. It also summarized the strategy for new markets.

The plan projected only moderate growth in SJE's Energy Services business line, which comprised energy systems including auditing and consulting, lighting, HVAC, systems and controls. The same was true for the Distributed Generation category, which included behind the fence emergency backup, peak shaving, and cogeneration. Gross income from these two categories combined was projected to in 2008.

AirLogics Business Plan

The AirLogics *2004 Business Plan* (11/17/04) described this perimeter air monitoring system business. The marketing plan for 2004 was to continue to serve existing utility clients and to foster relationships with new utility, industrial, and construction clients through participation in organizations, trade shows, and seminars, and by establish relationships with consulting firms having a nationwide marketing and customer footprint. The plan included a 2004 estimate of revenues, expenses, and gross profit. The following table shows that forecast, which AirLogics then .

Table IV-4. AirLogics 2004 Forecast

Item	Amount
Revenue	
Operating Expense	
Depreciation	
Total Operating Costs	
Gross Operating Margin	
Sales, G&A Expense	
Total Expenses	
Gross Profit	

SJ Energy Services Plus Business Plan

The SJESP plan projected 2004 revenues, gross income, gross margin, and pre-tax income through 2008. It anticipated growth through expanding offers and adding flexibility and choice. A partnership agreement with Pierce-Phelps Corporation provided Bryant equipment as their primary brand, along with consignment, marketing support and training services.

Table IV-5. SJESP 2004 Financial Plan

Year	Revenue	Gross Income	Gross Margin	Pre-Tax Income	Growth
2003 Actual					
2004 Budget					
2005 Plan					
2006 Plan					
2007 Plan					
2008 Plan					

Thousands of dollars.

Marina Energy Business Plan

The business plan focused on two areas: projects within the Marina District of Atlantic City, and projects outside of the Marina District. The plan noted that Marina had gained recognition from its association with the experienced staff of its subcontractor, DCO Energy. The plan identified intent to contract day-to-day operations functions to DCO or another third-party. Marina had no direct employees performing operations; its staff consisted of one engineer performing project management and a second doing development.

Marina's plan considered risk management to be critical, and each potential development opportunity was evaluated across several risk factors with tolerance threshold and mitigation strategies established during initial development stages. Financing was a key risk component, making assumptions on interest rates and the hedging of those rates important.

The plan stated that Marina continued to evaluate Southern Jersey and surrounding regions for further development opportunities for thermal facilities and/or electric generation. The plan stated that projected capital of [redacted] over the next five years would allow Marina to continue implementation and operation of its projects. Marina said that it was currently investigating xx new opportunities, [redacted].

The plan identified and set forth responses to three alternative scenarios, which included a slowdown of casino construction, an expansion of business, and fundamental changes in the energy markets. Marina expected to contribute [redacted] in net income to SJI during 2004, [redacted] during 2005, and then [redacted] in 2008.

SJRG Business Plan

SJRG characterized itself as primarily a wholesale marketing company that provided asset management and hedging risk management services to a variety of parties in the northeast and mid-Atlantic markets. SJRG felt that much of the competition had been reduced or eliminated in the wake of problems at Enron, and that credit downgrades had caused liquidity problems for many. They expected new entrants on the financial side, but felt that a lack of competition on the physical side could last much longer.

SJRG presented a marketing plan for [redacted]. The marketing plan also addressed [redacted], noting that SJRG added [redacted] assets in 2004.

SJRG planned to continue to build its strong base in mid-Atlantic area, which they expected to grow as the large marketing companies exited. Net income projections for 2004 through 2005 were $[redacted], $[redacted], and $[redacted], respectively.

The SJRG plan contained two scenario projections. The first was to move SJG's natural gas marketing portfolio to SJRG, which SJRG felt could facilitate their plan to serve the power generation market, lead to higher overall usage of all company's assets, and higher margins, because SJG cannot take the same advantage of price arbitrage available through hedging that SJRG could if it held the assets. The second scenario addressed the failure of the electric generation market to materialize at the pace anticipated. With its other growth strategies linked to this segment, SJRG felt that failure of the electric generation market to materialize would keep SJRG on a much slower, but profitable growth curve. SJRG could be a profitable survivor due to its low overhead structure and ability to arbitrage.

Millennium Account Services Business Plan

Millennium continually considered business expansion into other nearby regions like Delaware and other industries like water. MAS was governed by an executive committee comprised of two officers each from CS and SJI. Read rates formed a key part of client contracts. Employee read rates were tracked on daily basis to identify problems and training needs quickly. Combined read rates [redacted] from [redacted] in 1999 to [redacted] in 2000, to [redacted] in 2001, and to [redacted] in 2002. MAS had spent $[redacted] on ITRON's Premier Plus 4 (meter reading) System during 2002. MAS was considering expanding into the delivery of sales and advertising flyers, consulting, gas ERTS retrofit installation, and advertising.

MAS [redacted] from pre-tax earnings of $[redacted] in 1999 to a forecast of $[redacted] in 2003; it [redacted] to each owner during 2003. MAS projected net income [redacted] of about [redacted] through 2008, based on income [redacted].

Service Plans and Their Delineation of the Strategic Planning

The plans of the entities described above relate to units that SJI operates to produce returns. SJI also conducts annual planning for units that serve internal markets; *i.e.*, they provide common services to SJI entities at cost. Liberty examined the 2004 Service Plans for SJI's *Internal Services*. SJI positions eight internal service providers within SJI and ten within SJG. The plans provide reasonably detailed descriptions of the services provided, and often include the recipients of the service, representative financial data, and major projects.

Another major strategic thrust for SJI was to encourage individuals to take accountability for their activities, and for the service lines *to serve*. Establishment of a clear understanding between service provider and recipient on specifically what services are to be provided is fundamental to individuals taking accountability for activities in support of another. All of the Internal Services departments had plans in the *Services Plan Book*. Most plans included some form of metrics; however many were rudimentary and not in the form guided by the Balanced Scorecard model. Most SJG-based providers included signed agreements between themselves and the service recipients. The three exceptions were Environmental Affairs, Insurance, and SJG Accounting. No SJI-based providers included signed agreements, but the book contained four unsigned agreements.

The next table summarizes the 2004 plans for SJI-based providers and the second does the same for SJG-based providers.

Table IV-6. Summaries of SJI Service Provider Plans

Service Plan in Book	'Metrics'	Unsigned Agreement(s)
SJI Accounting Unsigned agreements with SJE Retail Gas Marketing, SJRG Wholesale Gas Marketing, SJE Energy Services, AirLogics, SJE Electricity Marketing	**Yes** Note: 'Metrics' often not in Balanced Scorecard style	**Yes**
Risk Management Unsigned agreements with SJE Retail Gas Marketing, SJRG Wholesale Gas Marketing, SJE Energy Services, AirLogics, SJE Electricity Marketing, SJG Off-System Sales	**Yes**	**Yes**
Investor Relations & Finance	**Yes**	
Government Relations Unsigned agreement with Chairman & CEO	**Yes**	**Yes**
Corporate Counsel & Corporate Secretary Unsigned agreement with Chairman & CEO	**Yes**	**Yes**
Internal Auditing	**Yes**	
Market Planning & Forecasting SJG, SJE, ASB, Marina	**Yes**	
Strategic & Financial Planning	**Yes**	

Table IV-7. Summaries of SJG Service Provider Plans

Service Plan in Book	Metrics	Signed Agreement(s)
Information Systems Master plus specific for SJGSP, SJG Company Sales, Customer Case Center, SJE, SJI Market Planning & Forecasting, Millennium	**Yes**	**Yes**
	Note: 'Metrics' often are not in Balanced Scorecard style	
Customer Care Center	**Yes**	**Yes**
Corporate Communications Master plus SJG Sales, ABS, Exec Group, SJE, Marina, SJI Sales, Market Planning & Forecasting, Engineering, Investor Relations		**Yes**
Property & Materials Management Specific for Information Systems, Communications, Materials Management Purchasing, Operations Department, ASB	**Yes**	**Yes**
Human Resources Master plus ASB (2), SJG Operations (2) Customer Care Center, SJE, Millennium	**Yes**	**Yes**
Environmental Affairs	**Yes**	
Rates & Regulatory Affairs	**Yes**	**Yes**
SJG Accounting & Tax	**Yes**	
Insurance		
Engineering Services		**Yes**

3. Conclusions

a. The market-facing businesses units and internal service providers have begun to structure their plans as guided, but progress is uneven.

That SJI's business units have discussions around important strategic, regulatory, tactical and operations issues and reduce them to objectives, goals, plans, and the beginnings of metrics is notable. The process from planning to successful implementation, with all of the feedback loops, should improve with time, attention, and practice.

The business plans generally reflected SJI's mission, vision, and value statements. They contained a widely varying mixture of descriptive text interlaced with discussions on issues, competitive positioning, strategies and tactics, and financial plan information. These business plans collectively can be described as a *work-in-progress*. The service plans were largely descriptive, and not all had signed service agreements.

Overall, the collection of Strategic and Business and Service Plans support the conclusion that performance has largely been managed rather than accidentally achieved. Major strategic themes permeated the key documents, abundant details were cited, information showed significant consistency, and the dynamics of the businesses were reflected in the repositioning of businesses or services.

b. The non-utility business and service plans reflect a reasonably cautious approach that serves to minimize the potential for negative impact on the utility.

All of the business and services plans articulated business objectives that fell within the scope of SJI's mission and vision statements. Collectively, the businesses also expressed:

- A cautious tone
- Reasonably modest growth projections
- A general preference for testing new ideas on a modest scale before committing more fully
- Attention to identifying risks and seeking ways to mitigate them
- Recognition of the importance of keeping headcounts and other costs controlled.

c. The business plans of the market-facing units show attention to SJI's emphasis on customer focus and opportunity identification; the service unit plans show attention to their internal customer needs.

The Internal Services were more sensitive to their service dimension as evidenced by the broad existence of service contracts between themselves and the recipients of their services. One example of increased attention to customers in the businesses was SJG's segmenting customers in order to gain a better understanding of customer characteristics and needs, and to better serve existing customers and to gain new ones. An example of SJG's attention to employees was its plan comments on human resources.

d. None of the businesses presented optimistic or pessimistic scenarios in addition to the "base" case and none provided a quantitative linkage between results and the key assumptions underlying them.

SJG Off System Sales, SJRG, and Marina discussed future potential scenarios in broad terms. This approach is very useful in promoting planning discipline, assessing risk, and supporting the process of *thinking outside of the box*. As did the others, however, even these three businesses presented only a base case forecast.

As is true of SJI's overall strategic approach, the individual businesses generally did not quantitatively link key indicators to projections of business and financial results. The businesses did not appear to use the economic indicator forecasts to help them with their planning except in the broadest directional sense, but did pay attention to their regional and local business situations and competitive conditions.

e. Each of the businesses, including the utility, appeared focused on its own business.

Liberty found nothing within any of the business or service plans that would indicate any of the businesses were not focused on its own businesses. Liberty observed no substantial reliance on utility resources or operations, apart from its role in gas delivery that is common to its affiliates and their competitors, and apart from the use of SJG Internal Services for which the affiliates are charged a cost allocation.

f. Most business units did not make sophisticated use of metrics.

The three businesses with Balanced Scorecards were Regulated Gas Sales and Delivery, SJE Service Plus, and Millennium Account Services. Most of the services had some version of

metrics, with metrics defined liberally, but not in the balanced scorecard style. Each of these three businesses customized the scorecard to meet its own needs, and collectively these scorecards showed thoughtful consideration, with many quantitative metrics as well as the identification of new metrics to be used. Each of these scorecards had room for additional maturing in articulating and tracking metrics, and for including metrics on all key business initiatives. Although the remaining businesses did not have an explicit Balanced Scorecard in their business plans, they did present information that was sufficient to enable them to articulate a scorecard. For example, they generally described their business, including varying degrees of market and competitive information, defined their nearer term plans (sometimes with specific goals and identification of key responsibilities), and presented summaries of their financial plan going forward. Thus, they appear to have a foundation for articulating a scorecard in their next set of business plans.

4. Recommendations

16. Provide for more consistent and amplified business plans.

First, the businesses should articulate in their plans a succinct rationale as to why they have confidence they can achieve their financial and other business objectives, and attempt to link key indicators quantitatively to projections of business and financial results. They should also articulate their primary contingency plans. The business plans contained abundant descriptive information. Inclusion of a succinct discussion on the rationale for expecting achievement of objectives would help to provide focus on what essentials drive success, what barriers may impede it, and what alternate routes exist should those barriers prove material.

SJI should require the businesses and services to prepare their plans according to a template or checklist so that the plans would be more complete and uniform throughout the corporation, and to place descriptive information in appendixes so that the body of their plans can focus on the strategic and tactical items and objectives, and on metrics and resources.

17. Require all businesses and service organizations to adopt and use more structured and comprehensive set of metrics in the style of the Balanced Scorecard.

Activities have a greater chance of getting accomplished if appropriate metrics for their progress and completion are used. Some of the businesses are well along with defining their scorecards; others are poised to begin articulating their metrics, and some of the businesses articulated goals or initiatives that were not present on their scorecards. Business and organizational initiatives can be harder to measure objectively, but it is important that business leaders do the best they can to give a basis for their own and senior management's formulation of judgments about success in pursuing them.

Some of the businesses are already identifying the individuals for key performance measures. All of the businesses and service providers should routinely follow the practice of aligning positions and accountabilities linked to the metrics.

18. Negotiate and execute agreements covering all internal service providers.

The process of discussing and determining the contents of a service agreement is an excellent and beneficial exercise for both the provider the recipient to become clear on needed specifics and eliminate non-value added work.

19. Improve the process for focused intelligence gathering on key utility competitors and customers.

The information in the business plans strongly suggested that the competitive intelligence gathering was generalized. The SJG Regulated Gas Sales and Delivery noted that "corporate priorities precluded" more competitive research and analysis to define their market potential. SJG needs to commit to routine and ongoing activity that identifies and assesses utility competitors with more detail.

20. Liberty recommends the businesses and services include optimistic and pessimistic scenarios in their plans to complement their "base" cases.

This recommendation has a similar scope and purpose to the similar recommendation made in the context of overall SJI strategic plans.

D. Major Marina Projects

1. Summary of Audit Activities

Marina comprises an important element in SJI's expanding non-utility activities. Its capital-intensive nature also creates a set of risks that differentiate it from the energy commodity and trading risks that characterize SJI's other two large non-utility businesses, SJE and SJRG. Liberty addresses the energy market risks of those two businesses for the utility elsewhere (in the companion reporting on *Gas Supply* and in the next chapter of this report.) Liberty here addresses how Marina has planned and analyzed its projects – specifically how it has managed construction and operating risks in its agreements with its customers and with the contractors that have worked with Marina. The purpose of this examination was to assure that Marina's growth has not come at the expense of material risk to utility operations and that its plans for future growth will not create exposures for SJG.

Liberty examined nine agreements between Marina and its customers on the affiliate's major projects. These agreements included two between Marina and the Marina District Development Company for the Borgata Hotel, Casino and Entertainment Complex, one agreement with Resorts International Hotel, two agreements with Johnson Matthey, Inc., and four agreements with Mannington Mills Inc. Liberty also examined nine important subcontractor agreements with six different contractors and one gas transportation agreement at tariff (the only time that Marina contracted with SJG). Liberty also discussed Marina's project planning and analysis methods, and examined the economic justifications and selected actual results for the Borgata, Resorts, and Mannington Mills projects. Liberty as well examined Marina's approach to determining and mitigating the risks of these four projects.

The criteria Liberty used to judge the effectiveness of Marina's performance were:

- Whether the nature of Marina's undertakings was consistent with, supportive of, and not deleterious to the utility

- Whether the agreements Marina executed for these projects were reasonable
- Whether Marina had carefully planned for delivering successfully on the agreements, especially for activities that were new to SJI
- Whether adequate attention was paid to risk identification and mitigation
- Whether economic analyses were sound and appropriately conservative
- Whether Marina learned, refined its approach, and became more skilled as it progressed with new business activities
- Whether Marina demonstrated adequate success in implementation of the projects.

2. Findings

Borgata Project

Marina did not exist when the Borgata opportunity arose. SJI responded to an RFP from the Marina District Development Company, LLC for the Borgata Hotel, Casino and Entertainment Complex in Atlantic City, NJ to provide its thermal energy (hot and chilled water) and emergency electricity generation. (The similarity in 'Marina' names was coincidental.) Conectiv and SJI became the two finalists; the Borgata told them that together they combined the needed capabilities, and encouraged them to join together on the project. The two then formed Marina Energy, LLC, and executed an *Energy Sales Agreement* for the Borgata in December 2000. Conectiv's then pending merger with Pepco Holdings, Inc, caused SJI's co-venturer to lose interest in pursuit of this project. SJI acquired Conectiv's interest, and Conectiv personnel with project knowledge and experience formed DCO Energy, LLC (*DCO*), which became the major subcontractor to Marina for the Borgata project.

The Borgata project and those that followed reflected Marina's view of its core strength and strategy; *i.e.*, to exploit SJI's regional knowledge and presence as an energy supplier and Marina's ability to deliver a total package of energy-related facilities and services to customers of substance and commitment to the region. DCO was expected to be a major contributor as subcontractor bringing experienced personnel for executing projects without Marina's having to build a large internal staff.

Two closely related agreements between Marina and the Borgata consortium largely define the project dimensions. The *Energy Sales Agreement* addressed Marina's ownership, construction and supply of energy services to the Borgata for its thermal energy and emergency generation. The *Power Purchase Agreement* addressed Marina's selling and delivering all of the Borgata's electricity requirements. Both contracts were executed on December 12, 2000, and set a 20-year term measured from commercial operations (July, 2003).

Marina owns the thermal energy and emergency generation facilities, and invested about . Marina began with equity; it raised the rest of the construction money . Annual operating costs for the facilities, based on the 2005 budget, amount to about . The facilities generally burn natural gas. A 30,000 gallon oil storage tank allows occasional use of #2 fuel oil. Marina managed the purchase of fuel. SJG delivers the gas, which SJE supplies. A third party supplies the fuel oil.

Economic analysis, including cash flows and discounted cash flow (*DCF*) analyses comprise the principal support for the investment. Liberty examined a July 28, 2000 analysis, an updated version of it, and a separate July 2004 analysis undertaken a year after operation began.

Marina's planning appears not to have used a single-point hurdle rate, but *looked for* internal rates of return (*IRR*) in the xxxxxxxxxxxx range (based on equity invested). Liberty examined the logic of Marina's financial assessments and key assumptions. Liberty also compared the pre-commitment analysis with the one performed after a year of operations. The two analyses matched reasonably well. The project produced significant tax benefit as well, but Liberty examined pre-tax cash flows in its examination, in order to validate the logic of the investment on the basis of business economics unaffected by *tax loss* considerations.

The Company prepared a one-sheet, summary level, qualitative risk summary profile. Given the lack of detail in the document, Liberty questioned Marina about risks perceived at the time and steps taken to mitigate them. In particular, Liberty focused on the Energy Sales Agreement, which imposed significant non-performance penalties on Marina. Liberty's questioning produced from Marina the identification of the same three principal risks that Liberty had observed from its examination of the agreement.

[redacted].

[redacted].

[redacted].

[redacted]

[redacted].

[redacted].

Resorts International Hotel

This agreement covered Marina's owning, operating, and maintaining the thermal energy production facilities for Resorts in Atlantic City. Marina had the right to use Resort' existing steam and chilled water production, and to install additional chilled water facilities to provide all of Resorts' heating and cooling energy requirements. The April 2002 execution set an initial term of 20 years, with options for two 5-year extensions. Marina won an RFP competition to supply these services. Marina now owns chillers and cooling towers for which it has invested $[redacted]. Marina used $[redacted] in equity and the remainder in debt to finance this investment.

Marina uses natural gas and occasionally #2 fuel oil for the production of steam and chilled water. Resorts purchases its own natural gas and fuel without Marina involvement.

Marina has not conducted a formal post-operational analysis of the type it performed for the Borgata project. Liberty was able, however, to compare projected versus actual 2004 net income. [redacted].

[redacted].

[redacted].

Johnson Matthey Inc.

There were two agreements involving Johnson Matthey's metal recovery and refining and pharmaceutical production operations in West Deptford. The first was an operation and maintenance agreement executed November 1, 2002 and having an initial term of 3 years. Marina undertook management and direction of day-to-day operations and maintenance of the customer's combined heat and power facility and the performance of other related duties as required. Marina had access to customer personnel, equipment, supplies, and other resources; Marina only provided management and direction of them. Johnson Matthey also furnished and delivered all fuel, water, and standby electricity without any involvement from Marina.

Marina invested no capital, making reimbursement of costs and payment of fees its main revenue-related risk. [redacted].

[redacted].

The second agreement resulted when Marina won a competitive award to procure architectural and engineering services and to furnish the construction and administration of a cogeneration facility at the West Deptford, NJ site. This agreement was executed October 21, 2002. Marina invested no capital under this agreement. xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx [redacted].

[redacted].

Mannington Mills, Inc.

There were four agreements, all dated January 5, 2004, addressing a Salem, New Jersey generating facility at a site where Mannington manufactures flooring:

- Bill Of Sale and Assignment Agreement
- Ground Lease Agreement
- Plant License Agreement
- Operations and Maintenance Agreement

These agreements address:

- Marina's purchase from Mannington of the generating facility for $[redacted]
- Marina's leasing at nominal rent from Mannington of the ground on which the facility is located for at [redacted] per year for the term governed by the other agreements
- A lease-back to Mannington of the generating facilities for $[redacted] per month for an eight-year lease
- An eight-year agreement for Marina to operate and maintain the facility for a $[redacted] fixed annual fee.

Marina's investment totaled $, which it funded with $ in equity and the remainder in debt. This arrangement, which is with a business operated by an SJI director, . Fuel for the generator was natural gas that Mannington bought directly without Marina involvement. SJE has provided natural gas to this facility.

.

Liberty's review demonstrated an adequate margin for recovering investment, return, and other costs, and securing a profit. .

Marina did not prepare a formal risk sheet for this project. Marina did model variable costs verses variable revenues, given that other factors were fixed. .

.

3. Conclusions

a. Marina's activities have been generally consistent with utility concerns and with SJI's mission.

Liberty was satisfied that Marina carefully studied opportunities and risks before entering its projects, took reasonable efforts to mitigate its risks, and made and managed investments and contracts in a way that did not expose SJI to adverse consequences of a magnitude that could have harmed utility operations. The documented analyses and the mindset demonstrated by

Marina personnel confirmed the propriety of the Borgata project, which became Marina's cornerstone. The same is generally true of Marina's subsequent projects. There was a rational strategic driver compatible with SJI's mission and the existence of the utility. Marina was able to earn a profit, provide business opportunity to SJE, and keep risks at a level appropriate in a utility holding company.

The Mannington project varies moderately from this collective experience. It included the unique features of a major (for Marina) customer financial service and the entanglements arising from a director's leadership of the customer's business. It also involved questions about equipment operation, for which Marina bore operational (although not repair cost) risk. These features called for, if anything, more, not less, up-front analysis. Marina did not prepare a formal risk sheet for this project, but did model a financial pro-forma, paying particular attention to variable costs verses variable revenues, since the other factors were fixed The project has not caused adverse consequences for Marina or SJI, but does stand out as the one Marina project that has performed at less than expectations. It stands as testament to two principles of consequence: the need to be constant in performing pre-commitment analyses, and the inherent difficulties that arise from the entry of significant, non-traditional relationships with entities led by members of the board of directors. Chapter I. of this report addresses the latter issue.

b. Marina and SJI did not bring notable engineering or construction experience to the types of projects involved, but acted prudently in securing relationships with capable and supportive subcontractors.

Marina's has good working relationships with a number of very experienced and capable subcontractors, has structured a number of the subcontractor agreements with incentive and penalty clauses, and gains the additional benefit of having some of the subcontracts "troll" for new business for Marina. This roster substantially strengthens Marina's capabilities, mitigates the risk it creates for SJI, and allows SJI to minimize the staff resources necessary to succeed at the current level of operations. Marina has one engineer working on project management and the second working on development.

c. Marina's projects have brought positive returns to SJI, and Marina is positioned to continue to do so.

Marina's reasonably cautious approach, use of capable subcontractors, and successful project management and project execution has earned consistent and growing profits. Marina's cumulative net income after tax has been [redacted], which is [redacted] than projected. Liberty confirmed that all projects were successful to date, and poised to remain successful.

Examination of the financial analyses for the Borgata and Mannington Mills projects showed a reasonable approach was used for the analyses, and that the projects contained good profit potential as long as Marina continued to implement well. Examination of the financial results for the Resorts project, the only other project where Marina [redacted] showed the actual results [redacted]. Liberty also considers it appropriate to conduct the kinds of audits that Marina prepared a year after commercial operations at the Borgata project, its most important project to date.

4. Recommendations

Liberty has no recommendations for this area, but notes that the Chapter I. of this report does address the conduct of business with entities in which directors have an interest.

E. SJI Planning Influences on the Utility

1. Summary of Audit Activities

An important issue for the BPU is whether the companies it regulates conduct their utility and non-utility activities in such a way that regulated customers are not likely to be harmed by ventures that pose potential financial risk or because of diversion of resources, like capital, management focus, and skilled employees, from utility operations. Liberty examined many aspects of SJI/SJG's strategic planning, but the focus of investigation was always this question, and related and subsidiary pieces, such as whether SJG's spending has been curtailed because of the capital and other resource needs of its non-regulated affiliated companies.

Liberty's experience in management audits of utilities over the last 15 years has shown that robust planning and budgeting processes do not guarantee success. The recent history of the utility industry has shown that aggressive expansion and diversification brings with it risks, sometimes to the detriment to stockholders and even customers.

It is with this knowledge and understanding of the BPU's interests that Liberty approached its examination of the influence of non-utility businesses on SJI's strategic planning. In this section Liberty reviews, at a high level, SJI's recent financial performance. This examination includes the crucial issues of the vision and realism of strategy and plans, as evidenced by the quality of execution and then financial results.

Planning and budgeting for a utility and utility holding company do not take place in a static environment. Liberty assessed the documents and information already cited, plus additional financial information, to discern how effectively the planning activities appeared to focus on utility needs, in the case of SJG, and to consider potential negative impact on the utility, in the case of the holding company and non-utility affiliates. Building on the conclusions from the earlier planning sections, the criteria Liberty used to judge the effect of SJI's planning on the utility were:

- Whether there has remained a sufficient focus on utility-specific needs and opportunities
- Whether non-utility activities have had adverse consequence for utility operations
- Whether non-utility planning recognizes the need for preserving SJG's ability to deliver public service
- Whether there is any indication of a lack of commitment to utility funding.

2. Findings

SJI has become more than SJG over the past decade, but substantial diversification from the traditional utility business has only occurred more recently; *i.e.*, in the last five years. Compared to other energy utilities, SJI started its diversification late. Whether by design or because of good fortune, SJI made its thrusts into its major new businesses (Marina Energy, SJRG, and SJE)

years after dozens of others tried and all too many utility-holding companies failed. So far, SJI has avoided the problems and prospered. It is also clear that SJI has taken advantage of opportunities to get into new businesses that have allowed it to grow, but there is nothing wrong with that if those opportunities fit with its capabilities and the Company pursues them with caution.

SJI has enunciated its strategy and evaluation of why that strategy has been working:

We attribute our success … to:

- *Following a consistent strategy that relies on SJI's intrinsic strengths;*
- *Conducting business in markets we understand;*
- *Targeting areas where we have broad name recognition;*
- *Strengthening customer relationships;*
- *Reassessing business lines and introducing products and services our customers want while maintaining a moderate risk profile;*
- *…Using demonstrated in-house expertise or obtaining that expertise very cost effectively through long-established business relationships for every product or service we offer ….*

The business model that guides us is a natural extension of our core utility business.

SJI's management has also said that its intent was to "operat[e] from a low- to moderate risk platform." This guiding principle encapsulates the criteria stated above, and fits with a company whose heritage is the gas-utility business. In 2003 SJI established a goal of 6-7 percent annual growth in earnings per share *(EPS)*.

While SJI now has several non-utility businesses, they are small compared with SJG in their financial measures (revenues, margin/profit, and assets) and employee complement. Further, close examination of those businesses (retail sales of natural gas, energy-efficiency services, on-site generation, supply-asset management, and appliance service) show that SJI has, as its management continues to stress, not strayed far from its gas-utility roots. An additional facet of these businesses is that most started as partnerships with others who had more experience in these new businesses; SJI started none of them from scratch with its own people.

Thus, the measured development of these businesses and their modest size present a different profile than the kind of diversification that has caused financial problems for some utilities. SJI's actions have matched its stated policies.

With respect to potential effects on SJG of the growth of the non-regulated businesses, Liberty found that while SJI was expanding its new units:

- Utility operations-expense spending grew substantially.
- SJG's capital expenditures were steady even while SJI's investments in Marina were at their peak (2001-2002), and then grew, showing that there have not been resource constraints on SJG, as is discussed in greater detail in Chapter Five of this report. The staffing of the non-regulated companies stayed low compared to that of SJG.

SJI has made significant capital expenditures in the past few years in only two of its non-business units, SJG and Marina Energy. Even though Marina's business is highly capital-intensive, SJI's cumulative investment in the utility, excluding environmental expenditures, was vastly greater than the investment it made in Marina during the five-year period 2000 through 2004.

The investment in SJG has been necessary primarily to meet growth in demand, which has been consistent and substantial. Adding customers brings in additional revenues, but can only be done if the distribution system can handle the increased gas use. SJG's system has been able to meet customers' additional demand. Most notably, during the weekend of January 21, 2005 SJG set a new sendout record that was 3.3 percent higher than the peak set the previous year.

SJI's non-utility operating revenues have increased in large part because SJE has been successful in adding residential and commercial natural-gas customers who also had to pay higher unit prices for the gas they consumed, followed by an increase in the sale of retail electricity. A more recent source of new revenues was the start of sales of thermal energy by Marina to Borgata, a large customer, which began in July 2003. The chart that follows shows summary income-statement line items for SJI that demonstrate how SJI was able to increase its revenues and operating income.

Table IV-8. Changes in Operating Income

	2003	2002	2001
Operating Revenues:			
Utility	$ 487,678	$ 386,120	$ 445,204
Non-utility	209,142	119,006	100,782
Total Operating Revenues	696,820	505,126	545,986
Operating Expenses:			
Cost of Gas Sold — Utility	332,463	243,341	305,587
Cost of Sales — Non-utility	184,992	105,242	88,149
Operations	59,168	48,110	44,121
Maintenance	5,678	6,101	7,771
Depreciation	24,646	22,451	21,209
Energy and Other Taxes	12,030	10,806	10,605
Total Operating Expenses	618,977	436,051	477,442
Operating Income	77,843	69,075	68,544

As the revenue performance of the businesses has continued to get better, their profitability has improved, especially the non-utility units, as measured by gross margin:

Table IV-9. Changes in Gross Margins

	2003	2002	2001
Revenues — Utility	$ 487,678	$ 386,120	$ 445,204
Cost of Gas Sold — Utility	-332,463	-243,341	-305,587
Utility Gross Margin	155,215	142,779	139,617
Revenues — Non-utility	209,142	119,006	100,782
Cost of Sales — Non-utility	-184,992	-105,242	-88,149
Non-Utility Gross Margin	24,150	13,764	12,633

The outcome of this growth in revenues and margins has been continuously-improving financial performance. SJI's operating income has increased every year from 1999 through 2003, going from $60.2 million to $77.8 million, with the largest increases coming from SJG and Marina, as the table below shows.

Table IV-10. Operating Income by Business Segment

	2003	2002	2001
Gas Utility Operations [SJG]	$ 65,420	$ 60,874	$ 60,463
Wholesale Gas Operations [SJRG]	4,998	4,280	4,628
Retail Gas and Other Operations [SJE]	5,600	4,159	3,824
On-Site Energy Production [Marina]	3,122	416	—
General Corporate	(1,297)	(654)	(371)
Total Operating Income	$ 77,843	$ 69,075	$ 68,544

The increases in operating income yielded concomitant enhancements in SJI's EPS, which grew during the period from 1999 through 2003 from $1.99 to 2.64, exceeding the company's recent target.

The stock market has recognized and rewarded SJI's strategy. The table below shows, using 1998 as a base year with an index number of 100, how SJI's stockholders, assuming they reinvested their dividends, were amply compensated after 2000 with superior returns.

Table IV-11. Comparison of SJI's Total Return with S&P Indices

	1998	**1999**	**2000**	**2001**	**2002**	**2003**
S&P 500	100	121	110	96.9	75.5	97.2
S&P Utilities	100	91.1	143.2	99.6	69.8	88.1
SJI	100	114.8	126.4	145.3	154	197.1

SJI's financial performance in 2004 continued its string of success, with record earnings from continuing operations of $43 million and total return to stockholders of 34 percent, bringing the annualized total return to stockholders for the most recent 5-year period to 18 percent. SJG provided 73 percent of SJI's net income, with profits increasing by 18 percent despite a reduction in the earnings from off-system sales that SJG keeps and warm weather in 2004 compared with 2003.

Coincident with SJI's institution of comprehensive integrated strategic and financial planning in 2000, the contribution of the non-utility income to SJI's total income began its steady increase, and became more than 25 percent in 2004. SJI believes that strategic planning has helped them to smooth out the variability in the utility income, which is very dependant upon weather, and to supplement parent income with the proceeds of the non-utility businesses. SJI believes that this latter development has removed some income pressure from the utility.

The next set of tables shows SJI net income (in thousands of dollars) after tax broken out by major businesses. The first one shows an overall comparison of utility versus non-utility earnings from year to year, and, within each year, from budgeted to actual. The following tables show the individual earnings performance of SJI's major non-utility operations.

Figure IV-12. Utility vs. Non-Utility Income

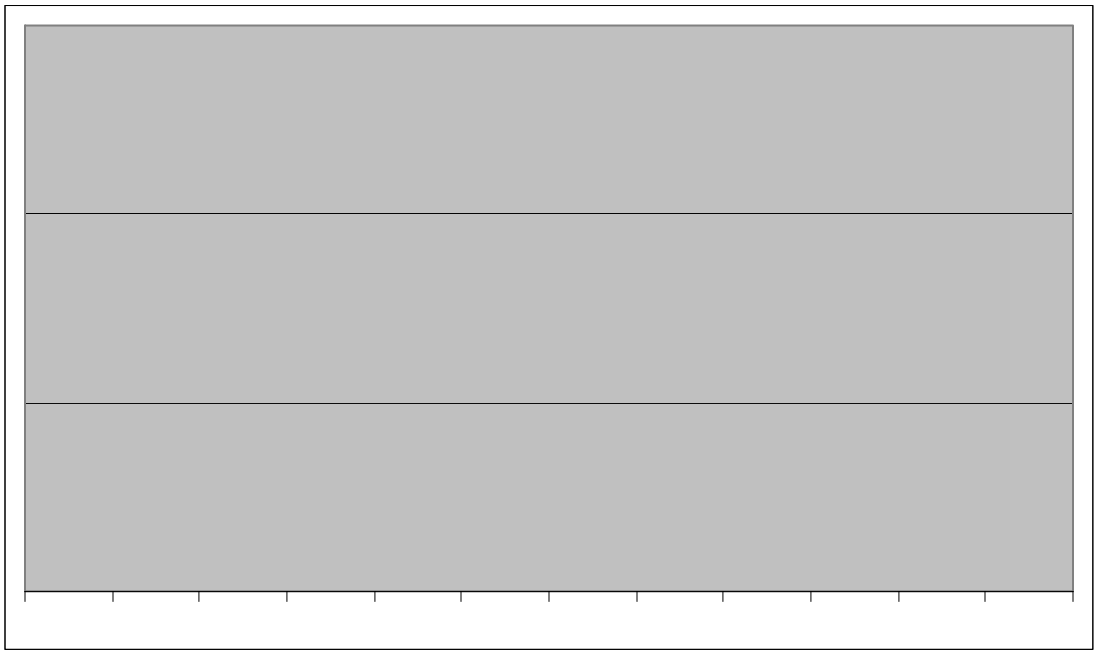
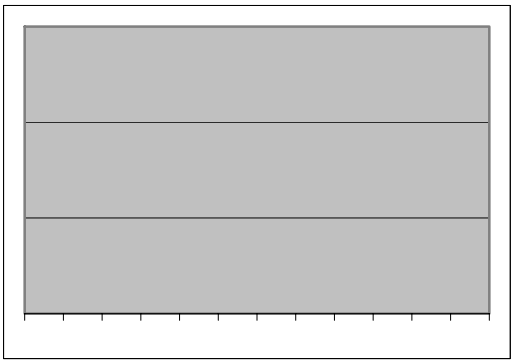
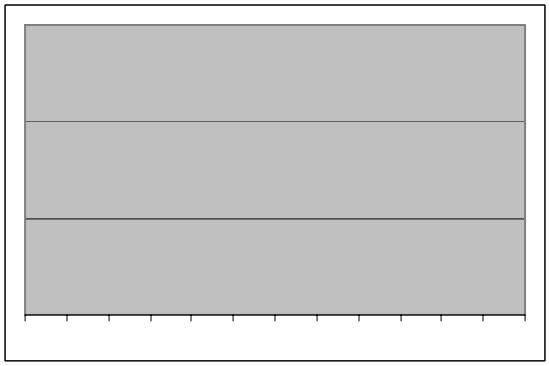


Figure IV-13. Non-Utility Affiliate Net Income

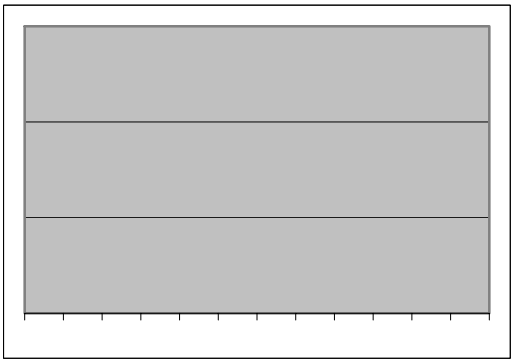
SJE



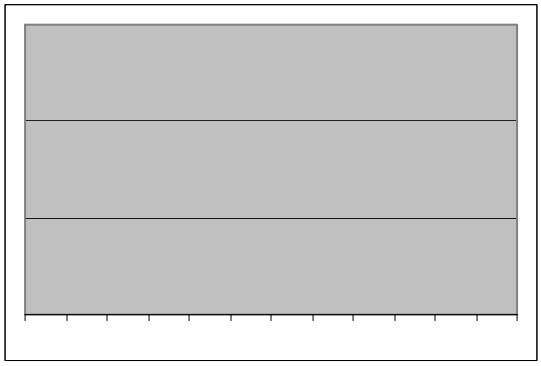
SJRG



Marina



Millennium



Total non-utility income after tax has always been better than plan since 1999. It has also grown significantly as a percentage of total SJI consolidated net income; from 7.4 percent in 1999 to 27.2 percent in 2004. The tables also demonstrate that three non-utility businesses, SJE, SJRG, and Marina, dominate, together producing 96 percent of SJI's 2004 non-utility net income after tax. Sound strategy development, a cautious approach, and careful execution have thus made non-utility businesses positive contributors without disproportionate risk.

Another significant impact of the planning on the utility and the corporation as a whole has been the initiative to expand accountability to operational management, and to clarify specifically who is responsible for what actions. This planning initiative is consistent with general current business practices in other corporations. Making such a change to expand accountability requires a change in corporate culture, which is not easy to accomplish. Progress has been made, and, while more is needed, SJI appears committed to doing so. Liberty believes that planning for non-utility growth has had a positive influence in encouraging a constructive reshaping of utility behavior expectations and accountability.

A common theme throughout the strategic and business plans has been resource allocation. All of the strategic and business plans collectively showed sensitivity to resources, and worked to find ways to acquire the expertise needed efficiently. Marina's use of subcontractors is an excellent example of effective planning that does not burden the utility. The extension of business planning to service units, particularly the use of negotiated service agreements, benefits all of SJI, including SJG, which in many senses is both the biggest provider and the biggest user of common services.

3. Conclusions

a. The strategic planning process instituted in 2000 had a positive impact on SJG and on SJI as a whole.

SJI's strategy and the execution of that strategy are aligned with the company's strengths and stated posture regarding risk. The strategic planning process introduced to the utility and to the corporation as a whole the discipline of looking outward at the business environment, customers, potential customers, and competitors, helped to initiate and progress the corporate culture transformation of expanding accountabilities to operational management, and helped with the definition, planning, and expansion of the non-regulated businesses.

b. The discipline and conservatism that SJI has shown in making non-utility business decisions has helped to smooth the variability in SJG income and to complement it with stable and growing non-utility contributions.

SJI's diversification into new businesses has produced strong financial results while the utility has also performed well. The total non-utility income was 7.4 percent of SJI consolidated net income after tax in 1999, and increased steadily from 2000 to 2004, being 11.9, 20.1, 21.4, 23.8, and 27.2 percent, respectively, in those years. The total SJI consolidated net income has been better than plan in four of the five years beginning in 1999, and essentially equal to plan in the remaining year.

c. Non-utility operations have grown to a level that requires vigilance in assuring continuation of a cautious approach that continues to recognize the overriding contribution of SJG to corporate success and the need for it to continue to meet public service responsibilities.

Liberty noted previously that significant progress had been made with the strategic planning, and that it was still a work-in-progress. It is important for SJI to continue to emphasize, as it has done to date, the need for continuing to improve. Satisfaction with non-utility progress must not be allowed to become an absorption in it, to the exclusion of attention on and resources for the utility. SJI's senior executives continue to show recognition that past success does not guarantee future results and they as well as the unit leaders operate with the clear understanding that care and discretion must be observed in pursuing new opportunities. There has been no loss of utility focus as non-utility operations have succeeded. To the contrary, Liberty found a widespread understanding and acceptance of the special value that SJG has by reason of the strong business fundamentals that characterize its strong service territory.

Liberty's only concern in this area concerns the notion that turning core utility operations into non-utility profit centers can represent an effective, albeit small element of SJI's strategy.

d. The management of SJI is appropriately focused on SJG, its most important business unit.

4. Recommendations

Liberty has no separate recommendations here. It bears repetition, however, that Liberty's earlier planning recommendations have equal relevance from the perspective of assuring that planning continues to fully support utility needs. SJI needs to continue to mature and refine its comprehensive, integrated strategic planning process, involve as broad a range of mangers and employees as is possible, and improve its market and competitive analyses. The positive impacts from planning can only improve as the planning process matures.

V. Finance

A. Financial Policy and Management

1. Background

SJG and SJI have changed financial policies and management significantly during the last several years. These changes, which began in 1999, followed a transition in upper management. At that time, the SJI dividend payout ratio was over 100 percent; it actually reached about 115 percent for 1998. The dividend had remained unchanged since 1990. Holding company earnings had insufficient strength to support it. The equity component of the consolidated capital structure was only about 36 percent, the daily trading volume on the common stock was only around 8,000 shares per day, and SJI lagged its utility peers in most financial measures.

New SJI management started 1999 with a new strategic business plan and a new financial management plan. The new financial plan included the following central elements:

- Decrease the dividend payout ratio by increasing earnings
- Increase the dividend payout ratio without cutting the dividend
- Focus on the energy business in southern New Jersey.

SJI saw significant opportunity on its utility side; it anticipated earnings stability and some growth. SJI saw strong growth potential in non-utility ventures. Company management viewed a weather-normalization clause as a key to utility earnings stability. SJG secured a weather-normalization clause change that would allow a steady dividend payment each year, with much less earnings volatility. SJG also secured adjustment clauses to recover coal-gasification remediation costs, which also proved helpful in stabilizing the utility's earnings. SJG amortizes remediation and carrying costs over a seven-year period. The Company estimates it will need to spend about $ in remediation costs during the next 10 years; it anticipates insurance recovery of about $.

2. SJG Capital Structure: 1999-2001

The first step that SJI charted in implementing its new financial management policies was to grow earnings, while keeping the dividend at the same level. Succeeding would reduce the payout ratio; SJG sought a goal of about 70 percent for this important financial measure. Achieving a substantial increase in earnings per share in 1999 allowed SJI to meet the target within one year. The table below shows that SJI reduced its dividend payout ratio to 71 percent in 1999. In January 2000, the SJI board approved its first dividend increase under a new policy of consistent and sustainable dividend growth. SJI expected to finance increased dividends going-forward primarily by SJG, which represented the yield component of SJI stock. SJI adopted no specific subsidiary dividend policy; it elected to treat its non-utility operations as the growth component. This approach left SJG to carry most of the dividend responsibility. SJI management believed that the non-utility subsidiaries would generate earnings growth and drive down the payout ratio over time.

Table V-1. SJI Earnings and Payout

	1998	1999	2000	2001	2002	2003
Net Income	$10,986	$21,688	$24,184	$26,562	$28,988	$33,353
EPS	$1.25	$2.01	$2.17	$2.29	$2.43	$2.73
Dividends Paid	$1.44	$1.44	$1.46	$1.48	$$1.54	$1.62
Payout Ratio	114.9%	71.0%	66.6%	63.9%	60.9%	57.1%

Dollars are in thousands; EPS and Net Income are from Continuing Operations

The table shows that SJI's earnings per share continued to increase significantly in 2000 and 2001. The dividend payout ratio decreased to about 64 percent in 2001, even after a slightly increased dividend. While the dividend payout ratio of SJI improved from 1999 through 2001, the capital structure of the utility did not. Given the starting financial condition in 1999, management believed that it could improve the capital structure (and the credit ratings that depend upon it) after establishing sustainable earnings growth. The table below shows year-end capital structures for SJG for 1999 through 2001.

Table V-2. SJG Capital Structure Changes

12/31/1999	**Amount Outstanding**	**Ratio with S-T Debt**	**Ratio w/o S-T Deby**
Short-term Debt	$ 118,900	22.28%	
Long-term Debt	$ 230,663	43.22%	55.60%
Preferred Stock	$ 2,044	0.38%	0.49%
Common Equity	$ 182,122	34.12%	43.90%
Total Capital	$ 533,729	100.00%	100.00%
12/31/2000	**Amount Outstanding**	**Ratio with S-T Debt**	**Ratio w/o S-T Deby**
Short-term Debt	$ 113,900	20.13%	
Long-term Debt	$ 252,939	44.71%	55.98%
Preferred Stock	$ 1,804	0.32%	0.40%
Common Equity	$ 197,101	34.84%	43.62%
Total Capital	$ 565,744	100.00%	100.00%
12/31/2001	**Amount Outstanding**	**Ratio with S-T Debt**	**Ratio w/o S-T Debt**
Short-term Debt	$ 135,500	21.81%	
Long-term Debt	$ 276,063	44.44%	56.84%
Preferred Stock	$ 1,690	0.27%	0.35%
Common Equity	$ 207,920	33.47%	42.81%
Total Capital	$ 621,173	100.00%	100.00%

Year-end

The table shows that utility year-end common equity for the utility stayed below 35 percent for each of the years 1999 through 2001. It actually decreased slightly during this period. SJG had a large short-term debt component in its capital structure. It amounted to over 20 percent of capital at the end of each of these years. A high level of short-term debt at an LDC on a seasonal basis would not have been unusual. SJG's high debt level was not seasonal in nature, however. The Company carried almost 20 percent short-term debt on an annual average basis throughout each of these years. Utility long-term debt was about 44 percent over this period. The net result was a highly leveraged utility capital structure and a lack of significant improvement through 2001.

3. SJG Equity Management and Dividends 2002-2004

SJG had been supporting almost the whole dividend SJI paid to its shareholders. SJG reduced dividends it paid to SJI in the second quarter of 2002. SJG then began to build its equity position by retaining more earnings. Across the next four quarters, SJG's equity position strengthened by about $10 million. The parent continued dividends by making up the SJG shortfall, presumably through short-term debt issued at the holding company level. .

Table V-3. SJI Dividend Funding

Dividends to SJI					
Quarter End	**SJG**	**SJE**	**SJRG**	**SJI Funded**	**SJI Dividends**
3/31/1998					$3,879
6/30/1998					3,879
9/30/1998					3,879
12/31/1998					3,879
3/31/1999					3,881
6/30/1999					3,881
9/30/1999					3,951
12/31/1999					4,014
3/31/2000					4,117
6/30/2000					4,147
9/30/2000					4,184
12/31/2000					4,197
3/31/2001					4,286
6/30/2001					4,318
9/30/2001					4,355
12/31/2001					4,389
3/31/2002					4,471
6/30/2002					4,504
9/30/2002					4,540
12/31/2002					4,689
3/31/2003					4,730
6/30/2003					4,779
9/30/2003					4,893
12/31/2003					5,315
3/31/2004					5,488
6/30/2004					5,565
9/30/2004					5,593
Totals					**$ 119,803**

The table shows the nine-quarter period of xxxxxxxxxxxxxxxxxxxxxxxx SJG-to-SJI dividends payments, beginning in the second quarter of 2002. The SJI dividend to its shareholders totaled $44.5 million across this same period. SJI was able to sustain payments to its shareholders

-
-

- [redacted].

SJG's equity position grew by about $35 million during this period of utility dividend curtailments. SJI planned to supplement this effort to improve the equity component of the SJG capital structure through use of the Company's dividend reinvestment plan. SJI raised approximately $37 million in equity capital during 2003, and infused almost the entire amount into the utility. The Company concurrently called some of SJG's higher priced debt during 2003, and replaced it with lower cost medium-term notes. SJG issued $110 million of medium-term notes during 2003, and used a majority of the proceeds to fund the redemption of about $78 million of long-term debt.

Most of the improvement in the utility's capital structure came during calendar year 2003 and in the first quarter of 2004. SJG's equity position increased by $39 million in the fourth quarter of 2003 and by an additional $35 million in the first quarter of 2004. At the end of the first calendar quarter of 2004, SJG's capital structure included more than 51 percent equity. The dramatic improvement in the utility's equity position resulted from equity capital raised through the dividend reinvestment program and from the reduction in utility dividends.

The target equity ratio for SJG is currently 46 to 50 percent of total capitalization, as reported by Company management. In the 2004 negotiated rate settlement, the utility company's rates are based on a capital structure of 46.0 percent equity, 7.46 percent short-term debt, 46.26 percent long-term debt, and .028 percent preferred stock. As part of the rate settlement, the NJBPU established a minimum equity floor for SJG of $289.2 million, which relates to 46.0 percent equity capital.

4. Future Earnings and Dividend Growth

SJG expects utility earnings stability and a moderate increase during the next few years. Two key assumptions underlie this expectation:

- Customer growth in the range of 10,000 per year, which has produced projections of a yearly revenue increase of slightly less than 3 percent
- Capital expenditures of approximately $40 to $50 million per year.

The Company also has established a new dividend policy for the utility company:

> *The intent of the Board of Directors of South Jersey Gas Company is to achieve a dividend payout ratio which approximates the natural gas distribution company industry average and to meet or exceed all applicable regulatory requirements related to common equity balances. As such, the dividend policy of the Company will be established to achieve a dividend payout ratio which will fall between 60 percent and 70 percent of SJG's estimated annual earnings. The dividend policy will also be established to maintain a common equity floor of $289.2 million in accordance with the order of the New Jersey Board of Public Utilities.*

On a holding company basis, SJI projects that its earnings per share will increase by six to seven percent per year for the next several years. SJI expects some growth in its Marina thermal projects, as well as in "behind-the-fence" co-generation projects for Marina. SJI believes that these latter projects may get a boost in the event of a move toward hourly electric pricing by the

NJBPU. The rising cost of natural gas during the last two years, however, has made the co-generation option less attractive recently. The Company knows that these projects are, therefore, very uncertain going forward.

5. Conclusions

a. SJG has substantially strengthened its capital structure in 2003 and 2004.

SJI management took strong action to strengthen the utility's capital structure and its fundamental financial strength in 2003 and 2004. The Company achieved a stronger capital structure by retaining most of the utility's earnings in 2002, 2003 and 2004, and by raising equity capital through the dividend reinvestment plan in 2003 and 2004. The holding company has invested most of these funds in the utility business. The SJG 2003 rate case filing incorporated the strengthened capital structure and the settlement of the case included recognition of that structure.

b. SJG's new dividend policy and the negotiated equity floor should result in continued capital structure strength and an improved credit profile.

SJG and the NJBPU negotiated a $290 million equity floor for the utility in the 2004 rate settlement. SJG has since established a dividend policy that recognizes this floor, which should maintain the newly strengthened utility structure. SJG also has stated a targeted equity component of 46 to 50 percent of capitalization on a going-forward basis

c. The planned growth of SJI's non-utility businesses is not expected to greatly change the holding company's financial profile in the next few years.

Liberty's review of SJI's strategic plans for its non-utility businesses noted significant growth over the next five years. SJI plans to make significant additional capital investments in Marina and it expects the SJE and SJRG businesses to grow at a moderate clip. SJI has planned for potential Marina projects that could more than double its investment in thermal and co-generation projects over the next five years. SJI projects that Marina's earnings will grow at an annual rate of over 40 percent over the next five years. SJE expects earning to grow at more than 10 percent over this period; the corresponding rate for SJRG is about 4 percent. The net result of these projections is an estimate that the non-utility businesses will then provide 32 percent of SJI's net income.

SJI management has stated that it will finance the non-utility businesses under approximately the same capital structure as that of the utility. Marina is the most capital-intensive part of the non-utility portfolio. SJI expects that it will initially finance Marina projects with 75 percent debt. However, SJI expects to retain within the non-utility businesses their earnings, which the parent expects to grow significantly. On a net basis, therefore, SJI expects the equity portion of its non-utility capital structure to be at around 50 percent over the next few years. The strategic plans confirm the existence of this approach. A continuation of experienced levels of performance by SJI's non-utility businesses would mean that they will not pose a substantial risk to the consolidated financial and credit profile.

6. Recommendations

Liberty has no recommendations related to financial policy and management.

B. Credit Ratings

1. Background

Standard & Poor's and Moody's, the national credit rating agencies, issue credit ratings for SJG long-term debt securities. SJI does not have, and has never had, a credit rating on any of its debt securities. SJG's corporate credit rating with Standard & Poor's has remained steady at BBB+ since 1993. Moody's rates SJG's unsecured debt at Baa2, which is equivalent to the Standard & Poor's rating. This rating also has remained stable over the long term. The following table shows the year-end 2004 ratings from the two agencies. These ratings were reiterated as of August, 2004.

Table V-4. SJG Credit Ratings

	Standard and Poors'	Moody's
Senior Secured Debt	*A*	*Baa1*
Senior Unsecured Debt	*BBB*	*Baa2*
Corporate Credit Rating	*BBB+*	-

2. Credit Rating Analysis

SJG's qualitative and quantitative attributes dominate its credit ratings, but the agencies also consider the influences of the holding company's non-utility subsidiaries. SJG represents about 90 percent of the consolidated assets of SJI. Standard & Poor's notes that these non-utility subsidiaries add more risk to the overall credit quality picture; but the agency considers the effect to be minimal, given their relatively small size.

Both rating agencies note that SJG operates in a healthy service territory, and demonstrates efficient operations. They note that SJG has above-average customer and throughput growth because of new residential and commercial construction and an expanding Atlantic City gaming industry. SJG also benefits from increased residential heating conversions to natural gas. The large residential and small commercial customer base that provides a great majority of the total profit margins largely mitigates SJG's market risk.

Certain SJG utility-service pricing elements also find favor with the agencies; *e.g.*, the 11.25 percent allowed equity return, an effective weather adjustment clause, and some margin-sharing on all system gas sales. The weather adjustment clause, in particular, has caused SJG's earnings levels to be extremely stable during the last five years.

The credit rating agencies also consider the liquidity of the utility company to be adequate to meet its foreseeable capital needs. SJG has a committed line of credit of $176 million, which SJG alone uses. In addition, SJG's debt maturities for the next five years will be at low and manageable levels. The credit rating agencies list the following credit strengths and weaknesses for SJG:

- Strengths:

  - Stable operations and cash flows;
  - Reduced financial leverage with the redemption of $75 million of higher rate debt replaced by a combination of equity and low-rate debt
  - Regulatory recovery of gas commodity costs and environmental remediation costs
  - Implementation of new regulatory price structure, allowing multiple gas charge resets if certain conditions are met, resulting in the reduction of over/under recoveries
  - Growing customer base.

- Challenges and Weaknesses:
  - Rapidly rising gas costs create the potential for recovery lags related to gas cost balances;
  - Rapidly rising commodity prices also tend to bring increases in bad debt expense, large customer receivables and service expenses.

The credit rating agencies consider SJG to have a solid and strengthening credit profile, but have not changed the SJG ratings since the Company strengthened its balance sheet through a significant recapitalization in 2003. The Company believes that the 2003 recapitalization of the utility has significantly strengthened the credit profile of the utility, and that the credit rating agencies have not yet reflected this improved strength.

The Company has plans to approach the rating agencies in the near future in order to examine the question of a somewhat higher rating for SJG. The Company also notes that the utility has reduced its debt leverage, eliminated its trust preferred stock outstanding, which were considered debt instruments, and has converted its uncommitted lines of credit to committed lines of credit for the utility, all in 2003. SJI has for an extended period also been considering establishing a separate credit rating for SJI from each rating agency.

3. SJG 2003 Recapitalization

SJG operated through the end of 2002 with a high degree of leverage for a gas distribution company. The utility's equity capital as a percentage of total capitalization ranged from the mid-to-high 30s during this time period. The Company noted that the rating agencies repeatedly cited the high degree of leverage as a negative factor in credit ratings.

The Company decided in 2003 to strengthen significantly its utility credit profile utility by increasing the equity capital and reducing debt and quasi-debt capital. SJI has had an optional cash option in its dividend reinvestment plan for existing equity shareholders. SJI raised approximately $35 million in new equity in 2003 through this optional cash investment feature. The Company used the capital raised through the dividend reinvestment program to redeem $35 million of trust-preferred securities. The credit rating agencies considered these trust-preferred securities as debt equivalents. Many companies have redeemed similar issuances in response to this rating agency viewpoint. In effect, SJG replaced $35 million of debt securities with $35 million of equity capital through these operations.

In addition, during 2003, SJG also called and redeemed approximately $75 million of higher priced debt securities. SJG, in turn, issued approximately $115 million of long-term debt

through its medium-term note program in two separate pieces. The medium-term notes carry significantly lower interest rates than those of the retired debt securities.

These recapitalization efforts increased SJG's equity capital ration to 46 to 50 percent of total capitalization, including short-term debt. Short-term SJG debt fluctuates considerably during the year. As is true for LDCs, generally, there is a lag between the time of highest costs (to acquire for gas for winter use) and the time of highest revenues (after customer usage has increased in response to cold weather). Short-term debt is a common LDC method for managing much of that gap.

The Company believes that the current capital structure of SJG, which approaches 50 percent equity capital, is in line with its utility peers, as well as positions the Company for a potential credit upgrade in the future. In fact, Standard & Poor's has stated that:

> *For the next few years, the consolidated financials should improve to more appropriate levels for the rating, with funds flow interest coverage exceeding 3.5 times and funds flow to total debt nearing 20 percent.*

4. Credit Impact of Non-Utility Businesses

Credit rating agencies believe that non-utility activities generally add risk to the consolidated credit quality of a utility holding company. SJI operates in three major non-utility business lines. SJE provides retail electric and gas commodity to retail customers in the region. In support of this position, the Company notes that SJE does not require permanent capital, that it hedges the risk for gas supply, and that the risk of disruption to transportation resources is minor. SJI also notes that SJE faces exposure to the risk of counterparty credit and changes in the rules for energy retailers established by the BPU. Overall, SJI believes that SJE carries a moderate-risk profile, as compared an LDC-typical low-risk profile. SJRG manages natural gas assets, and trades natural gas for its own account. SJI believes that SJRG carries a moderate risk profile also. The reasons are that SJRG does not require permanent capital and the SJI risk management policy requires that SJRG keep minimal open trading positions. Counterbalancing factors include the fact that the energy trading business is volatile in nature and that guarantees, letters of credit and credit facilities to support trading operations impose capital requirements on SJRG. These capital requirements rise with increases in the pricing of the gas commodity.

Marina operates the third major non-utility business of SJI. The Company notes that while Marina's business is capital-intensive, there is a 20-year contract covering core services. This contract is with two casino operators that SJI considers to have among the strongest credit in the industry. The company considers Marina's business risk to be low to moderate, or not much different from that of the gas utility business.

SJI considers the aggregate business risk of these non-utility entities to be moderate, albeit higher than that of the utility. SJI does use or plan an equivalent degree of leverage for its non-utility businesses, however. The capital structure target for the holding company equals the forecast for SJG. At this point, there are not quantified limitations on the credit support that the holding company will supply for these non-utility businesses, in total.

5. Conclusions

a. The Company has maintained and should continue to maintain effective credit ratings.

The two principal rating agencies have long given SJG a solid investment grade, and now recognize a strengthening credit trend. SJG currently has a BBB+ rating from Standard & Poor's and a Baa2 rating from Moody's. The utility has strengthened its credit profile significantly in 2003 by adding equity capital, redeeming trust preferred stock and by retiring $75 million of higher cost debt. Equity as a percentage of the utility's capital structure has increased to about 50 percent. This ratio provides SJG with a solid foundation. The following table shows that SJG's key credit indicators have strengthened significantly.

Table V-5. Key Credit Indicators

Measure	2001	2002	2003
Fixed Charge Coverage	2.36	2.68	3.41
Funds from Operations to Fixed Charges	2.7	3.4	5.3
FFO to Debt	6.0%	10.4%	22.4%
Debt to Capital	59.2%	56.9%	48.6%

Year-end figures.

b. SJI's non-utility businesses have not significantly increased the risk of the consolidated entity, and in turn, the utility.

Credit ratings for SJG reflect the utility credit profile and the impact of the holding company's non-utility businesses. Rating agencies tend to take a consolidated approach in rating utilities in a holding company structure, with the non-utility businesses influencing the ratings of its utility affiliate.

SJI’s non-utility businesses have had only a small impact on utility credit. Nearly all non-utility business carries a significantly higher risk profile than those produced by a standalone LDC. The same is true of SJI’s operations, but to a significantly moderated extent. For example, only one of them, Marina, is capital intensive. SJI has moderated that risk through long-term contracts with customers having good credit standing. SJE and SJRG impose market and trading related risks. SJI has moderated those risks as well. The parent has so far kept them relatively small, conservatively operated, and profitable. To date, therefore, the negative impact on utility credit from these businesses has been slight.

The BPU has also provided a ring-fencing mechanism for the SJG utility business that provides credit protection for SJG from the non-utility businesses. The 2004 rate case settlement includes a minimum SJG equity floor of about $290 million. This minimum equity level provides material credit protection for SJG. Absent a BPU Order violation, SJI cannot cure non-utility financial problems by raiding the utility of its equity capital. The potential negative influence of the non-utility businesses on the utility has therefore been limited by this "ring-fencing" mechanism. The strength of this mechanism should have a positive impact in future SJG credit ratings

6. Recommendations

Liberty has no recommendations related to credit ratings, but notes the related recommendation in Section H. of this chapter that SJI secure its own credit rating.

C. Financing

1. SJG Debt Financing

Permanent debt financing for utility operations takes the form of first mortgage bonds and secured medium-term notes. The same mortgage indenture secures both. The utility had $262,281,000 of long-term debt outstanding at June 30, 2004. Two series of first mortgage bonds issued in 1992 and 1997 represented about $42 million of this amount. SJG established in 1998 a medium-term note program in the amount of $100 million, issuing: $30 million in debt under the program in 1998, $35 million in 2000, and the final $35 million in 2001. SJG established a second medium-term note program in the amount of $150 million in 2003. The Company issued $110 million in debt under this second note program in 2003. This amount remains outstanding. SJG has $40 million of this second facility available to issue, if required to finance utility capital expenditures.

Unsecured debentures issued in 1995 in the amount of $10.5 million comprise the final piece of outstanding utility long-term debt. SJG also has outstanding a series of preferred stock in the amount of $1.7 million. The table below shows the utility's long-term debt outstanding as of June 30, 2004. The weighted average cost, including issuance expenses, of the long-term debt is 6.55 percent, and for the preferred stock is 8.05 percent.

Table V-6. SJG Debt and Preferred Stock

Long-Term Debt	*Issued*	*Maturity*	*Outstanding*
8.190% First Mortgage Bonds	1992	2007	$6,816,000
7.70)% First Mortgage Bonds	1997	2020	$35,000,000
7.125% Secured Medium-Term Notes	1998	2018	$20,000,000
6.120% Secured Medium-term Notes	1998	2010	$10,000,000
7.970% Secured Medium-Term Notes	2000	2018	$10,000,000
7.900% Secured Medium-Term Notes	2000	2030	$10,000,000
7.700% Secured medium-Term Notes	2000	2015	$15,000,000
6.740% Secured Medium-Term Notes	2001	2011	$10,000,000
6.570% Secured Medium-Term Notes	2001	2011	$15,000,000
6.500% Secured Medium-Term Notes	2001	2016	$9,965,000
4.460% Secured Medium-Term Notes	2003	2013	$10,500,000
4.520% Secured Medium-Term Notes	2003	2014	$11,000,000
4.657% Secured Medium-Term Notes	2003	2017	$15,000,000
5.550% Secured Medium-Term Notes	2003	2033	$32,000,000
4.600% Secured medium-Term Notes	2003	2016	$17,000,000
5.027% Secured Medium-Term Notes	2003	2013	$14,500,000
5.115% Secured Medium-Term Notes	2003	2014	$10,000,000
8.600% Unsecured Debt	1995	2010	$10,500,000
Total Long-Term Debt			***$262,281,000***
8.00% Preferred Stock			***$1,690,400***

The Company used the proceeds of the $110 million of medium-term notes issued in July and September 2003 to redeem a series of higher cost first mortgage bonds of $35 million and to redeem $36 million of unsecured debt used to back the issuance of trust preferred stock. The Company also called a series of first mortgage bonds in the amount of about $7.4 during 2003. SJG used the remainder of the proceeds from the medium-term notes to reduce its short-term debt.

The Company considers the medium-term note program, which is secured against the existing utility's mortgage indenture, to be SJG's main financing tool. The Company undertook a competitive solicitation before entering the $150 million medium-term note program in 2003. It received bids from Wachovia Bank, UBS and A.G. Edwards. The Company also reports that it has swapped long-term fixed rates for floating rates on utility debt in the past. The utility has also examined a commercial paper program as a funding tool, as an alternative to the Company's bank lines of credit. The Company determined that a commercial paper program is not effective for the smaller dollar levels and less active program that SJG would entail.

2. SJG and SJI Lines of Credit

Company management reports that until 2003, SJG and SJI had only uncommitted, discretionary bank lines of credit. These uncommitted lines of credit came from numerous banks, with most in relatively small principal amounts of $3 million to $10 million per bank. The Company found no significant problems in borrowing from banks under the discretionary lines when needed in the past. The use of uncommitted lines had not caused any significant liquidity problems.

Circumstances changed in recent years, however. Credit availability became more restricted in the industry, especially in 2001 and 2002. Credit constraints became apparent, as lenders reduced credit availability, especially to lower-rated companies. SJI learned in late 2002 that Moody's Investor Service now considered reliance on uncommitted lines of credit for utility operations could be problematic, causing a possible lack of liquidity during market credit *crunches*. SJI responded by seeking to establish committed revolving credit facilities, while recognizing that they come with higher costs than discretionary credit lines do.

SJG issued an early 2003 solicitation package seeking banks to syndicate a revolving line-of-credit facility. The main banks considered were Wachovia Bank, PNC Bank and JP Morgan. SJI felt that Wachovia offered the advantages of a specialized utility lending group and superior knowledge of the gas distribution business. SJI selected Wachovia as the lead in June 2004 and then put together the rest of the lending syndicate, relying on existing relationships and the treasurer's in-depth knowledge of the corporate lending business.

The solicitation for lines of credit produced committed and uncommitted lending facilities for SJG and SJI. SJG has a committed revolving line-of-credit facility that expires in 2006, totals $100 million, and includes commitments from several banks. SJG also has uncommitted facilities totaling $76 million from the same banks.

SJI entered into a June 2003 revolving, committed line of credit facility for a one-year period for $40 million. SJI extended and increased the size of this revolving line-of-credit facility to three years and to $60 million in June 2004. SJI also has at present $30 million in uncommitted lines of credit from some of the same banks.

The table below shows the committed and uncommitted credit facilities for both SJG and SJI.

Table V-7. SJG and SJI Line of Credit Facilities

	South Jersey Gas		South Jersey Utilities	
Lenders	**Committed**	**Uncommitted**	**Committed**	**Uncommitted**
Lender 1	$20,000,000	$10,000,000	$12,000,000	$15,000,000
Lender 2	17,142,857	3,000,000	10,000,000	-
Lender 3	17,142,857	8,000,000	10,000,000	-
Lender 4	17,142,857	5,000,000	10,000,000	$,000,000
Lender 5	10,714,286	10,000,000	7,000,000	-
Lender 6	-	20,000,000	-	-
Lender 7	-	10,000,000	-	-
Lender 8	10,714,286	10,000,000	7,000,000	$0,000,000
Lender 9	7,142,857	0	4,000,000	-
Total	***$100,000,000***	***$76,000,000***	***$60,000,000***	***$30,000,000***

SJG uses its lines of credit for working capital and financing the purchase of natural gas for summer storage fill and for winter seasonal purchases. SJI uses its line of credit to:

- Meet Marina's working capital needs
- Finance SJE's receivable payment lags
- Carry SJRG's trading book
- Finance the holding company.

The Company has structured its credit lines so that SJG has no ability to borrow under the SJI facilities and SJI has no ability to borrow under the SJG facilities. The underlying credit documents contain provisions that provide for this separation. The same bank groups participate in both the SJG and SJI facilities. The Company reported that all of the participating banks agreed to lend both to SJG and to SJI, except for one. That bank was willing to lend only to SJG. The Company notes that some of the banks have shown interest in lending to the non-utility sector, in light of its success at SJI.

Liberty reviewed documents produced by the 2003 solicitation for lines of credit. SJI stated that utility needs, particularly in light of the difficulties in continuing to rely upon uncommitted credit lines, served as the primary initiator of the solicitation process. Nevertheless, negotiation and arrangement of the SJG and SJI line-of-credit packages occurred at the same time, used the same process, and produced the same groups of committed lenders. The Company aggregated agent, legal, and other fees for the solicitation and then allocated them to SJG and SJI in proportion to the sizes of their respective lending packages.

SJG and SJI prepared a February 2003 presentation package and confidential information memoranda to solicit participants in the facility. Proposals to be the lead bank and syndication agent for the line-of-credit facilities came from Wachovia, PNC Bank, and JP Morgan. The first presentations of the banks, including indicative proposals for credit terms, came in February 2003. Such indicative terms included the proposed size and term of the facility, indicative pricing, estimates of up-front and other fees, and a general outline of key covenants to be included in agreements.

The indicative terms included pricing for the separate utility and SJI line-of-credit packages, both of which were to be based on the utility's credit rating. SJI did not then and does not now carry a credit rating. The utility credit rating was therefore the only available measure. The dominance of SJG in SJI's portfolio made this measure usable as a proxy for the profile for the parent.

The Company conducted discussions with the banks and then decided to seek more specific proposals from Wachovia and JP Morgan. These proposals came in April and May of 2003. They became more specific regarding the size of the SJG and SJI facilities, the pricing, and information regarding the financial covenants and arrangement fees. A three-year committed revolving credit facility was proposed for the utility, and a 364-day committed facility for SJI was proposed. The Company selected Wachovia after discussions with both remaining institutions. The Company then negotiated the term of the facilities for both SJG and SJI. An August 21, 2003 statement of the final terms sized the SJG facility at $100 million, set a term of three-years, and set fully drawn pricing at [redacted]. The SJI facility was for $40 million for 364 days with the same pricing as SJG obtained.

The pricing for both of the lines of credit were based on SJG's BBB senior unsecured debt rating. The facility fee for the utility was slightly more expensive, and the LIBOR margin was slightly less for the utility. The utilization fee was the same for both SJG and SJI. The net result is that the borrowing costs for the utility and SJI, on a fully drawn basis, were the same. One would not expect the same borrowing cost for the more risky parent facility. The utility facility's

longer duration (three years versus the SJI facility term of 364 days), however, must be considered. The parent facility required a lesser capital commitment from the lenders. All other things equal, this would justify a lower financing cost. Nevertheless, the charging of essentially equal rates seems an unlikely result, assuming complete independence in the negotiation of the two facilities. In addition, the Company noted that the lack of a spread between utility and non-utility financing costs is also due to SJG's ability to upstream dividends to the parent company. This conduit tends to equalize the credit ratings for the two entities, as noted by the close relationship of credit ratings between utilities and their parent holding companies.

The SJG the line-of-credit agreement included the following key elements:

- Three-year $100 million revolving line of credit;
- SJG senior debt rating of BBB
- [redacted]
- [redacted]
- [redacted].

The SJG credit agreement had the following key covenants:

- SJI to own 100 percent of SJG at all times
- SJG and its subsidiaries to have less than 65 percent debt at all times
- SJG's EBIT/interest coverage minimum of 2.0 to 1, based on SJG and its subsidiaries
- Defaults by the non-utility affiliates not to affect the covenants for SJG
- Proceeds of the SJG line of credit to be used only by SJG for general corporate purposes and working capital.

The negative covenants of the agreement are standard for agreements of this type. The covenants also do not include any cost-defaults between SJG and the non-utility entities. The credit agreements contain no substantive dividend restrictions.

SJI renewed its revolving credit in July 2004, extending the maturity into a three-year facility and increasing the committed line of credit from $40 million to $60 million. SJI received the same pricing on its new three-year extension as it received on its previous 364-day facility. The Company observed that the credit markets had significantly improved in 2004, as compared with 2003. The Company also noted that the banks have become even more comfortable with SJI's non-utility businesses, which performed even better than they did in 2003.

3. Non-Utility Business Financing

SJI arranges the financing packages for all of its non-utility businesses. Marina is the only capital-intensive business among them. SJI arranged construction financing to finance Marina's primary thermal plant in Atlantic City. Between September 2001 and January 2003, Marina issued $20 million of tax-exempt and $25 million of taxable variable rate demand bonds through the New Jersey Economic Development Authority. The tax exempt and taxable bonds mature in 2031 and 2021, respectively. Investors in the bonds receive liquidity and credit support from letters of credit provided by a syndicate of four commercial banks. These underlying letters of credit provide liquidity support for the weekly remarketing of the variable rate demand bonds, extending until September 2005. The Company used the proceeds of the Marina bond issuances

to fund most of the construction costs for the thermal energy plant constructed by Marina to serve the *Borgata* hotel and casino, which opened in July 2003.

Marina has entered into rate-swap contracts for both its Series A and Series B bonds, swapping variable-rate for fixed rate instruments. The Marina financing also gets support from a firm 20-year contract for chilled and hot water. The contracts provide a level of financial support to the debt financing of Marina. SJI infused $ into Marina in 2000 and an additional $ following , making the permanent financing of the facility $.

4. Non-Utility Credit Requirements

SJRG buys and sells physical gas contracts, and hedges its position by contractually locking in both the supplier and the buyer. SJRG also has a margin account with Smith Barney, which is required by volatility in the market pricing for physical versus financial positions. SJI considers the SJRG monthly book of electric and gas purchases to exert the biggest credit demand of all the parent's non-utility businesses. The SJRG margin account is the most volatile element of the non-utility businesses. The margin account can quickly swing $10 million in either direction, which places funding requirements on SJI.

SJE's credit needs are largely a function of its customer requirements for gas and electricity. SJRG secures the gas and electricity resources needed by SJE. Marina has not imposed significant working capital needs on the parent, because it has generally produced positive cash flow at all times. SJI provided equity infusions into SJE of $1.75 million in 2000 and $500,000 into Millennium in 1999.

5. Conclusions

a. **SJG's access to capital for utility operations is strong and improving.**

b. **The long-term debt and line-of-credit agreements for the utility and the holding company are separate and do not intertwine the financial interests of each.**

c. **SJI's joint solicitation of credit agreements for SJG and SJI was not ideal, but has not produced substantial problems.**

6. Recommendations

Liberty has no recommendations regarding financing, apart from the recommendation in Section G. of this chapter that there be no more joint negotiation of credit agreements.

D. Cash Management

1. Short-Term Borrowing Levels

As with most gas distribution companies, peak monthly borrowings for SJG occur around the gas settlement day, which happens near the 25th of each month. The following chart shows the peak borrowings for SJG on a monthly basis for 2000 through September 2004.

Table V-8. SJG Monthly Peak Borrowings

	2000	2001	2002	2003	2004
January	$129	$124	$136	$155	$87
February	$108	$137	$124	$139	$68
March	$96	$120	$100	$115	$35
April	$92	$111	$98	$100	$24
May	$108	$127	$100	$122	$30
June	$110	$145	$120	$122	$38
July	$108	$143	$118	$124	$65
August	$95	$129	$123	$55	$63
September	$100	$130	$127	$58	$42
October	$113	$137	$156	$76	$52
November	$125	$144	$162	$107	$54
December	$130	$142	$154	$104	$56

Millions of dollars.

The table shows that SJG's custom through late 2003 was to carry high levels of short-term borrowings year-round. Most LDCs have high levels of short-term borrowings to finance their gas purchases during the winter heating season; these high borrowing levels usually extend from November through approximately the end of April. SJG, however, until late 2003 had $100 million of short-term borrowing and often much more than that amount throughout the year.

Liberty sought to identify the major influences on the utility's short-term borrowing levels during these years. The Company listed the following factors:

- Gas cost deferrals in the winter of 2000/2001 totaled approximately $52 million, and $30 million of this deferral was carried into the following winter.
- A declining interest rate environment in 2000 through 2003 encouraged the use of relatively more short-term than long-term debt. The Company played the yield curve in carrying greater amounts of short-term borrowings in order to reduce interest costs.
- SJG locked in lower interest rates with the issuance of $110 million of long-term debt in 2003. This action reduced short-term debt levels on a year-round basis as the Company termed out most of its shorter-term borrowings.
- SJG generally did not invest short-term funds, because doing so would not make economic sense due to a negative arbitrage from investing funds borrowed under long-term instruments.

SJI acts as the central borrowing agent for both the holding company and each of the non-utility businesses. The non-utility businesses, in turn, borrow from SJI. The table below shows SJI's monthly peak short-term borrowings for 2000 through September 2004.

Table V-9. SJI Monthly Peak Borrowings

	2000	2001	2002	2003	2004
January	$1	$9	$27	$13	$28
February	0	$13	$25	$11	$35
March	0	$13	$17	$18	$34
April	0	$7	$5	$16	$27
May	0	$11	$5	$8	$21
June	0	$15	$9	$14	$17
July	0	$15	$16	$25	$24
August	0	$18	$12	$26	$27
September	0	$20	$12	$23	$30
October	0	$17	$15	$34	$29
November	0	$16	$20	$32	$27
December	$7	$18	$20	$27	$46

The principal influences on SJI borrowing during this period consisted of the following:

- Funding of Marina construction in Atlantic City starting in late 2000 and lasting until June 2003
- Placement in September 2003 of Marina's variable rate demand notes, which reduced short-term borrowing
- SJE and SJRG monthly borrowing needs tied to hedging gas sales contracts.

SJE experiences an approximately 60-day cash lag on each sold contract. Borrowings can vary widely because of their dependence on customer sales levels, gas prices, and weather. SJE and SJRG borrowing peaks rose as high as $34 or $35 million in February and March 2004.

2. Cash Forecasting

The annual budgeting process includes high-level cash forecasting SJG and SJI. The budgeting process provides a forecast for month-end cash positions for the forecast period. These expected month-end cash positions are then updated monthly, as information on actual performance accumulates throughout the year. These month-end cash position forecasts provide more of a *ballpark* figure; they do not offer a refined cash forecast with daily estimated positions.

The Company applies a more informal cash forecasting process for SJG cash requirements within each month. The treasurer and cash management assistants review cash and borrowing capacity on hand and major cash requirements within each month. The bank accounts are tracked and major payment requirement memos are generated by the accounting group. A file folder is maintained of these payment advice memos, invoice copies, and other information for major payments within the month.

The Company keeps this information in folders with daily information slots. The highest levels of payments usually occur around gas settlement day. The Company believes that forecasting cash requirements for SJG is relatively easy; most payments and invoices are of a relatively fixed amount, except for the gas purchase payments and utility receipt patterns, which comprise the prime focus of the cash management group.

Forecasting cash flow for SJI's non-utility businesses is considered more difficult. Currently the Company is gathering cash-flow information and historical cash-flow trends for the holding company in the non-utility businesses, in order to develop a daily cash-flow model. While such a cash-flow model is being developed for SJI, none is being considered at this time for SJG.

3. Daily Cash Management

Daily cash management operations begin from the general guideline that SJG and SJI both borrow first from their uncommitted lines of credit. The committed lines of credit provided by the bank syndicates entail more administrative restrictions, including multiple days of notice for borrowings, commitment fees, and minimums of 30-day borrowing maturities. The uncommitted lines of credit therefore frequently offer more flexibility, including overnight borrowings, and there has been competition to provide lower rates. Generally, SJG and SJI reserve the committed lines of credit for larger cash needs, such as utility gas payments, especially in the winter season.

SJI has to emphasized the seasonal nature and borrowing needs of the gas business in its operations and its communications with the bank syndicate. Care has been taken to explain the possibility of regulatory deferrals of gas costs during especially cold winters. Wachovia, the lead bank, is perceived as being especially knowledgeable and comfortable with possible gas cost deferrals and the borrowings that would result.

The treasurer holds regular meetings with company officers to review the cash management outlook for the following two weeks. The treasurer also includes major cash payments on a forward-looking basis in the Company's *Major Issues Report*, which officers review every two weeks.

4. Cash Pooling and Inter-company Balances

SJG does not participate in any type of cash pooling with any of its affiliates. The Company's policy is that the utility may not lend money or property to its parent without first obtaining the BPU's prior approval. SJG reports that it has never sought such an approval, and has never lent SJG money or property. There is no pooling of cash positions or borrowing between SJG and the parent company or the non-utility businesses.

SJI does pool cash and borrowings among the parent company and the non-utility subsidiaries. SJI maintains non-utility working capital lines of credit at the parent, and uses them to provide funding to all non-utility subsidiaries. Consequently, as cash is collected at the subsidiary levels, it is up-streamed to the parent either by loan or dividend. SJI then uses these inflows to reduce the amount outstanding against the parent's lines of credit. This process minimizes the total amount of overall credit facilities needed to support the non-utility businesses, and simplifies the credit underwriting process for the SJI creditors.

The affiliates generally settle inter-company balances monthly. Liberty reviewed the month-ending accounts payable and accounts receivable balances between the utility and its affiliates for 1995 through 2003. The balances were extremely small in amount. The build-up of inter-company balances is not an issue at SJI.

5. Letters Of Credit

SJI arranges for standby letters of credit from commercial banks to support the borrowings and operations of its non-utility businesses. The bulk of the letters of credit outstanding at September 30, 2004 supported Marina's long-term debt borrowings of $45 million, which finance the Borgata project. Four different letters of credit from four commercial banks support the variable rate demand notes. The letter of credit agreements contain interest coverage covenants, which measure SJI financial performance on a quarterly basis.

The Company reports that the total cost of the Marina letters of credit is [redacted] percent of the face amount annually. SJI also provided a letter of credit supporting Marina's construction of the thermal plant. This letter of credit has been reduced to $2.5 million, and currently costs [redacted] annually.

In addition to the bank letters of credit, SJI also issues its own letters of credit supporting the activities of SJE. These letters of credit support electric and gas marketing in the territories of other regional utilities. At September 30, 2004, SJI had $[redacted] of such letters of credit outstanding.

The Company observed that the market rate for a letter of credit to back non-utility operations is generally about one percent annually. The Company notes that it bills its non-utility subsidiaries for the cost of the bank letters of credit.

6. Conclusions

a. **SJI has properly segregated cash management systems and operations for the utility and the holding company, representing the non-utility businesses.**

b. **SJI charges bank letter of credit fees to its non-utility subsidiaries.**

c. **The cash forecasting process for SJG is too informal and needs to be upgraded to meet good utility practice.**

7. Recommendations

21. **Establish and operate a rolling cash management forecast for the utility similar to that being established for the non-utility entities and SJI.**

A cash forecasting system that supplies daily estimates of cash positions for 30 to 90 days is important in the gas LDC business, especially with the volatility of the natural gas commodity in recent years. Liberty believes that SJI should make the establishment of such a formal forecasting tool for the utility a high priority prior to the next winter season.

E. Investor Relations

1. Background

SJI has 13 to 14 million shares of its common stock outstanding. SJI's investor base has more retail investors, as contrasted with the more institutional investor base of most utility companies.

SJI observes that retail investors hold about 60 percent of its shares; other utilities typically see percentages in the 30 to 40 percent range. The SJI investor base includes some former shareholders of Atlantic Electric, who are interested in their local utility company. SJI's perception is that its shareholders as a group are more dividend- than growth-driven. Many diversified utility companies strove to show a 10 percent annual earnings growth during the late 1990s, and into 2000 and 2001. SJI only forecasted approximately 5 percent earnings growth during this period. This difference is among the factors causing SJI to believe that its investor base is less demanding and more conservative than that of many utilities. SJI has taken what it considers to be a relatively conservative expansion into non-utility businesses in order not to drastically change the risk profile of SJI. This conservatism is designed to continue SJI's appeal to its core shareholders.

SJI tracks its key investor groups with a monthly internal report. The November 2004 report detailing share ownership showed the following distribution in share ownership:

- Officers, directors, and Company employees; 12 percent
- Individual shareholders; 44 percent
- Institutions; 44 percent.

The top ten institutional holders of SJI stock accounted for approximately 27 percent of the ownership of SJI shares. The top ten institutional investors include some of the more common institutional investors who focus on utility stocks.

The Company reports that approximately 25,000 to 27,000 shares trade on an average day. The *New York Stock Exchange* lists SJI shares.

Wall Street equity analysts' coverage of SJI has decreased dramatically in recent years, during which a number of investment banks have left this field. Six or seven equity analysts used to follow SJI securities. Only *A.G. Edwards*, *Value Line*, and *Edward Jones* continue to follow SJI actively. Even among this group, only *A.G. Edwards* includes the SJI earnings information on first-call investor service.

2. Conclusions

a. **SJI has effectively managed its investor relations with equity investors in recent years, increasing the interest in the company's common stock and providing a reliable source of equity capital.**

3. Recommendations

Liberty has no recommendations related to investor relations.

F. Risk Management

1. Background

SJI participated in a joint venture with Anadarko Petroleum prior to 2002. As part of the joint venture arrangement, Anadarko provided SJI with trading and risk management services. SJI

bought out Anadarko as partner in 2002, taking over the entire risk book of the partnership, and dealt with the new FAS No. 133 regulations. SJI realized that taking on the trading book required it to initiate a comprehensive corporate risk management policy. SJRG would become the trading arm of SJI, and would market and trade energy commodities for SJE and for its own trading book. SJI developed in 2002 a risk management policy for the entire SJI organization with assistance from SJI's independent accountants.

SJE and SJRG undertake the market risk of price fluctuation in their buying, selling, and transporting of natural gas. The two mitigate this risk by entering into a variety of physical and financial transactions, which include forward contracts, swaps, futures and options. The SJI risk management policy provides guidelines and limits to managing these transactions, which include volumetric and monetary limits.

The Company says that SJE conducts only physical commodity transactions; it does not enter into financial derivative positions directly. SJRG manages trading risk for SJG, for SJE, and for its own portfolio by entering into financial derivatives contracts. SJI's risk management guidelines allow SJE an SJRG to have limited unmatched (*open*) positions on a deal or portfolio basis, while conducting these trading activities. Limiting open positions to a minimal level effectively hedges the financial impact that SJRG can experience from change in the value of its transactions.

The SJI risk management policy was also structured to include limitations on open position trading volumes. The trading needs of the utility business and the needs of SJE and SJRG formed the basis of those limitations. According to the company, open positions were allowed only to the extent needed to account for transaction time. SJI's corporate risk management policy includes specific limitations on SJE and SJRG. SJE is only authorized to trade natural gas and electricity through physical forward sales and purchases. SJI's credit committee must approve SJE's allowed counterparties and dollar limits. SJE has seven authorized natural gas and electricity traders.

The key limitations on SJE's trading are the aggregate open position risk limits and the margin limits. The policy states:

> *The intent of this policy is that all natural gas purchases are to be linked to a specific retail market. Due to the nature of the residential market, there may be open electricity purchases that will be linked to a specific customer agreement with positions from time to time. All commodity, capacity and transportation costs are hedged to avoid market price fluctuation risk. Open positions will be monitored by the Risk Management Department and any unusual levels will be brought to the attention of the Risk Management Committee.*

The risk management policy requires SJI Audit Committee approval for all SJE open natural gas transactions that extend beyond two years. Since SJRG acquires and trades natural gas and electricity for SJE, the risk management items for SJE's business are mostly dealt with through limitations on SJRG trading and positions.

The risk management policies that apply to SJRG impose much more expansive limitations. SJRG may trade natural gas only through physical forward sales and purchases and forward natural gas derivative sales and purchases, including fixed price, basis, options, swing swaps. SJRG may trade on the NYMEX, through brokerage houses and OTC. The risk management policy authorizes only four SJRG traders.

The policy requires SJRG to [redacted]. On an annual basis, SJRG [redacted]. SJRG [redacted]

For other [redacted], SJRG [redacted]. SJRG must also remain [redacted].

SJRG is allowed up to $[redacted]. [redacted] require the authorization of the Vice President of SJI. [redacted] require authorization of the Risk Management Committee and notification to the Audit Committee. [redacted] require authorization from the chair of the Risk Management Committee and Audit Committee. SJRG may not enter [redacted]. [redacted] years require Audit Committee approval.

SJI monitors the dollars committed to the SJRG margin account. The Risk Management Committee monitors the margin account cash balances through daily summary reports from the risk management manager. Such margin account balances, along with credit balances discussed in RMC meetings, are included in the Risk Management Committee minutes provided to the SJI Audit Committee.

2. Counterparty Credit Evaluations

SJI considers the creditworthiness of trading counterparties to impose the greatest risk. Counterparty risk is, therefore, a key focus of SJI's risk management programs. Liberty's companion reporting addressing *Gas Supply* discusses SJG's management of counterparty risk. SJE and SJRG both take non-utility related counterparty risks. Generally speaking, two months of physically delivered gas or electricity is sent to a trading counterparty before any shutoff can occur for nonpayment. As a result, the risk exposure is generally two months of business.

SJI performs a formal credit analysis for all potential SJE and SJRG counterparties. *Dunn & Bradstreet* reports and credit references are collected from various sources. The credit analyses result in a list of approved counterparties and a dollar limit for accounts receivable from each counterparty. On a monthly basis, the counterparty credit limit list is compared to actual business transactions for the Risk Management Committee report.

SJRG trades actively with approximately 25 counterparties. Most SJRG counterparties are major players in the natural gas market. A shakeout of players in the natural gas and electric markets during the last few years has weeded out many of the counterparties who had poor credit, leaving mostly stronger counterparties as trading partners. SJRG also performs gas and electric commodity acquisition for SJE, which in turn sells to its customers what it has acquired from SJRG. The credit of SJE customers is generally lower than that of SJRG counterparties. As a result, SJE sales engender more credit risk. SJI's credit requirements for counterparties that do not meet the Company's credit criteria are: a parental guarantee; or a letter of credit from a bank if the parental guarantee is not sufficient.

The SJI risk management manager performs credit evaluations for counterparties of SJG (for off-system sales), SJE and SJRG. The risk management manager also monitors the trading operations for these entities to determine whether they follow the Company's risk management policy. The risk management manager also monitors and evaluates the Resources mark-to-market report on a daily basis.

Risk management reports are prepared on a regular basis for the SJI Risk Management Committee. A weekly spreadsheet includes the trading positions of SJRG and information demonstrating whether SJE and SJRG are in compliance with the risk management policy. SJRG must be in compliance with the risk management policy, and all SJE positions must be covered positions. A monthly report prepared for the Risk Management Committee determines whether SJE and SJRG counterparties are in compliance with the established credit limits.

Liberty asked the Company to prepare a chart of monthly accounts receivable amounts for SJE and SJRG for 2002 through 2004. The Company noted that most of SJRG's receivables are owed by SJE, for whom SJRG makes purchases. As a result, most of Resources' receivables are not directly at risk. On the other hand, SJE's receivables are at risk, and therefore comprise the primary focus of the SJI credit evaluations.

SJE's residential sales are generally billed and collected by the utility providing transportation service. This factor provides some diversity and thereby moderates risk. Commercial and industrial receivables for SJE are riskier, and counterparties are evaluated for credit approval. SJI does not have a limit on the total amounts of counterparty receivables for SJE or SJRG. SJI instead focuses on the quality of the counterparties and the quality of the credit evaluations. SJE's receivables have been increasing with increased sales and substantial increases in the price of natural gas in the last few years. SJE's receivables ranged from [redacted] in 2002; they [redacted]. The [redacted] is the first-priority focus of SJI's credit evaluations for its non-regulated activities.

SJI has standardized evaluation forms for two types of customers: a) SJRG customers (other than SJE) and b) retail SJE commercial and industrial customers. The counterparties are evaluated under eleven different criteria and are assigned a point value for each criterion. SJI gathers publicly-available and subscription financial information on each counterparty, such as Dunn & Bradstreet reports and credit ratings. SJI uses the stress indicator and credit score from the Dunn & Bradstreet reports as two key credit measures. The financial statements of the counterparties

are also analyzed: the profit and loss statements for several quarters, debt coverages and the credit rating cash flow measures are key indicators. Credit ratings analyses and credit ratings are also analyzed for the counterparties. Additional counterparty measures are the stability of the management team, whether a counterparty is regulated and the quality of the regulation, and various other customer and market perceptions of the company and its business trends.

Following the scoring of the evaluation, a credit limit is determined for each counterparty. If SJI believes that the counterparty is too weak, the Company asks for a parent guaranty from an investment grade parent, if available. SJI maintains a list of approved counterparties and their credit limits. The Company also prepared for Liberty a list of rejected credit applications and the reason for the credit rejection.

According to the SJI risk management manager, occasionally SJE counterparties exceed their authorized credit limit. The risk management manager explains that an increase in the price of the electricity or natural gas commodity can cause a counterparty to exceed its credit limit. SJI monitors these occasional exceptions closely.

SJI reports that the credit evaluation process has been effective; no payment defaults have been experienced by Resources; and SJE has had a very low default ratio, which is less than the utility bad debt percentage.

3. Risk Monitoring

On a day-to-day basis, one of the key responsibilities of SJI's risk management is to monitor the trading and commodity operations of SJRG. The risk management manager reviews and evaluates SJRG positions and trades on a daily basis. Portfolio open positions and risk management position limits are specific focuses on a daily basis. The mark-to-market summary report for SJRG is prepared for the Risk Management Committee on a weekly basis. Each of the risk management criteria, especially for open SJRG positions, is monitored for adherence to the policy guidelines. SJRG's Smith Barney margin account cash balance is also monitored on a weekly basis. Large changes in the mark-to-market position and in the margin account are key focuses for the risk management manager. The risk management manager emphasizes that he monitors the mark-to-market position on a daily basis. If the mark-to-market is negative, there are potential problems with the value of the trades. In addition, the short positions in the New York market area during the winter is also a focus for risk management purposes. This position is particularly risky due to the volatility of this market. Liberty reviewed the weekly mark-to-market reports prepared for the Risk Management Committee from 2002 to the present. SJI also provided summaries of the Smith Barney margin account for SJRG for each month in 2002 and 2003.

4. SJI Guarantees

SJI provides guarantees to support the trading operations of SJRG and SJE and the debt instruments of Marina. The Company has a self-imposed limit on SJI guarantees; it has been increasing over the past few years. SJI increased its guarantees limit to $210 million in August 2004, from around $150 million the previous winter season. The Company notes that its SJRG gas traders raised the issue that increased gas pricing would require higher levels of SJI guarantees to support Resources' historic trading levels. As a result, the Company significantly

increased its guarantee limit and individual counterparty guaranty limits. In addition, the volume of trades by SJRG has also increased during the past few years, primarily due to increases in SJE's electric business. The Risk Management Committee recommended increasing the guarantee limit to the SJI board and it was raised to $210 million.

The vast majority of the guarantees supporting SJRG and SJE were issued to guarantee the payment to third parties who have commodity-supply relationships and contracts with the SJI subsidiaries. These guarantees support the SJRG and SJE accounts payable to the counterparties. The Company notes that, as part of its risk management policy, the Company also requires similar parental guarantees from trading counterparties. The guarantees for SJRG and SJE generally cover amounts due (accounts payable) by these two affiliates. The following table summarizes guaranteed amounts and the accounts payable outstanding against them over recent years. Some of the guarantees are not associated with accounts payable.

Table V-10. SJI Guarantees

Item (1)	**Outstanding Guarantees** (2)	**Accounts Payable** (3)	**Ratio** (Col3/Col2)
March - 2002	$130.841		
June - 2002	130.841		
September - 2002	100.841		
December - 2002	97.500		
March - 2003	100.100		
June - 2003	113.100		
September - 2003	131.800		
December - 2003	147.600		
March - 2004	157.200		
June - 2004	151.550		
September - 2004	159.600		
December - 2004	196.600		

Dollars in millions

Of the $210 million in approved guarantees, about $199 million were issued and outstanding in November 2004. A high percentage of these guarantees back the physical trading operations of SJRG. SJI has provided corporate guarantees backing the accounts payable of SJRG in the amount of $163 million to approximately 25 key counterparties. The size of the SJI guarantees backing trading with these counterparties is much greater than the actual SJRG accounts payable to these counterparties, however. SJRG monthly accounts payable ranged from $ during 2002; from $ in 2003; and peaked (for the first three quarters of 2004) at about $ in January and February of 2004. The preceding table shows the amounts outstanding only at quarter end.

SJI reports that the parent guarantees for SJRG support the trading activities of SJRG for its own book, as well as accounts payable for SJE sales to its customers. SJI also provides parental guarantees to support SJE's commodity sales of electricity and natural gas. As of October 22nd, 2004, SJE benefited from parental guarantees for $. Most of these parental

guarantees are required by utilities in whose service territory SJE conducts business. SJI provided a listing of these guarantees and amounts.

SJI also provides parental guaranties in support of Marina. The Marina guaranties totaled $[redacted], and primarily support Marina's operational activities.

SJI has not valued these guaranties, no money has moved, and no costs have been charged for the guarantees. In addition, the Company says that no reimbursement has been made to the utility for the indirect use of utility credit in providing the SJI guarantee support. The Company's position is that there are not costs and that the beneficiaries cannot rely on SJG cash flows to support the guarantees; therefore, SJI makes no payments and believes that none should be required.

5. Conclusions

a. **SJI's Risk Management policy for its non-regulated activities provides a good foundation to control risk.**

b. **SJI's counterparty credit evaluations protect against bad debt losses for SJE and SJRG and are thorough and effective. SJI has recognized the importance of evaluating potential counterparties for the businesses of SJRG, SJE and Marina.**

SJI has established a qualification and credit limit process that is thorough and uses proper criteria. SJI applies its credit evaluations to potential counterparties prior to doing business through SJE or SJRG. The counterparty evaluations have been effective in preventing nonpayment losses for non-utility businesses.

c. **SJI has not reflected the impact of its parental guaranties on the utility, nor has it compensated the utility for the value of those guarantees.**

SJRG and SJE are thinly capitalized marketing and trading operations. The most visible base costs of such business operations are personnel, telephone and communications systems, trading platforms, and accounting and risk management systems. However, a crucial and indispensable component of such operations is access to credit. These businesses require large amounts of backing credit, and are known throughout the utility industry *as credit-eaters*.

Counterparties of the SJI non-regulated businesses demand a parent guarantee to better ensure that they get paid for obligations, especially from SJRG and SJE. SJI applies the same credit requirements to its own counterparties. The access to liquidity and credit, to ensure timely payments for commodity contracts, is a critical base requirement to operating these businesses.

SJI has not recognized the value and costs that are associated with the credit requirements of these businesses. The value and costs are not reflected in any charges to these non-regulated companies for the parent guarantees. If not for the SJI parental guaranties, SJE, SJRG and Marina would have to pay for bank letters of credit or dedicated lines of credit to ensure their counterparties of payments. Moreover, the existence and the significant and growing magnitude of the guarantees call into question the impact on utility credit. The preceding table showed the

amount of the guarantees (both the maximum amount guaranteed and the amount of outstanding payables covered by those guarantees) has been growing substantially. They can be expected to grow greater in the event of business expansion, unless energy prices fall. If they rise, the guarantees can be expected to grow even in the absence of business expansion.

By the end of 2004, the payables outstanding supported by parent guarantees had grown to levels exceeding SJI's equity net of the utility equity floor recently established for SJG by the BPU. The following table shows this condition.

Table V-11. Guarantees in Relation to SJI Equity

Total SJI Equity	$344.4
SJG Equity Floor	$289.2
Remaining SJI Equity	$55.2
Total Gurantees	$199.6
Total Guarantees to SJI Total Equity	58.0%
Payables Outstanding	
Payables to Net SJI Equity	
Growth in Guarantees ('02-'04)	100.8%
Growth in Payables ('02-'04)	421.8%

Dollars are in millions.

The growth in guarantees and payables has been dramatic. Certainly, the general increase in market prices for natural gas has driven a major portion of it. The bulk of SJI's financial standing and ability to provide the guarantees comes from SJG and the earnings and dividends that it generates above the BPU equity floor. SJG provided most of SJI's net income from 2000 through 2004; it is projected to continue to do so from 2005 through 2008. In addition, SJG has served as a in the next five years. SJG provides a stable cash flow and credit foundation through its diversified customer base in its utility business, which allows SJI to support its fledgling non-regulated businesses during their growth period.

d. SJI has not determined a limit for parental guarantees that would preclude a negative credit impact on SJG.

6. Recommendations

22. Limit the amount of guarantees that SJI can make by relating them to SJI equity net of the BPU floor for SJG equity.

Total amounts guaranteed by SJI provide an outside measure of potential harm, but there is an extremely small likelihood that SJI would ever be in a position to have to perform under all of them. It is reasonable to expect that it would take an extremely precipitous change in the marketplace; *i.e.*, even much more substantial than what has happened to energy prices recently, to make SJI's exposure under guarantees unmanageable. SJI could, for example, respond to adverse business circumstances simply by limiting activities to prevent further accumulation of payables subject to the guarantees.

The payable amounts already outstanding provide a measure of the exposure that the guarantees create for SJI. While substantial, these amounts are much smaller than the level of the supporting guarantees. Nevertheless, they already approach or even exceed the amount of SJI equity not already dedicated to utility operations. A conservative yet prudent approach would be to limit SJI's non-utility guarantees to this net amount of SJI equity. This approach is conservative because it remains unlikely that all payables would fail to have a corresponding actual or predictable receivable, given the nature of the operations of SJI's energy-market, non-utility subsidiaries. The approach is prudent because it would help to address the *total meltdown* conditions that do have precedent in the business. While there is not a reason to conclude that SJI is taking undue risk in its energy-industry operations, it is nevertheless true that this segment of the business remains significantly more risky than the gas utility business. As much is clear from the cautionary tone of S&P's recent evaluation of SJI credit standing. S&P appears, for example, to have found more reason for concern than for reassurance in the growth of SJI's non-utility energy businesses, despite their increasing contribution to net income.

Liberty therefore recommends a *soft* limit that requires SJI to compensate SJG when the total accounts payable supported by SJI guarantees exceeds 80 percent of SJI equity net of the BPU equity floor for SJG (*SJI net equity*). Liberty also recommends a *hard* limit that would prohibit such payables from exceeding 150 percent of SJI net equity. This recommendation would not force an extreme change on current business operations. For example, payables have recently run at around 100 percent of SJI net equity. SJI could at this level still maintain at present levels the operations supported by the guarantees. The change that recommendation would create at current levels would be either to require compensation for impacts to utility credit or to force SJI to negotiate with more vigor when asked to provide guarantees for non-utility operations.
At the 150 percent level, SJI could actually increase supported payables to underwrite expansion of non-utility business or further increases in natural gas prices.

Given the recent emergence of rating-agency concerns, even the existing levels of unregulated operations supported by parent guarantees, have become somewhat problematic for the utility's credit standing. There should be a credit to SJG to cover the cost (in impacts on utility credit costs) and the value (to the non-utility affiliates who now receive the benefit of the guarantees without paying for that benefit). The value of the guarantees can be approximated by considering what the affiliates would have to pay for a letter of credit, which would be the market alternative to a guarantee. Liberty estimates this value at 1 percent of the amount guaranteed payable annually. SJI has estimated the bank costs of providing the service at issue of 0.5 percent. A reasonable value to use is the average of these two amounts, or 0.75 percent. The charge that Liberty recommends would apply when a quarter's average payables exceed the soft limit of 75 percent, and would apply to the payable amounts outstanding against guarantees. Applying the 0.75 percent annual fee to payables of $56.1 million at December 31, 2004 would produce a *charge* of $105,187 for that quarter. A rough measure of SJG's contribution to SJI enterprise value is 75 percent, which would entitle it to $78,891 of that quarterly payment.

The selection of the percentage to use as the limit on payables subject to guarantees must be viewed as dynamic. This recommendation is based on the nature of the businesses now requiring guarantees and the state of the markets in which they operate. Over time, the business may change in terms of how much must be guaranteed and in what portion of guaranteed amounts

even relate to accounts payable. As the businesses and their markets change, it would be appropriate to revisit the formula, beginning with regular dialogue between the Company and BPU staff.

The recommendation provides in essence that SJI must retain equity at the parent or non-utility subsidiary level as the means for supporting non-utility growth. Stated another way, it buttresses the BPU's minimum SJG equity provision by precluding guarantees that have no equity behind it other than that minimum SJG level. Reduced dividend growth or securing equity through new issuances or extension of the dividend reinvestment plan provide examples of alternate means for continuing non-utility growth. Moreover, stronger negotiation with counterparties to reduce guarantee requirements may also provide a means for supporting such growth or reducing credit support fees paid to SJG.

G. Utility Credit Insulation

1. Background

The identification of financial interties with affiliates that harm or have the potential to harm a regulated utility begs the question of what can be done to insulate the utility. The concept of "ring fencing" the regulated entity to the greatest degree possible, without restricting the commerce of affiliates, offers some possible solutions. Ring fencing, from a financial interaction perspective, can take the form of restrictions on capital, debt instruments, and financial management. The goal of such ring-fencing insulation is to ensure that the utility credit ratings, utility financial standing, utility assets and utility cost of capital are reflective of the standalone company, without negative influences from the holding company or affiliates.

Liberty has compiled a list of ring-fencing provisions intended to protect the financial standing of the utility, without unduly restricting the business operations of the holding company and non-regulated businesses. Liberty sets forth a check-list of items to consider to ensure that SJG and SJI have adequate protections in place for the utility.

The following is a summary of important ring-fencing areas, and our brief recap or reference to our evaluation of SJI in these areas.

2. Utility Equity Maintenance

The most important financial protection for a utility with non-regulated affiliates is an equity maintenance requirement. An equity maintenance requirement for the utility protects it and its operations from the removal of its equity capital by the parent company in order to cure financial problems at the holding company or an affiliate. Such an equity maintenance requirement can be satisfied by requiring an equity capital floor in the utility entity.

The BPU has secured an equity capital floor for SJG as part of the recent rate case. The existing SJG equity floor should be a very effective utility insulation mechanism, provided that it is updated as the Company grows in the future, and is subject to compliance monitoring.

3. Separate Credit Ratings

The utility entity should establish and maintain investment grade, stand-alone credit ratings with Standard & Poor's and Moody's. Such a requirement ensures that the credit profile of the utility, as well as influences from other parts of the holding company, can be viewed by an outsider through credit ratings that are specific to the utility entity and its business.

SJG already has a stand-alone credit rating, which is influenced somewhat by the holding company and the non-regulated businesses. However, the utility's credit rating is the only credit rating that has been obtained by any entity within the SJI holding company. We believe that SJI should also get a credit rating for the holding company. It will more closely examine the credit profile of the non-regulated businesses. Such a holding company credit rating may be used to differentiate the credit profile of the holding company and the non-regulated businesses from that of the utility, and to monitor the effectiveness of utility insulation measures.

4. Cash Management Segregation

Utilities should at all times maintain separate cash management systems, including receipts, concentration and disbursement systems, for the utility and its holding company and non-regulated activities. At no time should the cash of a utility entity be commingled with the cash of the holding company parent or non-utility affiliates. SJG and SJI maintain appropriate and adequate segregation of the cash management systems.

5. Inter-company Balances and Loans

Utilities, utility holding companies and non-regulated affiliates should settle all of their inter-company receivables and payables on a monthly basis. Under no circumstances should inter-company balances be allowed to accumulate between the utility and other holding company entities. In addition, the utility should not enter into any loans, loan guarantees or support agreements with the parent company or non-regulated affiliates.

Liberty's review of the SJI operations determined that the Company settles its inter-company balance and does not allow such balances to build up. In addition, the Company does not allow any loans between the utility company and other affiliates.

6. Pledges, Liens and Collateral

Utility assets, financial support or cash flow should not be pledged for the benefit of any entity except the utility. In addition, all borrowings of the parent company and all affiliates must be non-recourse to the utility and may not provide for any type of credit default to or credit support from the utility. Liberty's review of SJI financial documents and operations confirms that the Company currently conforms to this type of utility credit insulation.

7. Bankruptcy Protection

Utility entities should enact bankruptcy-proof covenants that protect the utility entities in the event of a parent company or affiliate bankruptcy.

8. Financing Separation

Utility debt and preferred stock financings should all be negotiated and acquired independently and with no attachment to or influence from the parent company or any non-utility affiliate. Liberty believes that SJI's joint negotiation of credit agreements provides specific potential dangers to a utility in a holding company environment. The utility is almost always the strongest financial entity in a utility holding company. Joint negotiation of financings or credit agreements can cause other affiliates to benefit at the expense of the financial strength of the utility. The danger exists that the non-regulated entities will receive lower financing costs, possibly at the expense of the utility, because such financings were solicited and negotiated on a joint basis.

A second and more serious problem with the joint negotiation of financing agreements is the potential for restrictive covenants on the utility portion of such finances that would not be required but for the financial weaknesses of the affiliates. This particular situation has been a problem at utility companies where the lenders are the same for the utility and non-regulated businesses. However, at SJI Liberty has not found any restrictions or requirements in the utility credit agreements due to SJI's non-regulated operations.

SJI should provide for separate solicitations and negotiations of the SJG and SJI credit facilities when the current agreements expire.

9. Conclusions

SJG currently has in place a minimum utility equity ratio, adequate cash management segregation, no inter-company loans or balance, and no inappropriate pledges, liens or collateral attachment of utility property. These existing utility insulation statuses are described in sub-sections 2,4,5 and 6, respectively, above.

SJI requires strengthening of utility protections in the following areas:

- Separate holding company credit rating (sub-section 3 above)
- Separate solicitation and negotiation of utility and holding Company lines of credit (Section C.2. of this chapter)
- Determine and implement a maximum level of parent guarantees that will not impact the utility credit profile in conjunction with rating agency reviews.

10. Recommendations

23. Strengthen utility financial protections.

Secure a separate holding company credit rating; separately solicit and negotiate utility and holding company lines of credit; determine and implement a maximum level of parent guarantees that will not impact the utility credit profile in conjunction with rating agency reviews.

VI. Budgeting

A. Budgeting Process

1. Background

Liberty assessed how SJI/SJG approached the combination of budgeting and strategic planning, two processes that should be integrated. Unless budgets are tied to plans, the plans can provide much less guidance mean little, and plans must be reflected in budgets if there is to be a realistic likelihood that the objectives of the plans will be met.

2. Findings

SJI's financial planning department has coordinated the company's business planning and budgeting using the same structured approach and calendar for the past several years. Financial planning provides a detailed schedule and guidance about planning/budgeting assumptions and formats for submitting financial information.

This process starts in July so that financial and business plans can be presented to SJI's board of directors in November. The tasks done in the intervening period include forecasting numbers of customers and sales, development of service and marketing plans and balanced scorecards, submission of capital programs to the financial planning and tax departments, and submission of operating forecasts and financial plans. The financial planning department is responsible for linking budgeting to the strategic-planning process.

When all of the pieces are assembled and approved, the boards of directors review the financial plans and approve the capital budgets. After this step, the business and service units update their plans and balanced scorecards to reflect the final financial plan, which then cascades to balanced-scorecard goals for individual employees. All of the business and service units have leaders assigned, with an executive leader for each (senior vice president or higher).

SJI's process for deciding financial and operational goals has evolved over the last 5 years and has changed significantly in the last 2 years. The old process had been focused on variances in operational factors, and thus was mostly concerned with the past. The planning process used now is more attuned to the future; Liberty's review of an array of documents (*SJI Strategic Planning Report, March 2003; SJI Strategic Planning Update Report, March 2004; SJI Mid-Year Strategic Performance Report, August 2003;* and the *SJI Mid-Year Strategic Performance Report, August 2004*), as discussed in more detail in other sections of this chapter, showed that SJI does in fact have comprehensive and detailed plans that look to the future.

The planning process does not overly focus on goals set at the top. While SJI has an overarching goal of annual growth in earnings per share of 6-7 percent, each business unit sets its financial goals and articulates how those goals will be reached in the annual planning/budgeting process. The business units do not have to meet the corporate goal of financial performance, but SJI's executive management is watchful for business-unit goals that are set too low. Management also tries to avoid using unrealistic expectations. Discipline is imposed on meeting business-unit

annual financial goals because they are related to the setting of individual-performance goals, which are tied to incentive compensation and part of salary increases.

There is one aspect of the budgeting process that SJI/SJG is now in the middle of fixing. It concerns a weakness in SJG's financial computer system. As is discussed in greater length in the chapters on accounting, cost allocations, and information systems, SJG only recently installed the module of its new financial system, commonly referred to as the Lawson system. With the new module, SJG will finally be able to have responsibility accounting; *i.e.*, the ability to set up cost centers assigned to management and supervisory employees who will be able to budget for their area of work responsibility and then get reports on charges assigned to their unit. Without this capability, the best that can be done is to use FERC sub-accounts as proxies for organizational units who receive and send out charges. For certain departments and kinds of costs this proxy is fine, but for others it is of little value. This capability is being implemented for 2005; SJI has been very late in putting this fundamental tool.

3. Conclusions

a. **SJG has been very slow in making changes to industry-accepted responsibility-center accounting.**

b. **SJI/SJG has a reasonable planning/budgeting process.**

c. **SJG has succeeded despite not making a ubiquitous, modern management technique available; it is not possible to tell how much better in cost control it could have been doing in the past few years if it had made responsibility-center accounting available earlier.**

4. Recommendations

Liberty has no recommendations in this area.

B. Trends in Expenditures

1. Background

One way to analyze how a utility is extending, improving, and maintaining its system is to assess the change in expenditure rate over time. Liberty's examined trends in expenditure rates and changes in budgets to assess whether the trends appear reasonable and consistent with the direction of the company and customer needs, including consideration of the issue of the utility needing to compete for capital with the new, non-regulated subsidiaries.

2. Findings

The growth of SJG's investment in its plant over the past several years is impressive both in absolute terms and as a trend. Moreover, the high level of utility investment is also substantial as a function of gross and net utility plant, which, for instance, in 2002 was at $846 and $651 million, respectively, compared to an average-annual investment rate of about $50 million.

The level of SJG's capital investment as a function of its installed base recently can also be put in context by comparing SJG's investment over the period 1997-2004 of over $380 million with its net utility plant of $420 million at the end of 1996; *i.e.*, just before that seven-year effort started. SJG more than doubled its net investment in plant in a period of only nine years.

The exhibits below, with accompanying narrative, describe how SJI and SJG have been investing in SJG over the past decade, with special attention paid to the last few years. The first table shows SJG's actual construction expenditures by major category over the period 1995 through 2004 by major category. As noted above, capital spending began a significant rise in 1997. The major sources of increased investment were improvement mains and new business, both of which are associated with customer growth. The table shows a recent year trend of roughly 8 percent annual increases in actual utility construction expenditures excluding environmental remediation.

Table VI-1. SJG Construction Spending: 2000-2004

Category	2000	2001	2002	2003	2004*	2005**
New Business	$ 21,967	$ 22,553	$ 26,091	$ 28,039	$ 25,309	$ 26,779
Improvement Mains/ROW	2,130	1,858	3,023	7,248	18,953	18,288
Replacements	18,143	16,609	15,901	12,699	13,501	13,431
Cathodic Protection	1,239	1,252	1,196	1,118	1,400	1,017
Automotive Equipment	766	728	867	852	800	859
Production Equipment	67	2,608	271	128	712	714
Transmission Equipment	388	303	984	742	2,057	2,960
Distribution Equipment	434	130	469	604	427	555
Office Equipment	879	917	715	1,480	542	1,709
Building Improvements	826	723	320	328	626	1,107
Total	$ 46,839	$ 49,683	$ 49,836	$ 53,238	$ 64,327	$ 67,419
Yearly Rate of Increase		6.07%	0.31%	6.83%	20.83%	4.81%
Average Rate of Increase	7.77%					
Environmental Expenditures	$ 10,977	$ 11,395	$ 4,850	$ 3,855	$ 5,424	$ 15,094
** Actual through September plus 4Q budget*						
***Budget*						

Thousands of dollars.

The following table shows comparable expenditures for the preceding five years.

Table VI-2. SJG Construction Spending: 1995-1999

	1995	1996	1997	1998	1999
Category					
New Business	$15,779	$15,836	$17,837	$18,451	$19,492
Improvement Mains/ROW	$2,846	$3,126	$6,991	$20,883	$6,972
Replacements	$16,296	$15,752	$17,310	$18,847	$16,839
Cathodic Protection	$1,970	$1,930	$1,822	$1,727	$1,349
Automotive Equipment	$127	$302	$1,438	$971	$0
Production Equipment	$140	$120	$221	$306	$48
Transmission Equipment	$706	$1,158	$1,516	$1,122	$1,185
Distribution Equipment	$1,366	$470	$505	$657	$157
Office Equipment	$503	$447	$470	$1,343	$884
Building Improvements	$345	$243	$422	$626	$466
Total	$40,078	$39,384	$48,532	$64,933	$47,392
Environmental Expenditures	$3,251	$6,238	$8,718	$8,268	$7,884

Thousands of dollars.

SJI/SJG has shown flexibility in changing budgets as changing circumstances have dictated new plans. The next two tables show a presentation to SJI's board of directors in 2003 about expected construction plans for that year and the following four. As it turned out, actual capital spending in 2003 and 2004 substantially exceeded the amounts expected early in 2003.

Table VI-3. SJI's Construction Plan in 2003

	2002 Actual	2003 Financial Plan	2004 Estimate	2005 Estimate	2006 Estimate	2007 Estimate
Utility	$49,836	$50,902	$58,391	$48,589	$45,057	$46,052
Non-Utility	34,063	21,981	32,560	55,564	30,731	1,490
Total	$83,899	$72,883	$90,951	$104,153	$75,788	$47,542

Thousands of dollars.

Table VI-4. SJG's Construction Plan 2003

	2003	2004	2005	2006	2007
New Business	$22,713	$23,214	$24,236	$24,954	$25,949
Improvements	10,588	14,775	4,625	1,325	1,325
Replacements	13,501	13,800	13,575	13,075	13,075
Other	4,100	6,602	6,153	5,702	5,703
Total	$50,902	$58,391	$48,589	$45,056	$46,052

Thousands of dollars.

SJG management kept its board of directors apprised of changes in spending and expectations, as well as the expected future slowdown in spending after the large program was finishing. The following tables summarize information presented to the board.

Table VI-5. SJG 2004 Board Presentation: Construction Expenditures

2000 Actual	2001 Actual	2002 Actual	2003 Update	2004 Target
46,843	47,682	49,864	55,865	64,327

Thousands of dollars.

Table VI-6. SJG 2004 Board Presentation:
Capital and O&M Expenditures per Customer

	2004	2005	2006	2007	2008
Capital	$148	$141	$135	$128	$126
Expense	$30	$30	$31	$31	$31

However, even after several years of increased and high construction expenditures, SJG still expects to invest more in 2005 than was called for in previous plans, as the following table shows.

Table VI-7. Board Presentation in November 2004
on SJG's 2005 Construction Program

SJI	$16
SJG	59,760
SJE	19
SJRG	3
SJESP	296
Marina	19,489
Total	$79,583

Thousands of dollars.

SJG has routinely exceeded its budgeted utility construction expenditures, sometimes substantially, as the following table demonstrates.

Table VI-8.
Budgeted v. Actual SJG Construction Expenditures

Year	Budgeted	Actual	Variance
2001	$40,648	$47,682	$7,034
2002	$48,591	$49,836	$1,245
2003	$50,902	$53,238	$2,336
2004	$64,327	$67,419	$3,092
** Actual through September plus 4Q budget*			

SJI has made substantial non-utility capital expenditures as well. The following table summarizes them.

Table VI-9. Non-Utility Construction Budgets and Expenditures

Entity	2000 Actual	2001 Budget	2001 Actual	2002 Budget	2002 Actual	2003 Budget	2003 Actual	2004 Budget	2004 Actual*
Parent	$152	$110	$134	$81	$126	$163	$153	$125	$160
SJE	270	5	29	10	12	4	6	4	6
SJRG	-	-	61	-	-	-	6	10	10
ASB/SJESP	-	-	-	-	-	101	86	40	89
Marina	2,838	0	17,915	20,967	33,925	3,700	8,137	10,530	5,806
Total	$3,260	$115	$18,139	$21,058	$34,063	$3,968	$8,388	$10,709	$6,071

** Actual through September plus 4Q budget*

Thousands of dollars.

The following table shows corresponding investments from 1995 through 1999.

Table VI-10. Non-Utility Capital Expenditures: 1995-1999

	1995	1996	1997	1998	1999
SJI Parent	$ 1	$ 4	$ 4	$ 35	$ -
South Jersey Energy	-	2	137	32	390
South Jersey Resources Group	-	-	-	-	-
SJE Service Plus	-	-	-	-	-
Total Non-Utility Construction	$ 1	$ 6	$ 141	$ 67	$ 390

Thousands of dollars.

3. Conclusions

a. SJI/SJG has pursued a robust utility capital program in recent years even as it greatly expanded its non-utility investment, which has come primarily in Marina Energy.

b. SJG's policy of greatly expanding its investment in plant has been the foundation of its ability to accommodate its high rate of growth in customers and use.

4. Recommendations

Liberty has no recommendations in this area.

C. Reporting

1. Background

Liberty reviewed the following documents to ascertain whether SJI/SJG's managers have access to clear and detailed reports on actual experience compared to budgets for expense and capital:

- SJI's monthly income statement reporting for 2004
- SJG's monthly budget versus actual, by FERC account, for 2004
- Administrative and general expense, detailed monthly report, for 2004

- Operating results by business line, detailed monthly report, for 2004
- Capital projects and expenditures, detailed monthly report, for 2004, known as the *Authorization Charge Statement*.

2. Findings

These reports provide the kind of information that Liberty would expect a financial system to produce so that managers can plan and control their businesses. For instance, the Authorization Charge Statement is 29 pages and provides both summary and then expanded detail of line items, with figures on the amount authorized, unexpended balance, amount charged to-date, and amount charged this month, further broken down:

- By division
- Mains
  New business
  New business-special
  Improvement
  Improvement-special
  Replacement
  Replacement-special
  Leak Clamping
- Services
  Replacement
  Meters
- Meter installations
  New business
  Special meter installations
- House regulators
- House regulators installations
- Transmission equipment
- Distribution equipment
- Cathodic-protection equipment
- Storage equipment
- Building improvements
- Automotive equipment
- Office furniture and equipment
- Reimbursable projects
- Environmental-remediation projects.

3. Conclusions

a. **SJI has adequate management reporting of expense and capital results, subject to the qualifications that the company is behind in implementing responsibility-center budgeting and reporting and needs to improve its reporting of the distribution of costs between companies (described in the chapter on cost allocations).**

4. Recommendations

Liberty has no recommendations in this area.

D. Reviews and Approvals of SJG's Construction Expenditures

1. Background

Fundamental precepts of planning and control for utilities include the requirements that boards of directors approve construction budgets, and that these construction budgets are realistic in the sense that they reflect what the utility needs to do, can afford, and can reasonably expect to accomplish.

With these rules in mind in auditing this area, Liberty reviewed two recent sets of documents that showed how SJI/SJG management presented SJG's construction program to SJI's board of directors. Further, Liberty used this review to gain insight into how SJG's management responded to change in its business.

2. Findings

The first set of documents was a pre-meeting package sent to the board of directors in advance of its November 2003 meeting. The package included a 2004 Business/Financial Planning Report and a Construction Program Approval Request. The 17 pages included: short narratives on progress against the 5-year plan; underlying economic assumptions; performance to-date and projected, by subsidiary; income statements for each subsidiary; SJI's and SJG's capitalization and dividend targets; and construction-program requirements, by subsidiary, with detail by cost type for SJG.

The report showed that the SJG construction budget for 2003 was $50.9 million, but actual utility-construction expenditures were on an annual pace of $55.9 million. It also showed that the most-recent 5-year plan had projected 2004 expenditures to be $58.4 million, but now management proposed a 2004 budget of $64.3 (excluding environmental remediation). The largest cause of the increase was in the category of new business, which accounted for almost $3 million of the $5 million rise in actual 2003 expenditures over budget. The second biggest source of increase was in transmission equipment, where actual expenditures were about $1 million compared with a budget of $150 thousand. The final cause of the increase was in the category of office equipment, which increased from about $900 thousand to $1.6 million.

The reporting to the board tracked spending on the remediation of old SJG sites. Actual environmental expenditures in 2002 for SJG were $4.9 million, and 2003 updated actual

expenditures (meaning actual through September plus expected spending for the remaining 3 months of the calendar year) were projected to be $4.7 million. In contrast, SJG planned expenditures for remediation for 2004 to be $9.1 million. Expenditures on site clean-up for 2002 and 2003 were significantly less than SJG's combined recoveries from insurance and its remediation-adjustment clause, while expected recoveries in 2004 would be significantly less than expenditures; the net effect for the 3 years was projected to be an excess of recoveries.

Finally, the first package had a summary of required changes to the approved 2003 construction expenditures and the amount requested for approval for 2004.

The second document was a presentation that the executive vice president and COO of SJG *(EVP/COO)* made to the board of directors in March 2004 that addressed the utility's next 5-year construction program. This presentation noted that SJG's actual 2003 capital expenditures were $53.2 million (less than the increase described above, but still more than the original plan). Management proposed an average expenditure rate of $51.3 million annually for the 2004-2008 period, with annual amounts ranging from a high of $64.3 million in 2004 to a low of $45 million in 2006. The presentation noted that 75 percent of the expenditures would go to new business (averaging $25 million annually) and replacements (averaging $13 million). The remainder would go to improvement mains, consisting mostly of large pipeline projects, with peak expenditures for this category of about $19 million in 2004.

The presentation depicted and described the system as it existed in 2002, as SJG improved it in 2003, and as it proposed to improve it in 2004 and 2005. The presentation summarized the nature and purpose of the major projects completed or planned in these years. The major projects between 2003 and 2005 concentrated on increasing the ability to supply growing load in the eastern portion of SJG's serving territory:

- A 2003 installation of approximately 4.5 miles of 24" pipeline to improve peak delivery capability in eastern Atlantic County (placed in service March 2003)
- A 2003 installation of approximately 4 miles of 8" pipeline to improve distribution pressure in response to growing load in Cape May County shore communities (placed in service December 2003)
- A proposed 2004 installation of approximately 2 miles of 8" pipeline to reinforce the distribution system in Cape May County to meet growing load (placed in service June 2004)
- A proposed 2004 installation of approximately 7 miles of 12" pipeline to reinforce the distribution system in Burlington County to meet growing load (placed in service September 2004)
- A proposed 2004 installation of approximately 4 miles of 20" pipeline to create a loop to relieve a bottleneck in the portion of the system serving Cape May County (anticipated to be placed in service January 2005)
- A proposed 2004 uprating of the pressure of an existing 16" pipeline (inspection performed December 2004, filing for uprating to be made in spring 2005)
- A proposed 2004 installation of approximately 7 miles of 24" pipeline to SJG's McKee City storage facility (filing to be made with BPU in January 2005 for construction in summer 2005)

- A proposed 2005 installation of approximately 5 miles of 24" pipeline back to a new Transco city gate station to increase supplies into the entire SJG system (filing to be made with BPU in January 2005 for construction in summer 2005)
- A proposed installation of 2 miles of 8" pipeline as a second distribution-supply feed between the mainland and Ocean City (environmental permitting to be filed January 2005 and construction scheduled for fall 2005).

The EVP/COO also said that the company made a "conscious effort to complete large capital projects either by end of Rate Case test period 2/28/04, and/or within six month post-test year construction adjustment period ending 8/31/04." Liberty's review of the first 9 months of 2004's reporting of capital expenditures, using the "Authorization Charge Statement," showed that SJG was using capital in virtually all of the budget categories, and spending at a healthy rate when the weather warmed.

Table VI-11. Capital Expenditures by Month
January-September 2004

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
3.2	3.4	4.4	5.0	5.0	8.2	4.5	5.3	6.1	45.1

Millions of dollars

3. Conclusions

a. SJI/SJG's board of directors is appropriately informed of the company's progress and involved in approving capital budgets.

b. SJI/SJG's management has reacted flexibly recently as it increased SJG's capital expenditures beyond original budgets to realize new-business opportunities.

c. SJG generally invests capital according to its plans; it spends what it budgets and budgets what it needs.

4. Recommendations

Liberty has no recommendations in this area.

VII. Accounting and Controls

A. Background

Accounting records and financial statements must be maintained through a set of processes that provide adequate comfort about completeness and accuracy to those who rely upon them. Maintaining adequate internal controls and reporting measures allows those who rely upon the books and records and financial reports to have reasonable assurances that they can use them to form opinions and make judgments about the company in financial, regulatory, and operational contexts.

SJI has an Accounting department, with a staff of four. The SJI accounting staff maintains the books of the all SJI companies, except for SJG, and provides related services to a number of groups in other departments; *e.g.*:

- Financial planning: budget preparation
- Finance: cash flow projections, shareholder records, bank reconciliations
- Environmental: reports of spending.

The SJI Internal Audit department, with a staff of five supports the Audit Committee of the Board of Directors, and performs internal audits of all SJI entities, including SJG.

The SJG Accounting & Tax department supports all of the cost centers within SJG, and provides tax services to SJI and all the affiliates. SJI has for some time been engaged in the processes of:

- Developing and installing a new, computerized accounting system
- Preparing to use the systems reporting and tracking capabilities it will offer.

Significant impetus for moving to this new system came from the last EDECA audit report, which was issued two years ago in March 2003. That report raised a number of concerns about the Company's capability to capture and use the information needed for assuring proper control over the process of assigning and allocating costs, particularly between utility and non-utility operations. Liberty's companion reporting on *Cost Allocations and Affiliate Relationships* discusses those issues in detail. Companion reporting on *EDECA Affiliate Standards* addresses recommendations made in that prior audit.

B. Accounting Systems

1. Findings

SJI and its affiliates rely upon two different accounting systems. SJG has its own accounting system and set of books. SJG's older system, which it refers to as *the mainframe GL*, uses *COBOL*, and dates to the 1970s. SJG has for some time been developing a personal-computer (*PC*) based accounting system from *Lawson Software* (the *Lawson system*). SJG began to run the Lawson system in parallel with its existing system in July 2004. SJG switched over to the Lawson system in October 2004. SJI maintains a separate set of books for itself and its non-utility subsidiaries. SJI uses a different accounting system from SJG's old COBOL and new Lawson systems. The separate SJI system is also PC-based, and is known as *Solomon*.

SJG's Lawson system general ledger module is the central one for financial reporting purposes. A number of accounting interface modules; *e.g.*, payroll and accounts payable, link to this general ledger module. The accounts payable and payroll modules went live in January 2002 and July 2004, respectively. The inventory module is scheduled to go into effect at the end of 2005 and the budget and forecasting module may be running in 2006. Liberty describes the implementation of the Lawson system in greater detail in the chapter on Information Systems. SJG's implementation process was hindered by the loss of key personnel who left the Company and temporary staff reductions due to medical leaves.

The Lawson system does not yet have a sufficient track record to allow a definitive analysis of all material aspects of its effectiveness, completeness, and capabilities. It does not yet include a full 12 months of actual data. Nevertheless, the parallel running of the old system and the Lawson system has given opportunity for adequate verification of accuracy. What remains to be seen is how effective the new system will be in offering capabilities beyond those of the old system. For example, the old system lacked the ability to provide for cost-center or responsibility accounting. The old system also did not support user-friendly queries, but relied upon complex and time-consuming program development to obtain information for analysis. The old system also could not readily provide detailed general ledger data for analysis. Users could not practicably secure, for example, a transaction's brief description, dollar values, or cross reference information for drilling down into the accounting system to sample and verify data on an account by account basis.

SJI's PC-based Solomon accounting system allows users to query detailed general-ledger information by year on an account-by-account basis. SJI was able to provide Liberty with sufficiently detailed general ledger information related to intercompany transactions. The Solomon system, however, also does not provide for cost center responsibility accounting. The Manager of Financial Reporting has reported that SJI does not plan to switch to the Lawson system. At an earlier interview, however, Liberty was given to understand that all remaining SJI entities would migrate to the Lawson system by January 2006.

2. Conclusions

a. Development of the Lawson system has been unduly slow.

SJG has not made full implementation of the Lawson system a sufficiently high priority. It remains difficult to secure and analyze affiliate transaction data two years following the last EDECA audit, although the underlying information can ultimately be secured and used. Liberty will address in more detail general ledger and cost center information later in this chapter. Moreover, SJG remains without the effective business management tool that it would gain from cost-center accounting supported by available reporting tools.

b. The SJI system produces complete and accurate information, and supports the analysis of affiliate transactions, but there is not a plan for introducing cost-center accounting.

SJI's Solomon Accounting System provides sufficient information to support the analysis of detail general ledger information on an account by account basis, and reasonably reflects cost

allocated and booked through the system. It too, however, fails to include cost-center accounting and reporting.

3. Recommendations

24. Complete SJG's implementation of the Lawson system this year.

SJG needs to take all necessary steps to assure that the Lawson system is fully operational by the end of calendar 2005, including capabilities related to general ledger detail and cost center reporting as addressed later in this chapter. Assuming that SJI will implement the Lawson accounting system by early January 2006, SJG should begin planning and coordination of the necessary steps to assist SJI in the transition.

25. Implement cost-center accounting for SJI and the other affiliates this year.

Assuming that SJI will adopt and implement the Lawson Accounting System by the start of 2006, it should begin planning and coordination of the necessary steps for SJG's assistance in the transaction. If SJI will not be adopting the Lawson system, then it should develop the appropriate cost center responsibility accounting codes and reports similar to that which will be discussed later in this report in connection with SJG.

C. Accounting Policies and Procedures

1. Background

SJI applies a formal set of accounting policies and procedures to SJI and all of its affiliates. Sarbanes-Oxley testing has caused many of these policies and procedures to be revised or updated. In addition to these accounting policies and procedures, SJI also has Cost Allocation Manual (*CAM*) policies and procedures. They provide for maintenance of the CAM, approved methods for costs assignment and allocation, identification of the departments responsible for developing charges and allocations, and applicable effective dates. Many of the CAM policies and procedures rely upon the accounting policies and procedures. The accounting systems and their maintenance are fundamental elements of the policies and procedures.

2. Findings

Liberty reviewed the current and proposed accounting policies and procedures and the CAM policies and procedures. Liberty also examined the documentary record of test transactions. In general, Liberty found SJI's policies and procedures to be reasonably formulated, with some exceptions. For example, Liberty found cases where services provided solely for one affiliate were being billed to another; *e.g.,* services provided to SJG but billed to SJI or vice versa. Liberty learned that the practice is to forward invoices to the entity that received the service because that entity is expected to communicate with and pay the vendor. In other instances SJI negotiated services on behalf of an affiliate, and received invoices directly. On some occasions, SJI paid for the services and then billed the affiliate; in other cases SJI forwarded the bill to the affiliate for direct payment by it.

Liberty also observed that the Company does not make accounting and CAM policies and procedures available to employees on a network. Liberty believes that these types of information

should be made more readily available to authorized employees via the Company network and/or web based system to provide for ease of use and greater information sharing among employees who may need them

3. Conclusions

a. Accounting policies and procedures are generally complete and appropriate.

b. SJI does not take sufficient steps to assure that vendors invoice the correct affiliate.

When the parent or an affiliate receives an invoice for services provided to another affiliate, SJI policy allows the solution of forwarding the invoice to the affiliate that was served. SJI should require the vendor to invoice directly the correct SJI entity. Vendors need effective instructions on the correct party to bill and vendors who do not follow such instructions should be required to issue invoices to the correct party. Retransmission of invoices internally to correct a lack of effective instructions to vendors or vendor errors should not be a routine solution.

c. The lack of electronic access to accounting and CAM policies and procedures inhibits their effectiveness.

The accounting and CAM policies and procedures should be made more readily available to authorized employees via the Company network, to enhance the ability to access and search them.

4. Recommendations

26. Require that vendors invoice the correct affiliate.

Liberty recommends that SJI adopt policies and procedures requiring that the responsible affiliate be billed directly by the vendor providing the service. Vendors need to receive clear guidance on invoicing and the need to comply. Any affiliate receiving an invoice that should have been directed to another entity should notify the vendor that it is not the responsible company so as to avoid confusion and potential financial liability or responsibility for the bill rendered. Likewise the responsible affiliate who benefits from the service should notify the vendor to properly bill it in the future.

27. Make accounting and CAM policies and procedures available electronically.

D. Accounting Data Collection

1. Background

Both accounting systems operate on the basis of collecting accounting information from various feeder groups. In general, these feeders consist of information groups such as accounts payable, payroll, and inventory. These groups feed information through an interface into the review and journal entry process in order to collect and transfer accounting data within the general ledger. Some feeder groups collect data through distinct accounting functions and processing through specific computer program modules. For example, the accounts payable, inventory, and human resources groups use their own specific accounting collection system or *module*. At the time of

the close of books, these modules can download information into the general ledger. Data collected within the general ledger module is then reviewed and appropriate journal entries are made and posted to the general ledger at or before the time of the accounting period close. The general journal serves as the primary central collection process for the development of routine financial statement reports. The general ledger can also support special queries for data or analysis, and generate routine and special reports and analyses. However, the level and detail of inquires and reports hinges upon uniform and consistent collection processes for collecting, processing, and maintaining data.

As discussed earlier SJI and its other affiliates use the Solomon system as their primary collection facility, except for payroll. SJI and its affiliates use the Lawson payroll module for purposes of collecting and reporting of payroll costs. SJI and its affiliates also rely upon a number of other programs for the collection and reporting of data.
The collection process relies upon the proper coding and classification of expenses gathered within the feeder groups and general ledger system. SJG has adopted a chart of accounts that is based upon the FERC Uniform System of Accounts (*USofA*). SJG's implementation of the Lawson system has included significant updates to and enhancements of USofA codes to support cost center accounting and to use coding that provides for project activity tracking. For example, SJG's Accounting & Tax Department is a cost center; particular codes will allow for the tracking of costs for specific projects and activities; *e.g.*, intercompany Management Services, and will support tracking payroll by account and by cost center. The implementation of this process, while delayed and not fully operational till October 2004, represented a major step forward in providing for cost-center accounting.

The system of accounts for SJI and its other affiliates differs in moderate respects from that of SJG's. This is not unusual given two different accounting systems. SJI's uniform system of account coding, however, does not provide for cost-center or project activity tracking, in the absence of the creation of a specific account set up for tracking purposes.

Liberty reviewed the accounts payable and accounts receivable process. This examination included a tracking of intercompany and other accounts payable and receivable transaction through both accounting systems, and a validation of the use of appropriate account classifications. This section of the report addresses the classification and feeder group processes; the reporting and reconciliation process is discussed later.

2. Findings

The SJG accounting structure defined in accounting policies and procedures is generally appropriate. Liberty also found it to be well documented and testing showed it to be consistently and effectively applied.

Liberty did find significant delay in implementing the new SJG accounting system. Nevertheless, prior to, during, and after the implementation process SJG did take reasonable and adequate steps to provide for employee training on the new system. The training process was directed to appropriate staff and it was sufficient to provide a general understanding of the new system, including the new coding system that provides for cost center responsibility and project activity accounting.

The SJI and other affiliates' Solomon account code system does not provide for cost-center and project activity reporting. SJG, by contrast, has now developed a reasonably sophisticated account code system to reflect USofA codes, sub-accounts, cost center and project activity codes at the time of posting and recording.

Payroll; *i.e.*, salaries and wages form a major component of expense for SJI and its affiliates. Payroll also represents one of the largest elements of the intercompany or affiliated services that get charged directly or indirectly among the parent, its subsidiaries, and business units. The time-reporting process relies upon a combination of manual and automated reporting. The utility workers and the appliance service groups, for example, track time on the *Automated Dispatching System* (*ADS*).

Utility and non-utility management and administrative employees must also track time when they perform a task for an affiliate, but their methods for doing so vary. In some cases, an employee fills out a time sheet as provided for in the instructions in the CAM. These sheets account for time on a daily basis throughout the month. Some other groups do not use time sheets, but track time separately by project and/or actively. For example, SJG's IS personnel keep track of the time they spend on defined projects or activities for non-SJG users, but do not use time sheets to do so.

In cases where time sheets are not maintained, payroll assumes that the employee has worked the full allotted amount of straight time within the pay period, unless notified otherwise by the Lawson payroll program module for *Exception Time Reporting*. This module requires supervisors or responsible department heads to maintain and submit exception time for each employee for other than straight time; *e.g.*,, sick, annual, special leave, over-time, or bonus-time.

Not all employees are required to submit a formal timesheet to affirm their time. CAM instructions, however, require that an employee who once fills out a time sheet must continue to do so, even if no services to other affiliates are provided. Further, management personnel are directed to conduct reviews to determine if anyone not doing so needs to be complete a time sheet. Liberty also observed a failure to assure regular immediate supervisor or management department head review of time sheets. Interviews with an SJI financial reporting manager and the SJG Controller confirmed this observation. However, recognizing Liberty's concern about this matter, SJI and SJG took corrective action during field work. Liberty confirmed that appropriate review is now being performed.

The new Lawson system provides for an on-line entry of time; all employees can employ this efficient, useful capability. SJI personnel continue, however, to prepare timesheets manually. Their results are later entered into automated spreadsheet systems in order to provide for appropriate time tracking and billing purposes.

3. Conclusions

a. **SJG's USofA code classification is reasonable and adequate to provide for cost center and project activity reporting, but SJI's account code classifications fall short of providing the necessary information to prove such useful information.**

b. **SJI's practice of not requiring all employees to fill out a time sheet does not support needs for assuring the proper charging of time.**

Such a practice of affirmatively capturing all time would provide an affirmation of time worked. The consistent filling out of time sheets by all responsible employees would also provide verification that all time spent is charged properly.

c. **The failure to maximize use of the Lawson system's automated time-entry capability is inefficient.**

SJI's reliance upon manual time sheets that must later be accumulated and entered into a computer program, in lieu of the on-line Lawson time reporting system, is duplicative and time consuming. Further, the Lawson on-line time reporting process would also provide for a more effective process for intercompany billing, for cost-center and project activity tracking, and for reporting and analysis.

4. Recommendations

28. In conjunction with converting to the Lawson system, develop an enhanced SJI chart of accounts and coding system.

Assuming that SJI and its affiliates who currently use the Solomon accounting system switch to the Lawson system, Liberty recommends that they work closely with SJG to develop an appropriate chart of accounts and coding system to provide for cost center responsibility accounting and for project and activity expense reporting similar to that of SJG. Even if these entities remain on the Solomon system, they should take appropriate steps to upgrade the accounting system to provide for an appropriate chart of accounts and coding system that will provide for such enhancement.

29. Require all employees, except for senior officers to routinely complete time sheets.

Liberty recommends that all employees fill out a time sheet as an affirmation of time worked.

30. Use automated time reporting for all employees.

Liberty recommends that SJI eliminate manual time sheets, and use on-line time reporting. To the extent current time is effectively captured and reported on current systems such as ADS, Liberty recommends that the balance of the time reporting requirements be performed on the Lawson on-line time reporting system. Further, the on-line time reporting systems should be configured to allow for adequate supervisory review and approval, as well as billing and tracking of inter-affiliate services.

E. Reporting Structure

1. Background

As described earlier, the general journal under the control of the Accounting Department serves as the primary central collection process for the development of routine financial statement reports; *e.g.*, the monthly Balance Sheet and Income Statement on a consolidated and unconsolidated (standalone) basis. The Accounting Department is also responsible for SEC Forms 10-Q and 10-K, FERC Form 2 financial statement annual reports, and other important reports such as the statement of intercompany charges. The Accounting Department is also responsible for preparing the intercompany bills and for maintaining and reconciling the intercompany payable and receivable balances.

The new Lawson system's general ledger, accounts payable, inventory, and payroll modules will provide for a uniform and consistent collection and coding process that can provide other reliable reports and special inquires. This section addresses the adequacy of the accounting reporting process and reports. More specifically, this section looks at the adequacy of the following reports and special inquires: financial statements, detail general ledger reports, payroll reports, cost center reports, and project and activity expense reports. This section of Liberty's report addresses the adequacy of intercompany payable and receivable reporting on such financial stations and special reports. A later section will address their detail transactions and reconciliation process.

2. Findings

SJI performs external financial reporting on a consolidated basis. Such reporting excludes intercompany accounts payable and receivable balances. SJG, however, operates as a regulated utility under the jurisdiction of the BPU. The BPU requires regulated gas utilities to use the FERC Uniform System of Accounts prescribed for Natural Gas Companies subject to the provisions of the Natural Gas Act. SJG must file with the BPU an annual report similar to the FERC Form 2. This report captures a wide variety of financial and operational statistical activity for the current reporting year and the one immediately preceding it. More specifically, the FERC Form 2 reports provide for the disclosure and reporting of intercompany and associated accounts receivable and payable balances in financial statements. Liberty reviewed SJG's 2003 FERC Form 2 reports, and found intercompany receivable and payable balances to be reasonably and adequately reported. Liberty also reviewed SJG's 2003 independently audited financial statements presented on a standalone basis. For financial statement presentation purposes, intercompany receivable and payable balances are included in accounts receivable and accounts payable balances on the balance sheet. While not reported as a separate line item, they are reasonably and adequately disclosed and reported through footnotes that form an integral part of the financial statements.

Liberty's review of prior audits and discussions with the Company confirmed the difficulty in obtaining financial information from the old accounting system in an electronic format that could then be reviewed, sorted, and analyzed across years under a spreadsheet programs such as MS Excel. Further, the delay in implementing the Lawson system made it impracticable for Liberty to secure a year's worth of accounting data for review and analysis using a spreadsheet program.

Liberty therefore decided to take a two-part approach. First, Liberty sought to work with the Lawson system information that was run in parallel from July 2004 through September 2004 with the old accounting system. Secondly, Liberty decided to use information from the first quarter in which Lawson was run alone; *i.e.*, starting in October 2004.

Liberty asked for the production of cost center reports and detail general ledger information. SJG's controller informed Liberty that the Company had not yet run any cost center reports. In fact, Liberty later learned that the reports, if produced, would merely provide detail general ledger information by cost center. They would not provide summary information within the cost center by project or expense activity types. Liberty was advised that SJG had not yet had the developed the capability to provide meaningful cost-center reporting. Liberty decided that such information as could be made available would not support meaningful analysis at the cost-center level.

Liberty learned that its request for detail general ledger information in an electronic format, even for a short period of time, would result in a massive amount of information. A detail general ledger usually provides a very brief description of the transaction, related dollar values, along with key cross reference information for drilling down into the accounting system to sample and verify data on an account by account basis. SJG informed Liberty that its level of detail would far exceed this level of information. For example, a simple transaction related to office supplies would be broken down and listed in the detail general ledger by each cost center, which would cause an item to be listed up to nine times. Based upon this information, Liberty did not believe that the production of such information would allow a meaningful analysis on a detail general ledger basis.

3. Conclusions

a. **The SJG financial statement reporting process adequately and reasonably discloses the reporting of intercompany payable and receivable balances on a standalone basis.**

b. **SJG's independent audit report reasonably disclosed intercompany balances through footnote references.**

c. **SJG has not yet adequately taken advantage of the Lawson system capabilities to support analysis of detail general ledger and cost-center information.**

4. Recommendations

31. **Commit the necessary resources to enhance the detail general ledger and cost center reporting process to provide for meaningful reports and analyses.**

F. Intercompany Receivables and Payables

1. Background

Liberty examined SJI and its affiliate's treatment of intercompany receivable and payable balances. The BPU as part of its regulatory oversight has adopted the FERC USofA and requires its regulated utilities, such as SJG to conform to the FERC USofA. The USofA addresses accounting for such items:

> Definition 14
> Transactions with associated companies. Each utility shall keep its accounts and records so as to be able to furnish accurately and expeditiously statements of all transactions with associated companies. The statements may be required to show the general nature of the transactions, the amounts involved therein and the amounts included in each account prescribed herein with respect to such transactions. Transactions with associated companies shall be recorded in the appropriate accounts for transactions of the same natures. Nothing herein contained, however, shall be construed as restraining the utility from subdividing accounts for the purpose of recording separately transactions with associated companies.
>
> Definition 5
> A. Associated (affiliated) companies means companies or persons that directly or indirectly, through one or more intermediaries, control, or are controlled by, or are under common control with the accounting company.
>
> B. Control (including the terms "controlling," "controlled by," and "under common control with") means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of a company, whether such power is exercised through one or more intermediary companies, or alone, or in conjunction with, or pursuant to an agreement, and whether such power is established through a majority or minority ownership or voting of securities, common directors, officers, or stockholders, voting trusts, holding trust, associated companies, contract or any other direct or indirect means.

Further, the USofA prescribes the use of various accounts for the recording of intercompany receivable and payable transactions. The USofA provides as follows:

> ***146 Accounts receivable from associated companies.***
> *These accounts shall include notes and drafts upon which associated companies are liable, and which mature and are expected to be paid in full not later than one year from date of issue, together with any interest thereon, and debit balances subject to current settlement in open accounts with associated companies. Items which do not bear a specified due date but which have been carried for more than twelve months and items which are not paid within twelve months from due date shall be transferred to account 123, Investment in Associated Companies.*

Note A: On the balance sheet, accounts receivable from an associated company may be set off against accounts payable to the same company.

Note B: The face amount of notes receivable discounted, sold or transferred without releasing the utility from liability as endorser thereon, shall be credited to a separate subdivision of this account and appropriate disclosure shall be made in financial statements of any contingent liability arising from such transactions.

234 Accounts payable to associated companies.
These accounts shall include amounts owing to associated companies on notes, drafts, acceptances, or other similar evidences of indebtedness, and open accounts payable on demand or not more than one year from date of issue or creation.

Note: Exclude from these accounts notes and accounts which are includible in account 223, Advances from Associated Companies.

Liberty reviewed SJI's accounting policies and procedures to determine that adequate controls are in place to assure compliance with the above regulations.

2. Findings

SJI's accounting policies and procedures as well as it CAM adequately provide for reasonable and adequate controls for the recording of intercompany receivable and payable transactions. More specifically, Policy A2.2, *Policy for the Allocation, Recording and Invoicing of Affiliated Company Transactions – Cost Allocation Manual, V. Recording of Transactions & Intercompany Invoicing* provides as follows.

A. Recording of Transaction – South Jersey Industries and each of its subsidiaries shall maintain separate accounts in their ledgers for the purposes of recording intercompany transactions. All transactions shall be processed through these intercompany receivable and payable accounts unless circumstances dictate that doing so would violate GAAP or other governing rules and regulations.

B. Transaction Summaries – Current BPU requirements call for the filing of summaries of all intercompany transactions within 48 hours of serving notice. As such, a summary of all intercompany transactions must be maintained by SJI and each of its subsidiaries. Such summaries shall be updated no less frequently than quarterly and on a 3-month lag. For example the 1st quarter transactions shall be summarized no later than the end of the 2nd quarter of a year. Such summarizes are the responsibility of each company's Accounts Payable supervisor."

C. Intercompany Invoicing – The supervisors responsible for the Accounts Payable function of SJI and each of its subsidiaries are responsible for ensuring the3 accurate and timely invoicing and payment of intercompany transactions.

> *Charges classified to the intercompany accounts receivable are generally billed to the respective subsidiaries at month-end. Earlier payment is permitted when circumstances warrant.*

SJI and its affiliates generate monthly invoices that in turn are booked to the respective intercompany receivable and payable accounts.

Liberty reviewed a sample of the invoices submitted along with summaries of the monthly charges. Other portions of this report address weaknesses in supporting documentation or lack readily available information. This section addressed the development of the bills and their recording into the affiliate general ledgers. Liberty also reviewed the SJI detail general ledger intercompany account activity. The primary work to prepare current intercompany invoices results from a manual process of extracting information from various accounts payable, invoices, payroll reports, and journal entries. Liberty was able to trace charges from the supporting documents provided up through and including the development of the invoice. In some instances supporting data was not readily available with the affiliated invoices. Liberty was, however, able to obtain it from other sources; *e.g.*, detail monthly payroll reports for intercompany services provided.

Liberty noted some minor errors in the calculation of the monthly bills and in the recording or posting of the charges reflected on the general ledger. The books reflected the monthly settlement of intercompany accounts via either payments and/or receipts of cash due to or from the respective affiliated company.

Liberty requested SJI's policy with regard to the review and reconciliation of intercompany balances between the companies. SJI provided its *SJI and Nonutility Subsidiaries General Ledger Closing Cycle Operating Procedures*, which references *Section III Procedures-12*. The referenced section requires that all material balance sheet accounts be formally reconciled each month after closing and that quarter-end reconciliations be forwarded to SJI's CEO and CFO. Further, *Section III Consolidation-2* provides for further reconciliations and eliminations of intercompany balances. SJI's response also included detail schedules that reconciled all intercompany balances including that of SJG.

The referenced policy, however, was for SJI and its affiliates under the Solomon accounting system. The policy does not refer to SJG at all. Liberty found that the affiliates do, in fact, reconcile intercompany balances. Nevertheless, it appears that there is not formal inclusion of SJG in a policy requiring such reconciliation.

3. Conclusions

a. SJI/SJG have not sufficiently considered the potential for automating intercompany bills.

As noted elsewhere on this report, Liberty believes that the current process that SJI and its affiliates use to develop and provide intercompany bills, including supporting data, could be improved. Liberty asked SJI's Manager of Financial Reporting and SJG's Controller if the current systems could be used to produce the required bills, in order to eliminate the cumbersome

and production of a manual bill and its risk of error. The Company has not considered this option, and there is uncertainty about the capabilities to do so.

b. There are clear policies requiring intercompany balance reconciliation and they are followed for all entities, including SJG, but SJG does not appear to be formally included in the requirements.

SJI and SJG current policies and procedures and accounting systems reasonably and adequately report intercompany transactions through the general ledger accounting system, with the exception of the failure to require explicitly that SJG reconcile its intercompany balances,.

4. Recommendations

32. Examine the capability to make increased used of automation in generating intercompany bills.

33. Formally include SJG in procedures requiring reconciliation of intercompany receivable and payable balances.

This recommendation would conform nominal requirements to what is already the practice.

G. Work Order Procedures & Continuing Property Records

1. Background

Liberty examined how SJG manages its accounting and reporting of plant assets. Liberty examined the use of continuing property records for the tracking and recording of projects, the process for associating capital items with the correct business unit, the use of project identification numbers, the assignment and tracking of budget amounts, the existence of project rationales, and the securing of appropriate approvals. Liberty evaluated internal controls to determine if SJG established and used adequate policies and procedures to assure that the books and records reasonably report the value of utility assets. Liberty sought to verify that work-order processes have provided sufficient controls on the commissioning of utility work and on monitoring its performance quantitatively.

SJG maintains the property records for assets put into service for utility purposes; SJI maintains the asset ledger or records that support investments by other affiliates. This section will address SJG's work order procedures and continuing property records and not that of SJI. Liberty did, however seek to verify that there is reasonable separation between plant asset accounting and capital asset plant facilities between utility and non-utility operations. Liberty also sought to verify that appropriate capitalization policies are in place and that they conform to regulatory requirements for the tracking and recording of new and existing projects under the USofA and good utility business practices.

2. Findings

SJG has a formal corporate wide capitalization policy that is titled: *Capital Expenditure and Environmental Remediation Procedures and Policy Manual* (N1.2). SGJ also has a policy for inter-affiliate property transfers; *i.e.*, *Procedure for Transfer of Company Property Between*

Affiliates. SJG has a *Capital Expenditure Review* process that provides for a monthly review of capital expenditure authorization charges for inactive and over-expended authorizations. The responsible department must provide monthly reports explaining any such occurrences.

Capital budgets are approved, work is tracked to budgets, and variance reports are issued in accord with established Company requirements. An effective review process exists. SJG's Accounting Department is responsible for the recording of plant asset work, and uses the work order reporting process to do so. Accounting controls provide for the recording of appropriate allowances of funds used during construction (*AFUDC*) to provide for the proper mix of capitalized interest at appropriate debt and equity cost rates as approved by the BPU.

Work-order control begins with the use by SJG FERC *Uniform System of Accounts*. This system provides detailed guidance for the classification of assets during the construction work-in-progress (*CWIP*) phase and for the classification of assets as *in-service*. The Capital Asset Management Department maintains utility plant costs. However, data was not maintained on the system mainframe, nor does SJG use a capital asset module within the new Lawson system. Instead, SJG maintains information on PC-based software programs, such as *Lotus Approach*.

SJG makes routine use of work orders for construction related to new business activities and normal capital projects. Work orders for new business activities generally get treated as open *blanket orders*, because of their relatively shorter construction durations of construction periods and their routine and recurring nature. SJG closes work orders for these types of activities at the end of the fiscal year, and issues new work orders for the upcoming year.

Non-blanket; *i.e.*, specific projects with work order authorizations have their own asset identification numbers, and are separately identifiable. Liberty found the process for these project work orders to be well defined and monitored throughout the construction process. Annual budgets are approved and costs are tracked and compared on a routine basis. In addition, appropriate forms and controls are maintained for increases in both blanket work-order and specific project authorizations.

The review and tracking process provides for analysis, and assures that assets are timely placed into service. As prescribed by the USofA, partially completed projects are classified as CWIP. SJG relies upon information generated from the Lawson system payroll module. SJG does not use the Lawson system accounting module here; it uses PC-based project costing programs that apply the *Lotus Approach* data base system to generate authorizations and report status. The reports maintain CWIP balances, and note the status of the project. Projects are not closed if they remains listed in the system. SJG's process provides for project status tracking at key milestones; *e.g.*, opening the project, placement in service, and unitization on the books of account to the proper sub-account code classification. In order of hierarchy, the project status classifications require the project coordinator to track activity through various phases. The tracking process identifies status against approved cost, completion and removal from CWIP, placement in service. The tracking process also looks for inactivity on projects in order to provide assurance that the asset is timely removed from CWIP and placed into service.

Liberty also reviewed the Accounting Department's monthly closing procedures, and found them to be adequate to provide for the entry of cost, including the booking of AFUDC and overhead charges. Liberty also reviewed reports from the new Lawson system to validate the proper use of payroll data on a capital and non-capital (operating expenses) basis.

Internal Audit performed only one examination of SJG work orders or continuing property records since 2001. SJG has spent over $300 million in new plant investment in the last seven years; $53 million of that expenditure came in 2003 alone. SJG estimates it will spend another $257 million between 2004 and 2008. Given the level of commitment, Liberty believes that SJG requires more frequent internal audits to assure ongoing compliance with its current polices and procedures.

3. Conclusions

a. **Current procedures and practices regarding work order procedures & continuing property records are sound and effectively implemented.**

b. **There is sufficient attention to the separation of asset assignment between utility and non-utility operations and business units**

c. **The use of Lotus Approach, in lieu of the new Lawson system for tracking does not promote efficiency and.**

d. **Internal auditing of work order and continuing property records procedures and processes should be more frequent.**

4. Recommendations

34. **Implement the Lawson system capital asset module.**

35. **Include audits of continuing property records and work order procedures and activities in future internal audit plans.**

VIII. System Planning and Design

A. Background

A central problem in planning and design for SJG's system arises because all of its sources of supply lie on the northwest side of its service territory, but major segments of its customers and important growth areas lie on the southeast side, along the coast. SJG must therefore operate 400 miles of high-pressure (250 psig maximum) or transmission system (700 psig maximum) downstream of its city gates to move large quantities of gas across its service territory. The high-pressure and transmission systems, in turn, feed its local distribution systems.

The Company organizes its distribution system into five operating divisions: Cumberland, Glassboro, Waterford, Atlantic and Cape May. The Company's high-pressure and transmission systems feed meter stations that comprise the interface with its distribution system. The distribution systems operate at normal distribution pressures (60 psig and below) downstream of their interfaces with the transmission system. SJG connects the distribution systems in the five divisions to each other as appropriate for pressure maintenance and reliability.

The Company's markets have been growing at very high rates, most recently at 2.7 percent per year. The principal system planning and design problems have been to increase the capacity of the transmission system, and to extend the reach of the distribution system. SJG is currently engaged in a five-year construction program that includes installing new transmission pipelines and up-rating existing transmission lines by increasing maximum allowable operating pressures. One of the projects involves a new gate station on the Transco system, in order to provide additional supplies.

B. Findings

The 10-year forecast of peak-day requirements serves as the principal system planning and design *driver*. Financial Planning prepares this forecast, which Gas Supply also uses to plan for delivery capacity to the Company's city gates.

The 10-year forecast is not disaggregated within the Company's service territory. However, as part of the Company's business planning process, SJG Sales and SJI Marketing produce monthly estimates of gross customer additions by operating division for the next year. About half of the Company's increased load recently has been along the Atlantic coast. Much of the other half has come in the northwest part of the service territory, in the Greater Philadelphia labor market. Marketing personnel advise the system planners of the expected sources and locations of expected growth in the out years. The Company's operating divisions also provide input on the locations of customer growth in the course of twice-yearly operations review meetings. The system planners become directly involved in discussions with the potential customers when large loads are to be added. They evaluate the capacity of the system to meet the customer's requirements, and discuss the customer's potential contribution to the costs of any required system expansion.

The Company uses computerized, hydraulic-simulation modeling to analyze the impacts of load growth and perform contingency planning. The Company began modeling the transmission system in the mid-1980s. In the mid-1990s, the intensity of the effort increased. Within the last few years, the modeling effort has been extended into the distribution system. The Company currently has working network models of its high-pressure and transmission systems, and of the Atlantic, Cape May, and Bridgeton distribution system areas. Extension to the Glassboro and Waterford operating divisions is in progress, with a projected completion date of April 2005. Approved funding exists to extend the model further, to the Cumberland operating division, in 2005. With the completion of the Cumberland model, the Company will have computerized network analysis capability for 100 percent of its transmission and distribution systems.

Source data for the modeling system comes from the Company's *Supervisory Control and Data Acquisition* (*SCADA*) system. That system monitors 113 flows and pressures originating at six different delivery receipt points and 25 inter-company transfer points, where the Company's high-pressure and transmission systems interface with its distribution system. The SCADA system provides real-time pressure and flow information to Gas Control. SJG also has 168 large-volume customers who are continuously metered; those meters are tied into the Metretek system to provide daily flow information to Gas Control. The Company also installs temporary pressure trackers in locations where it is concerned about system pressures and flows.

SJG uses a formalized process of pre-winter and post-winter operations review meetings. The pre-winter meetings develop a *Winter Operations Plan* that System Engineering and Planning (*SEP*) develops in conjunction with the operating divisions. The post-winter operations review examines how the system performed during the winter, and identifies areas that need attention. That review produces input to the capital and operating budgeting process; it helps to prioritize expenditures prior to the following heating season.

The pre-winter operations review meetings also identify a "hit list" of interruptible customers who may be curtailed in the event of extreme weather. This review takes place prior to the beginning of the heating season, which gives the divisions and the Sales Department time to take the steps they deem necessary to prepare those customers for the possibility of curtailment due to supply or system-delivery issues.

SJG conducts longer-term planning as part of the Company's strategic planning process. The 10-year customer-growth forecast provides the foundation for an assessment of the system's performance over the planning horizon. Simulation modeling allows SEP to model increased flows in response to forecasted growth, and observe where capacity limits appear. SEP then studies these *hot spots* to evaluate alternative solutions to identified problems. Computerized network analysis enables SEP to compare the specific benefits of various system improvements, in order to identify the lowest-cost/highest-benefit solution for implementation.

The Company uses a Load Management Committee (*LMC*) to establish and implement policies regarding system expansion. The LMC is composed of the following:

- President and CEO
- Executive Vice President, Treasurer and Chief Financial Officer
- Executive Vice President and Chief Operating Officer

- Senior Vice President, Corporate Communications and Administrative Services
- Senior Vice President, Gas Supply, Delivery and Sales
- Vice President, Rates and Regulatory Affairs
- Vice President, Engineering Services
- Assistant Vice President, Customer Services
- Assistant Vice President, Engineering Services and System Integrity
- Director, Gas Sales (committee chair).

The LMC establishes and administers SJG's gas main extension policy. SJG's *Procedure for New Business Analysis* prescribes the analysis to be done for each project proposed for customer additions. For the projects that meet certain criteria, established by the LMC, authorization is automatic; larger projects, and projects that do not meet the cost-to-revenue ratios set forth in the Procedure, must be specifically approved by the Committee.

The Procedure provides for annual audits of the performance of main extension projects. Audits are to be performed by the Construction Department to test the accuracy of both cost and revenue estimates.

C. Conclusions

a. SJG uses a sound process for system planning and design.

SEP involved the key stakeholders in the development of the business case for simulation modeling to support the system planning and design process. The Company's pre- and post-heating-season operations planning meetings reflect best practices in this area in our view, and mesh appropriately with the Company's annual budget cycles. The strategic planning process provides a motivating force and process framework for the longer-term planning that allows identification of system upgrades that require a longer lead time.

b. SJG's system planning, however, does not consider important options on the supply side and the demand side.

Important classes of options on the supply side and the demand side are not *on the table* for system planning purposes. On the supply side, the only options considered are those that reinforce the Company's northwest-to-southeast infrastructure. Liberty believes, as the prior auditor did nine years ago, that the Company needs to consider peaking options sited on the east side of its service territory. Liberty's companion reporting, which addresses *Gas Supply*, addresses in detail the dismissal of east-side peaking facilities as an alternative to installing the capacity to move large quantities of gas all the way across the service territory.

Liberty also did not find significant consideration of demand-side options. A significant amount of SJG's peak-day requirements for capacity can be expected to be used on only one day in 20 years. One day in 20 years is the practical interpretation of the five-percent probability of occurrence that applies to the Company's peak-day design criterion of 63 heating degree-days (HDD). This probability of occurrence results from Liberty's analysis of weather data provided by the Company. See the more extensive discussion of this subject in Liberty's companion report addressing Gas Supply. Proper planning for an event with that frequency should involve

consideration of options to reduce the peak. Examples include paying certain customers to curtail their consumption under extreme weather conditions and installation of back-up supply facilities at customer premises.

The Company's failure to consider these options either is, or soon will be, causing increases in customer rates. The table below shows the increase in net plant per customer that has occurred over the last 10 years. When system investment increases faster than the number of customers, pressure for increased rates is inevitable.

Table VIII-1. Net Plant per Customer Growth

Year	Net Utility Plant	Number of Customers	Net Per Customer
1995	$396,771	248,022	$1,600
1996	$421,622	253,874	$1,661
1997	$454,239	260,567	$1,743
1998	$502,243	267,065	$1,881
1999	$530,874	273,899	$1,938
2000	$557,269	281,350	$1,981
2001	$583,983	288,008	$2,028
2002	$610,052	296,374	$2,058
2003	$639,581	304,562	$2,100
2004	$685,436	313,579	$2,186

Plant amounts are in thousands of dollars.

c. SJG's considerable commitment to hydraulic modeling enables its search for least-cost solutions to system planning issues.

With its commitment to full modeling of its transmission and distribution systems, the Company is able to test alternative solutions to pressure and flow problems. The Company states:

> *… system planning studies for both transmission and distribution infrastructure improvements, whether they be for customer growth or system reliability purposes, are the basis for determining the benefit ranking of capital improvements to be constructed. These planning studies are done periodically and are used to assist in the allocation of limited capital dollars to the projects of greatest system value. For the utility capital budgeting process, the studies help identify the priority of the projects to be constructed. For the Sales and Marketing function of the utility, the studies identify the various options available so that a least-cost solution may be implemented.*

d. The Company performs audits of gas main extension projects.

SJG's *Procedures for New Business Analysis* provide for annual audits of approved main extension projects by the Construction Department to test the accuracy of the estimates of costs and revenues used in the process for project approval. The specified procedure calls for the

audits to be performed a full two years after projects have been completed, to ensure that actual data on both costs and revenues is available.

The Company reports that the cost side is *self-enforcing*, because each project is authorized at a particular cost. Any costs in excess of those authorized would require a separate authorization that, in turn, would require an assessment of the reasons for any cost increase.

Performance on the revenue side is assessed by the Sales Department. The Sales Department uses two reports for tracking extensions of service to residential customers. The *Residential Conversion Historical Tracking* report follows the progress of conversion projects from when the service order is written until the meter is set. This report is distributed to the Sales Representatives, who follow up if the meter set has not occurred. The *Residential Potential Projects* report follows the progress of main extension projects approved by the LMC.

The Sales Department performs an annual audit of all extensions to commercial customers. The audit compares consumption information that was developed when the request for service was made with actual consumption. The audits are performed in July, after a full 12 months of consumption data is available. Thus, the audit for all extensions placed in service in 2004 will take place in July 2006.

D. Recommendations

36. Broaden the range of options that are considered for extending services.

The Company's emphasis on adding capacity to its transmission system is increasing costs. In its companion reporting that addresses *Gas Supply*, Liberty addressed problems in Company examination of alternatives that would diversify its peak-day sources of supply. Liberty found a similar lack of detailed examination of the potential for managing peak-day supply capacity through demand-side measures. It can be difficult to tell customers to suspend their receipt of gas when demand is highest, but the costs of keeping everybody in service under once-in-20-years conditions can become burdensome. Using selected curtailments under peak conditions or adding dispersed alternate-fuel facilities for use under peak conditions may prove very cost effective. It is not possible to know, however, without focused and structured exploration.

The Company's considerable bias toward adding to its transmission system calls for specific arrangements to ensure that demand-side options are considered. Liberty recommends that such arrangements include the following:

- Development of specific objectives for DSM measures
- Identification of specific individuals, including someone at the vice-president level, who would be responsible for DSM evaluations
- Requirement for special showings regarding DSM evaluations as part of BGSS or other rate-change filings.

IX. System Operations

A. Background

SJG divides systems operations into three organizational groups:

- Distribution Operations
- Engineering Services & System Integrity
- Technical Training, Safety, Regulatory Compliance, Gas Allocation & Communication.

SJG Delivery is charged with designing and building a cost-effective distribution system, efficiently maintaining pipelines and facilities, and responding to customer needs and emergencies in a timely manner. Their mission is:

> *to create value for shareholders and customers by providing natural gas safely and efficiently to customers within our franchise territory.*

SJG Delivery relies heavily on SJG's Customer Care Center to maintain good customer relations. SJG Customer Care provides meter reading (sub-contracted to Millennium), billing, and all other customer care related functions.

B. Findings

1. Organization & Staffing

Distribution Operations personnel have responsibility for all outside work, with the exception of Meter Reading and Field Collections. SJG's Distribution Operations department is divided into two Regions—Eastern and Western. Directors of each Region report to the Assistant Vice President Distribution Operations. Technical Services and System Delivery & Control also report to the AVP include.

SJG further divides the Eastern Region into two Divisions: Atlantic and Cape May. The Western Region has three Divisions: Cumberland, Glassboro, and Waterford. Each Division office contains Division Operations, Utility Services, and Office & Systems (walk-in payments and office administration) groups. Each District Office is organized as follows:

- Manager Division Operations (MDO) (Street Department) oversees street and utility-service operations
  - Asset Supervisors – Leaks, Street Department
  - Construction Supervisors - New business, implement compliance plan
  - Compliance Supervisor – shared within Region
  - Utility Service Supervisors – First responders for odor and carbon-monoxide calls, meter sets, on/off orders, field investigations, age-changes
- Manager Division Office Processes & Systems
  - Cashiers
  - Storeroom
  - Clerical & Reporting

- Field Collectors (dotted line).

Distribution Operations is also responsible for dispatch, training, and compliance. Dispatch operators are located in the McKee City system operations center, primarily because it operates 24/7. Dispatch employees are overseen by Engineering Services, who are responsible for system operations. SJG's Training Center is located in Glassboro. All operator qualifications testing and training is conducted in this facility, as is other job-specific technical training.

Distribution Operations employees are represented by three unions—IAM locals S76 and S95, and the International Brotherhood of Electrical Workers (*IBEW*). SJG recently ratified four-year contracts with these bargaining units in November, 2004. Union work rules restrict union employees within certain geographical boundaries. SJG has been successful in its Western region in creating flexibility to allow union employees to cross some of these boundaries. However, SJG is restricted in its Eastern Region to defined geographical boundaries.

SJG outsources almost all of its construction projects to contractors. Additionally, SJG outsources some leak-survey work in the Western Region. This practice was initiated four years ago to deal with employee retirements. In 2004, SJG pilot-tested bringing some of this work back in-house in the Waterford Division. The test proved it to be possible, but SJG has determined to continue outsourcing for the near future.

Before it became a separate subsidiary in August 2004, Appliance Services was part of SJG Distribution Operations. All former Appliance Service employees were transferred from SJG to SJ Energy Services Plus, the subsidiary that now conducts this business.

In August 2001, SJG outsourced its Meter Shop operation to Measurement Solutions International–Northeast, LLC (*MSI*), a joint-venture company formed by Measurement Solutions International and South Jersey Industries. MSI has since been acquired by Terasen Utility Services. Under a five-year contract, MSI provides procurement, testing, and repair services for SJG regulators and meters. MSI also conducts meter sampling and analysis as part of SJG's *Gas Meter Sampling Test Program and Annual Report* to the BPU.

Staffing levels for Distribution Operations is presented below. SJG staffing dropped significantly in 2004, primarily after June and as a result of the transfer of appliance service personnel. The following table shows staffing levels for distribution operations. SJG staffing dropped moderately over this period.

Table IX-1. Distribution Operations Staffing

Group	2002	2003	2004	Change	
Office	51	50	46	-5	9.8%
Street	146	143	137	-9	6.2%
Utility Service	65	57	63	-2	3.1%
Total	*262*	*250*	*246*	*-16*	*6.1%*

The following table shows monthly changes in 2004.

Table IX-2. Monthly 2004 Distribution Operations Staffing Changes

Group	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Street	142	143	142	145	142	144	138	141	139	139	138	137
Utility Service	58	57	55	55	55	58	58	59	59	61	62	63
Office/Systems	50	49	49	50	47	48	49	48	48	47	47	46
Total	*250*	*249*	*246*	*250*	*244*	*250*	*245*	*248*	*246*	*247*	*247*	*246*

Transmission maintenance is performed by personnel based in McKee City.

2. Expenditures

The compliance program makes up nearly 20 percent of the annual O&M budget and 11 percent of SJG Delivery's capital budget. In addition to compliance, the single most costly contributing factor to the SJG Delivery capital budget is the amount of unprotected bare steel main in the service territory, which comprise nearly 23 percent of system totals. Bare steel is a major source of main leaks. In 2004, SJG Delivery spent about $5.1 million locating and repairing main leaks. The following table shows the overall breakdown of SJG Delivery costs in recent years.

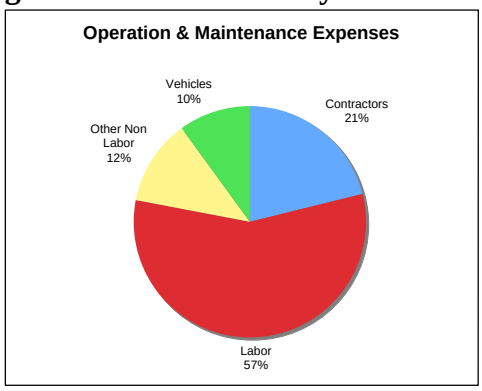
Table IX-3. SJG Delivery Costs

Costs	2000 Actual	2001 Actual	2002 Actual	2003 Actual	2004 Plan	2004 Actual
O&M $	9.3	9.6	10.4	9.9	9.4	9.8
O&M %	18	19	17	17	14	13
Capital $	42.7	41.2	49.9	49.7	59.6	65.5
Capital %	82	81	83	83	86	87

Dollars are in millions.

The following table shows the categories that make up O&M costs.

Figure IX-4. SJG Delivery O&M Costs



3. Engineering Services & System Integrity

Engineering Services operates and maintains the systems to assure that gas continues to flow in an uninterrupted manner to end users. Through the System Engineering and Planning (*SEP*) group, it performs the design and construction of the system. SEP works closely with Sales, and provides cost estimates for sales-driven system expansion projects. Planning personnel are responsible for growth projections and for making recommendations to accommodate growth.

SEP also oversees Company construction standards and methods, drafting and mapping services, system planning, supervision of *NJ One-Call*, and utility street opening permitting.

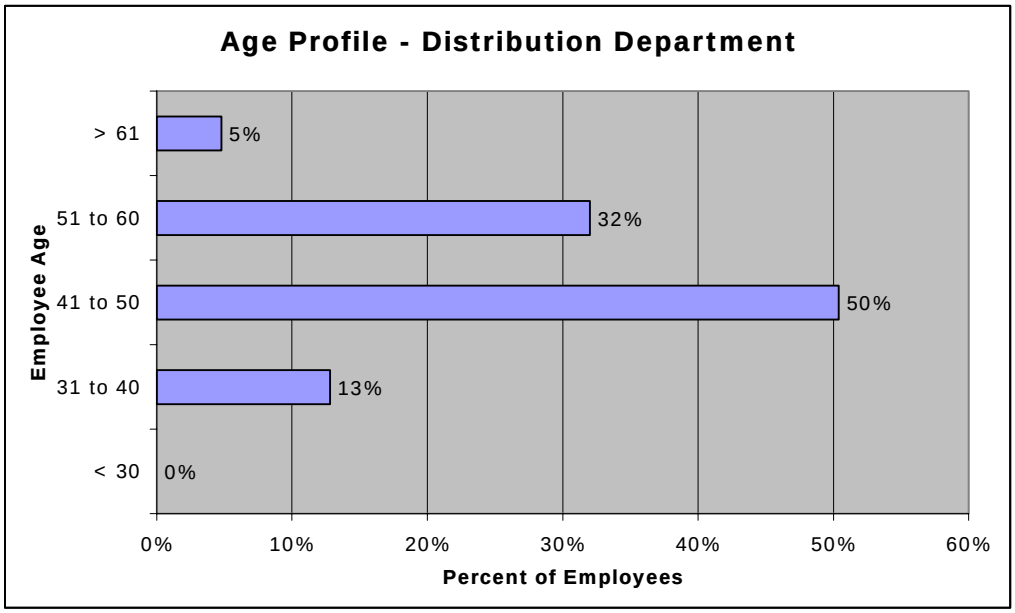
System planning uses a computerized hydraulic network model (the Stoner model) to calculate the capacity of various parts of the system. The Company has developed working models of its Transmission subsystem, Atlantic, Cape May, and Bridgeton subsystems. The Glassboro and Waterford model will be completed by the second quarter of 2005. The remaining model of the Cumberland Division is schedule for completion by the end of 2005; this will complete the model. The model has been built over a period of six years. Once complete, the model will allow SJG to assess system needs associated with system replacement, system expansion, and proposed load growth.

Initiatives underway to improve efficiency and effectiveness:

- Work Management System (in process)
- Performance matrix being developed to make better comparisons; will participate in AGA and Northeast peer panel benchmarking
- Utilizing new and less intrusive technologies when appropriate
- Insourcing certain construction activities when appropriate; *i.e.*, new services
- Customer satisfaction feedback gathered after services are provided (pilot program)
- Gas Sales Tracking System (in progress)

SJG has an older workforce, which will have an impact on human resource management.

Figure IX-5. Distribution Personnel Age Profile



Tenure averages 19 years for Distribution and Utility Operations bargaining unit employees.

4. New Construction & Replacement

The company identifies a number of challenges in planning and executing its construction program:

- More stringent local ordinances regarding location and timing of construction work
- Raised expectations from customers and municipalities for restoration quality
- Higher permit fees from municipalities.

SJG has sought to introduce a number of features that will help to maintain efficiency and effectiveness: new technology, speeding up process, focusing on cost efficiency, a tracking system, a work management system, and using SJG manpower on new service installations.

SJG has contracted out nearly all of its construction work to contractors. SJG contracts out small construction projects to three different contractors operating under three-year blanket contracts. These blanket contracts cover projects less than $50,000. SJG bids bigger projects competitively. It plans its replacement main program the basis of three-year projections, identifying main replacement based on the condition of the pipe and the amount of leaks. Over the last five years, SJG has replaced on average about 118,000 feet of main per year.

5. Utility Service

The Service Department has implemented home-based reporting and a four 10-hour work day schedule (Sunday through Wednesday or Wednesday through Saturday). This expanded work schedule allows for coverage 7 days a week from 8am through 6:30pm for normal customer-related activities. Emergency response is available 24/7.

Utility workers perform the majority of meter sets; however, SJG has been using a contractor to supplement the workforce during peak periods. In addition, SJG relies on the Street Department as well to supplement in busy times. SJG is also in some cases setting meters when the new service is installed, rather than sending someone out at a later time. This approach has saved time and travel costs.

Before the August 2004 transfer of the appliance-service technicians and supervisors to ESP, they were available as time allowed to install meters and perform other meter related work. When the employees were transferred out, SJG lost flexibility in scheduling meter-related work, which has placed a greater demand on SJG's utility workers.

6. Theft of Service

Traditionally, meter readers and other field employees have been relied upon by utilities for the identification of meter tampering and energy diversion. Millennium Account Services (*MAS*) meter readers since 1999 have had the responsibility for ensuring that all meter seals are intact while obtaining cycle readings. SJG or MAS employees receive $50 for any confirmed tampering or theft that they identify.

SJG has assigned a Theft of Service Coordinator in each region. These coordinators report to division management and a Central Theft of Service Coordinator (the General Manager of Taxes and Insurance) oversees their activities in performing this role. The two regional coordinators are

responsible for planning and coordinating any field investigations. Customer Service is responsible for inquiries into the account and preparation of back billing.

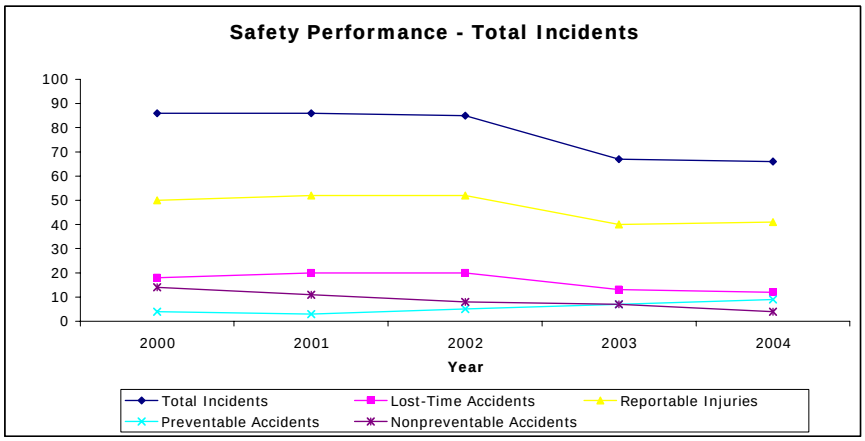
SJG's a standard operating procedure for Theft of Service outlines responsibilities and provides guidelines for reporting, coordination of investigation, accounting, prosecution, record keeping and reporting, and employee incentives. Revision dates indicate no changes to the procedure since 1991.

C. Conclusions

a. Safety has improved in the last five years in terms of total incidents, but lost time per incident has increased dramatically.

The following table shows total incidents, which have been trending downward.

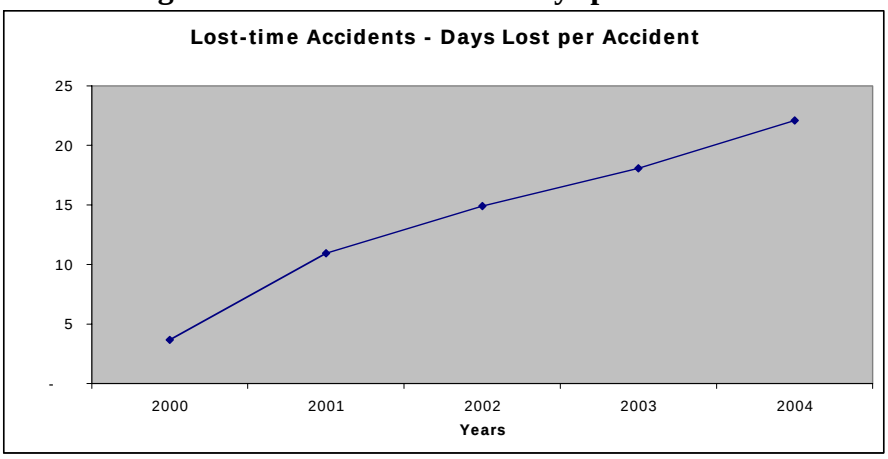
Figure IX-6. Total Safety Incidents



There were no fatalities during the entire period. Incident numbers for all categories have decreased. Over the past five years, SJG has focused significant attention on safety and accident prevention activities. SJG looked outside the company for best practices that could strengthen its safety program. SJG continues its emphasis on safety and each operating region has specific safety goals and actions established to eliminate all avoidable personal injury accidents, as well as heighten safety awareness. SJG is also investigating with the unions the potential to initiate incentives and awards for achieving zero lost time and other safety goals.

Lost-time accidents which usually result in a significant cost in terms of non-productive hours, investigations, and inspections, paperwork, and medical expenses, have decreased in number by one-third since 2000. However, since 2000 lost-time accident days per incident have increased significantly; *i.e.*, by 500 percent.

Figure IX-7. Trends in Lost Days per Incident



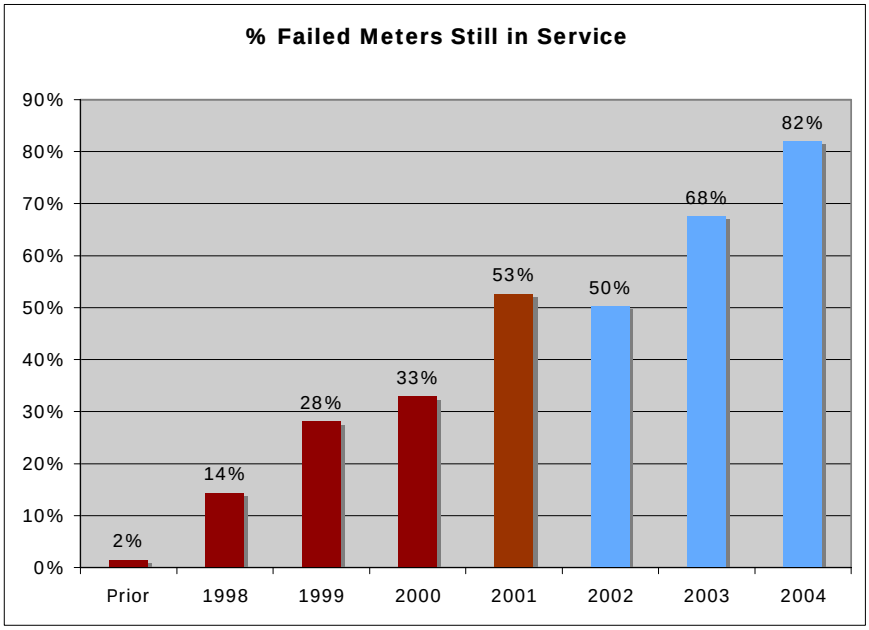
b. SJG has not met its schedule for mandatory meter change-outs, which has produced a growing backlog.

The BPU requires all utilities to remove groups of meters from service where there has been a failure exceeding the 90 percent confidence level for the sample selected. The minimum sample size must be at least 200 meters or 10 percent of the total group. As meters are taken out of service, they are tested and the results recorded in the meter history file. Groups of meters that fail the test standards should be removed from service within four years.

Currently SJG is behind in its meter removal program. The BPU-approved *Gas Meter Sampling Test Program* stipulates the removal of poor-performance meters from service so that "the required removal is complete within four years from the date such meters were reported as not meeting the performance standards." This requirement means that SJG is required to have removed all meters rejected on or before March, 2001 out of service by March, 2005.

As of year-end 2004, SJG had 14,406 rejected meters (5 percent of total in-service meters) still in service. The chart below shows that the bulk of those meters were rejected in 1999 and 2000, which means that they remain in service more than the limit of four years from rejection. Specifically, 53 percent of meters rejected in 2001 were still in service as of the end of 2004, as were 33 percent of meters rejected in 2000, 28 percent of meters rejected in 1999, and 14 percent of those rejected in 1998.

Figure IX-8. Failed Meters Still in Service



SJG had no established targets for "forced meter removals" before 2004. The Company established a target of 7,000 removals of meters on the forced remove list for 2004. SJG fell below its target for 2004, removing 6,423 "forced remove" meters from service. SJG also faces significant backlog in getting remaining required removals accomplished. As of year-end 2004, SJG was required to remove 14,406 meters from service. More than 80 percent of these meters should have already been removed from service (within four years of data of rejection). SJG is not in conformance to its Gas Meter Sampling Test Program as a result of the delay in removing rejected meters from service within four years.

Liberty reviewed the results for tested meters in the sampling program (< 500 cfh) that tested over 2 percent fast or slow. Two out of three of them tested fast. Extrapolation from these results would suggest that delay in pulling these meters means that two out of three customers affected will have incurred a fast meter for some period, and therefore be due a refund. SJG's delay in removing rejected meters means that customers are more likely to be subject to "fast meters" for a longer period than prescribed by the BPU, resulting in larger "fast meter" refunds to customers upon ultimate removal of the meter.

c. SJG has experienced marginal failures to comply with DOT 192 patrolling, surveying, and inspection regulations.

Review of compliance and operating reports, the monthly potential non-compliance issues report, and company databases that track leak repair, regulator maintenance, and valve maintenance indicates that SJG has had difficulty in remaining in compliance with Federal DOT regulations. There have been some instances of non-compliance and SJG has had to undertake late-period actions to address potential non-compliance items.

Annual Compliance Programs

SJG is required by the Department of Transportation Minimum Federal Safety Standards (Code of Federal Regulations, Title 49, Part 192) to survey exposed and underground piping at periodic intervals to detect leaks and identify segments for repair and/or replacement. The following leakage surveys are required:

- Exposed piping survey – every 3 years (148 locations year)
- Transmission line survey and patrol – Must patrol pipelines two times per year and leak survey annually (92 miles of pipeline)
- Distribution business district leak survey – mains and services within business districts shall be surveyed each calendar year, with intervals not to exceed 15 months. (5,780 services within designated business districts)
- Service leak survey – all active and inactive service lines outside of business districts shall be leak surveyed at once every 3 years (not to exceed). Approximately 100,000 surveyed annually with portable gas detector
- Distribution main survey – all mains with a MAOP of 60 psig or less – outside business districts. (2,500 miles of main surveyed annually in total). A portion of this work is contracted out to a vendor in the Western Region
    - Bare steel, cast iron, and unprotected wrapped steel surveyed annually (not to exceed 15 months) (29% of system)
    - Protected wrapped steel surveyed once every 3 years (not to exceed) (33% of system)
    - Plastic mains surveyed once every 5 years (not to exceed) (38% of the system)
- Winter leak survey cast iron main – when frost conditions reach a depth of 15 inches, survey all cast iron mains until frost conditions no longer exist
- Railroad & Highway Crossing Survey – All transmission pipelines crossing highways and railroads must be visually inspected at least 4 times per year (not to exceed 4.5 months). 191 Highway crossings, 52 Railroad crossings
- Valve Maintenance – each gas valve identified as critical must be inspected annually (not to exceed 15 months). 965 valves
- Regulator Maintenance – Each district regulator station is required to be inspected annually (not to exceed 15 months). 811 regulators.
- Special one-time surveys – following unusual stresses (earthquakes, blasting…).

On-Going Compliance Programs

Gas Delivery has three key compliance programs, in addition to the annual compliance programs described above:

- **Main & Service Replacement Program** – SGJ identifies mains and services that are replaced if certain criteria are met. Once identified, SJG has three years to complete the replacements. Segments of mains experiencing leaks but not qualifying for replacement must be monitored every 6 months.
- **Meter Testing & Replacement Program** – Annually, SJG must test and replace failed meters. SJG has contracted out the entire meter department to MSI (testing, minor maintenance, and storeroom) and SJG performs meter change outs.

- **Operator Qualification Training** – Federal regulations require all workers involved in the operation of a natural gas delivery system (300 SJG employees) to complete operator qualification evaluation every three years.

The following chart depicts the percent of items reported as being in jeopardy of non-compliance—number of items out of compliance, by year versus total items to comply. Cumulatively, SJG is responsible for keeping approximately 13,000 items in compliance (see compliance requirements above). The chart after that shows the number that SJG eventually reported as non-compliant.

Figure IX-9. Items in Compliance Jeopardy

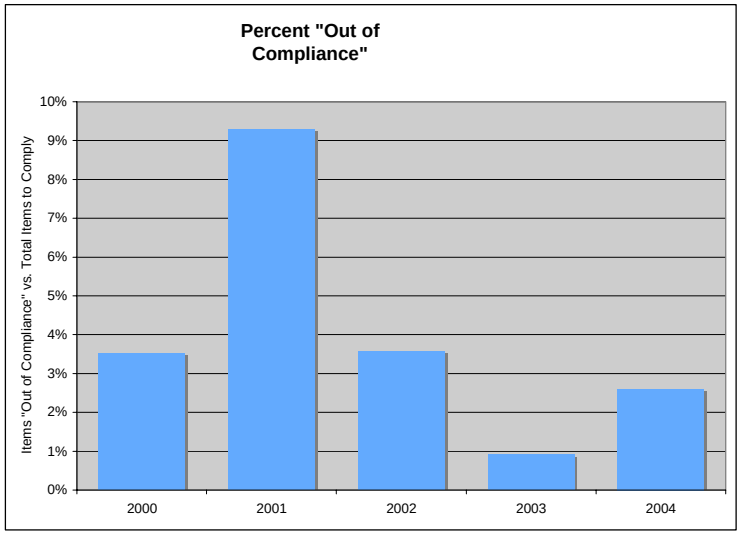
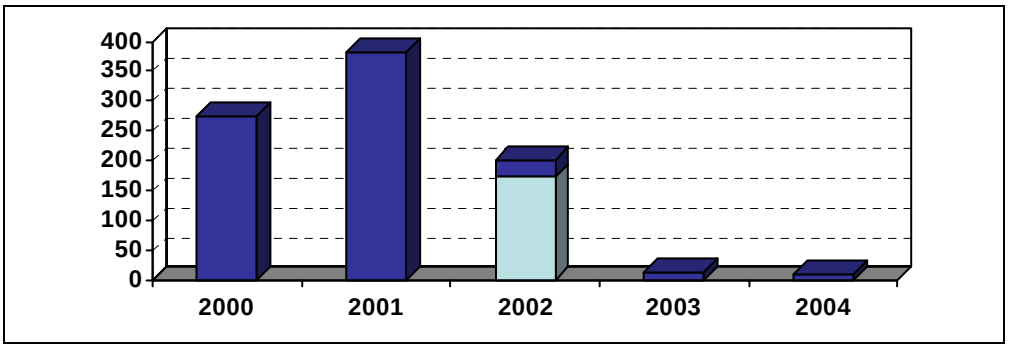


Figure IX-10. Items Out of Compliance



SJG's comments to the draft report provided further detail on items that fell out of compliance:

- 2004: SJG completed 10 items within 2 months beyond compliance period and 1 item 7 months beyond the compliance period
- 2003: SJG completed 14 items within 1 month beyond compliance period and 1 item 4 months beyond the compliance period

- 2002: SJG inspected 174 items in one division (the lighter portion of the bar) within 2 months beyond compliance period (due the need to manually recreate computer records lost), completed 25 items within 1 month beyond compliance period and 3 items within 4 to 6 months beyond the compliance period
- 2000 & 2001: SJG experienced a bargaining unit work stoppage. The Company did not have a readily available breakdown of the number of items that, while reported in compliance jeopardy, were eventually completed within the compliance period.

d. SJG has a growing backlog of pending "B" leaks.

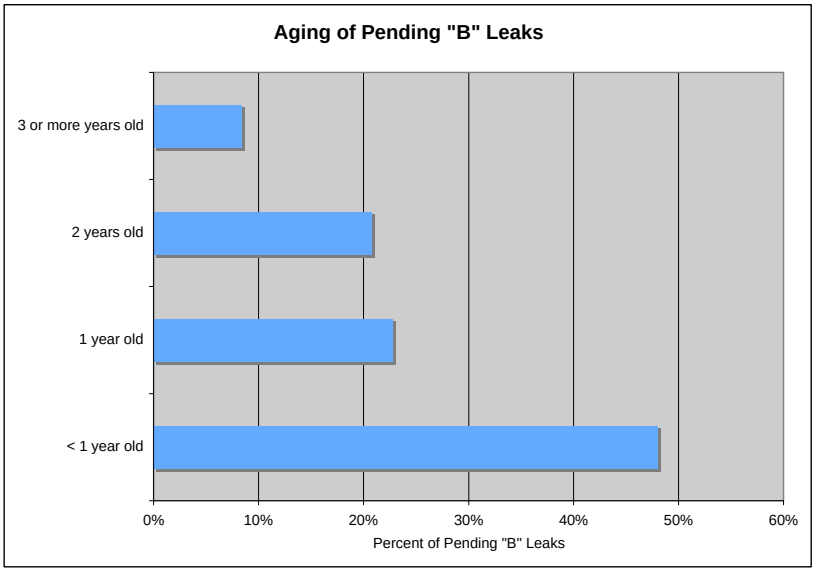
SJG relies on its *Main Replacement Evaluation Program* to ensure the safety and reliability of its distribution main system. This program identifies sections having potential concerns and prioritizes the replacement of these sections. Depending upon the results of the evaluation, main sections may be monitored or replaced (within 36 months). Additionally, SJG is required to replace all bare and coated, cathodically unprotected steel service lines within a definable area when records indicate that 20 percent or more of the bare and coated cathodically unprotected steel services exhibit leaks. In 2003, operations management changed its approach to leak management. Until that time, geographical rotation served as the foundation for scheduling repairs. Management now schedules "B" leak repairs on basis of the percentage of gas readings. SJG first repairs the "B" leaks having with the highest percentage, regardless of age. The Company then rechecks remaining "B" leaks every six months.

SJG uses the following leak classification:

- *Grade C Leak* – "A leak that represents an existing or probable hazard to persons or property, and requires prompt and continuous attention until repaired or made safe"
- *Grade B Leak* – "A leak that is recognized as not being an immediate hazard at the time of detection, but justifies scheduled repair based on probable future hazard." B leaks should be scheduled for repair or continually reevaluated at intervals not exceeding 6 months.
- *Grade A Leak* – "A leak that is non-hazardous at the time of detection and can be reasonably expected to remain non-hazardous." A leaks shall be continually reevaluated each calendar year with intervals not exceeding 15 months, until repaired, regarded, or no longer results in a reading.

SJG has a significant backlog of "B" leaks. Review of SJG's pending leaks indicates that 8 percent of pending "B" leaks are 3 or more years old (versus date leak was found). Another 21 percent are 2 years old, as seen on the chart on the following page.

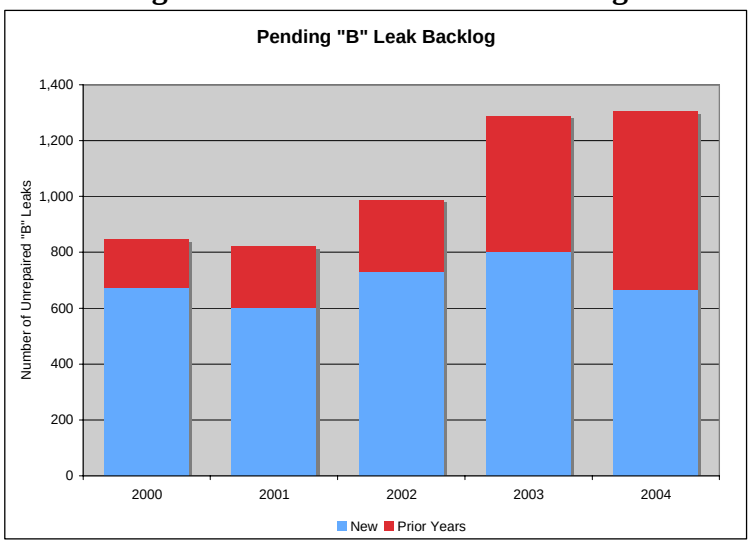
Figure IX-11. Grade B Leak Summary



The *Office of Pipeline Safety Guidance Manual* recommends that Grade 2 or "B" leaks be repaired or cleared within one calendar year, but no later than 15 months from the date the leak was reported. Additionally, The Office recommends that Grade 2 leaks be reevaluated at least once every six months until cleared. SJG relies on its *Main Replacement & 20% Replacement* programs to address leaks. The Company has accumulated a significant backlog over the past five years. Currently, "B" leaks represent 78 percent of all pending leaks. When compared to AGA benchmark data, SJG's leak backlog represents 3rd quartile performance.

The unrepaired "B" leak backlog has been growing significantly as a portion of totals since 2000. In December 2000, unrepaired "B" leaks older than one year represented only 20 percent of the total backlog. This figure has more than doubled, growing to 38 percent in 2003 and to 49 percent by year-end 2004.

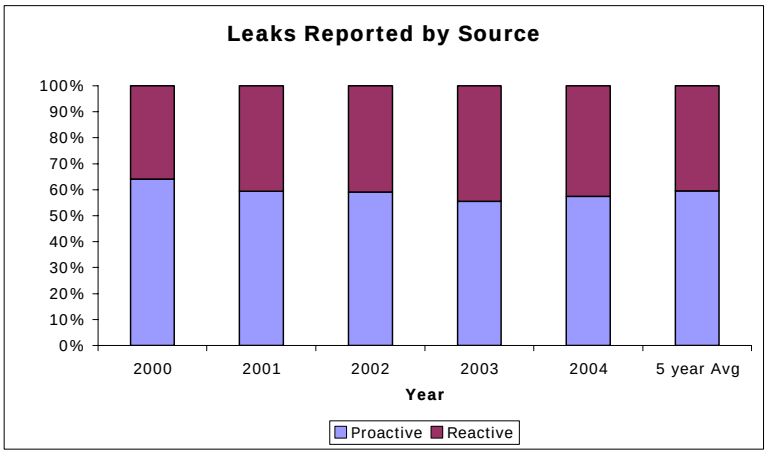
Figure IX-12. Grade B Leak Backlog



e. SJG has reduced its reliance on proactive means of leak detection.

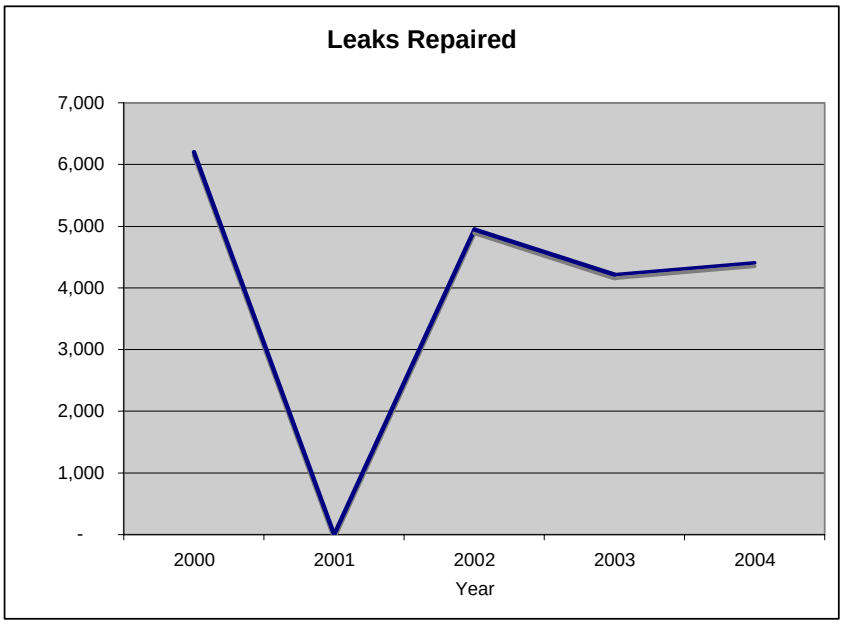
Analysis of information included in reports indicates that required line maintenance and leak surveys and other required DOT inspections are not always performed as timely as they might be. Most gas leaks on the Company's side of the meter are detected through active means, as shown below; however, the percentage of leaks identified through proactive means rather than reactive has been declining steadily since 2000. In 2004, SJG detected 57 percent of leaks through proactive means (leak surveys) and 43 percent through reactive (customer, passer-by, public authority). In 2000, SJG detected 64 percent through proactive means and 36 percent through reactive means. The leak survey, conducted using the flame-ionization technique, is the primary proactive means of leak detection for the gas mainlines in the distribution system.

Figure IX-13. Leak Reports



As seen from the chart below, fewer leaks have been repaired since 2000. This has also contributed to SJG's growing leak backlog.

Figure IX-14. Leak Repairs



Liberty prepared the preceding table without the benefit of 2001 data from SJG. The Company's comments to the draft report noted that it repaired 4,574 leaks in 2001. The added data shows that 2001 data fit the trend of decreasing numbers of leaks repaired. SJG's aging backlog of pending "B" leaks and the fact that more leaks are being reported through reactive means than in the past suggest that SJG has not been maintaining its distribution system in the timeliest manner.

f. SJG Leaks Resulting from Third-Party Damages are increasing.

Damage due to excavation activities is the leading cause of pipeline failures and accidents, both statewide and nationwide. The *New Jersey One Call* program has helped utilities avoid many leaks that would result from excavation damage. *New Jersey One Call* is a state-regulated, non-profit organization comprised of public utilities and municipalities in the State of New Jersey. NJ One Call functions as a one-call notification system that provides excavators and the general public with the ability to notify owners of underground facilities before proposed excavation. *NJ One Call* handles both routine and emergency calls.

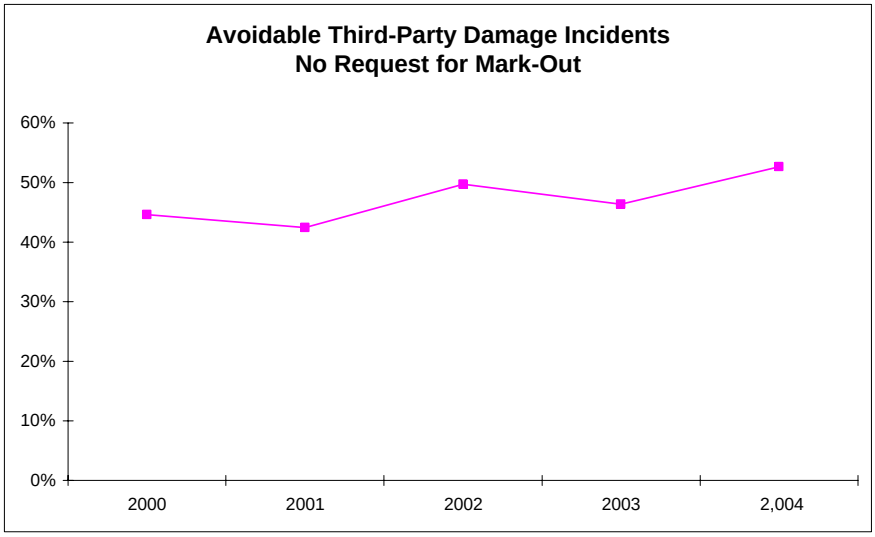
As shown below, third party damage represented 18 percent of total SJG leaks repaired in 2004, up 4 percent from 2002.

Table IX-15. Leak Causes

Leaks Repaired by Cause	2002	2003	2004
Corrosion	69%	63%	66%
Third Party Damage	12%	17%	18%
Outside Force/Cast Iron Break	2%	2%	1%
Other	17%	15%	15%

SJG relies on a contractor to identify and mark its underground facilities. SJG receives more than 100,000 requests for mark-outs each year from customers and excavators. Requests for mark outs have been increasing every year; however, the ratio of damage incidents to requests has been declining since 1998. Even so, third-party causes represented a higher proportion of leaks in 2004 than they did in the two prior years. Not everyone who should actually uses the *NJ One Call* notification system. The following chart shows a significant increase over recent years in the percentage of avoidable damage incidents that followed a failure to request a mark-out.

Figure IX-16. *No-Ticket* Incident Growth



The high and growing percentage of *no-ticket* damage incidents indicates the importance of efforts to make excavators aware of the dangers of working around buried facilities and the importance of using the *NJ One Call* notification system. Better promotion of the *NJ One Call* program appears to be in order. SJG should be more aggressive in alerting customers to the *NJ One Call* notification system, especially for new customers, builders, and contractors.

The next table shows that approximately 21 percent of third-party damage incidents (on average for the past five years) result after a request for a mark-out has been made, not completed, and the requestor proceeds to excavate without the mark-out. Another 34 percent of the incidents result after an incorrect mark-out or poor practices by the excavator following the mark-out.

Table IX-17. Other Third Party Incident Causes

Third Party Damages	2000	2001	2002	2003	2004	5 yr. Avg.
% No NJ One Call Ticket	45%	42%	50%	46%	53%	48%
% Ticket with no Mark Out	18%	23%	24%	23%	17%	21%
% Marked Out & Still Damaged	37%	35%	29%	35%	36%	34%

More than half third-party incidents follow no mark-outs (about 146 leaks per year) or result event though mark-outs have taken place (up to 236 leaks per year). Clearly many of these incidents did and will continue to result even though there was timely scheduling and effective

performance of mark-outs. Nevertheless, the size of these cause groups suggests increased attention to scheduling and accurate performance of mark-outs. Every third-party damage incident creates a potentially serious public safety issue, and causes expense. The previous table also underscores the concern about the number of leaks (nearly half, or 334 per year) that involve a failure to make a mark-out request.

g. SJG has lagged in performing meter maintenance and services in recent years.

Before the August 2004 transfer of appliance service technicians and supervisors to ESP, these personnel could and did on occasion install meters and perform other meter related work. SJG's loss of this resource took away significant flexibility in scheduling meter-related work. SJG used a contractor in 2002 and 2003 to help with meter sets, primarily because it was falling behind on meter sets by enough to cause customer dissatisfaction. SJG has improved to a point where it can now provide one-week promise dates.

SJG has also experienced a significant lag in the meter age-change program that the BPU requires. SJG management has set goals to remove 7,000 meters for the next two years; nevertheless, its backlog keeps growing. Currently, more than 13,000 meters still in service should have been removed from service (see earlier finding). SJG has been adding, on average 3,000 meters to it removal list each year.

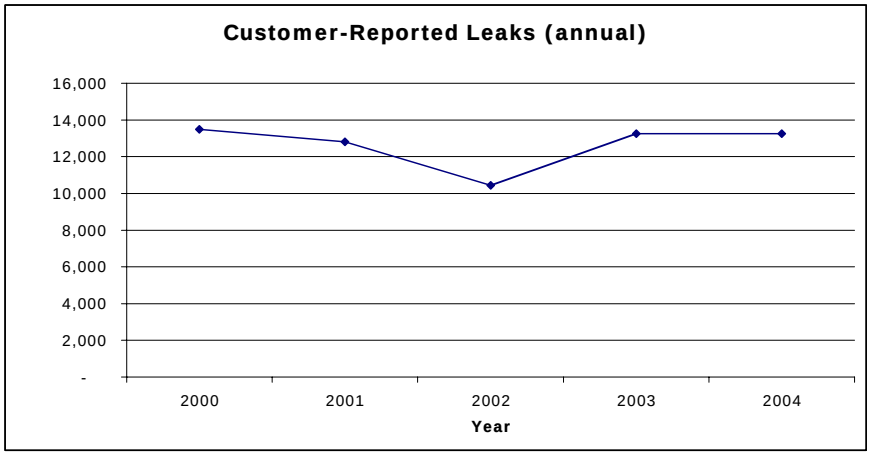
Utility workers are the *first responders* on customer-reported leaks and emergency calls. This work comprises the top work-task priority for utility workers. Other activities performed by utility workers include: turning meters on and off, off-cycle meter readings, chart changes, meter investigations, meter sets, and meter removals. SJG initiated a program last year to let utility workers go directly to their first job in the morning from home. This enhancement has reduced some travel time, which makes more time available for working on orders.

The removal of appliance-service technicians from the division workforce in combination with the use of street department crews to install new business services has greatly reduced the flexibility available to supplement the utility workforce. SJG therefore finds itself at risk of even further growth in its backlog of required change-out of meters. In turn, the added press of work can jeopardize leak response, and risk customers dissatisfaction associated with longer waits for meter sets, meter removals, turn-ons and turn-offs.

h. SJG has not met its goal of responding to customer-reported natural gas leaks within 60 minutes.

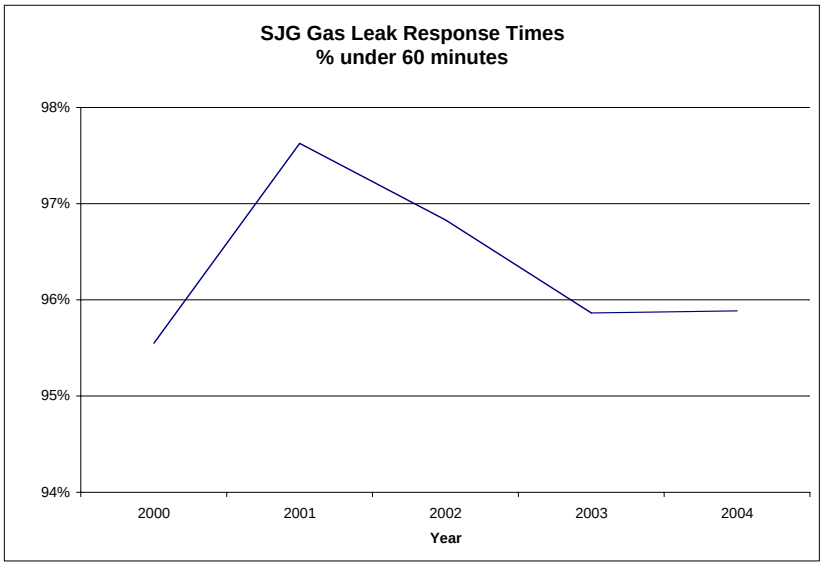
Available data indicate that customer-reported leaks or carbon monoxide investigations have generated 12,647 on average calls per year over the last five years. Such calls declined from 2000 to 2002, but had returned to 2000 levels in 2003 and 2004. On average, 62 percent of these calls lead to confirmed leaks.

Figure IX-18. Customer Leak Reports



SJG's goal is to respond to 100 percent of leak reports within 60 minutes of the call. Available records indicate that SJG has not met this goal in the last 19 years. SJG responded to 95.9 percent of emergency leak calls within 60 minutes in 2004. Over the last five years, SJG averaged 96.3 percent within 60 minutes.

Figure IX-19. Leak Report Response



i. SJG's lost and unaccounted for gas has climbed significantly since 2000.

The table below shows the five-year average of 2.51 percent, which is high for a local distribution company.

Table IX-20. Lost and Unaccounted for Gas

	2000	2001	2002	2003	2004	5 yr. Avg.
% of Total Throughput	1.41%	3.25%	2.83%	2.88%	2.36%	2.51%

Benchmarking data, from the 2004 *AGA Best Practices Benchmarking Study*, which used 2003 data, places SJG falls within the 4th quartile, ranking 53 of 69 in the study.

j. SJG met its new federal compliance requirement to develop a System Integrity Plan for transmission piping.

SJG submitted its System Integrity Plan on time on December 17, 2004. This plan is the first major requirement of the DOT's new transmission pipeline safety policy, enacted in January 2004.

k. SJG's new business service in-sourcing program reduces staffing flexibility and increases backlog of maintenance work.

SJG began using employees to install new business services in the fall of 2002. SJG employees, installed 22 percent of new services were in 2002. These installations displaced work performed by contractors. SJG increased the percentage installed internally to more than 40 percent in 2004. Management planned to increase the percentage again, to 50 percent, in 2005.

Street Department employees who perform these installations also typically perform leak repairs. No new employees have been added to the workforce to accomplish these installations. SJG has instead redirected workers from other tasks. This approach leaves fewer employees available for leak repair. Additionally, in the past, Street Department employees supplemented utility workers, in peak times. Therefore, the redirection to new business services also reduces the availability of these workers to help with utility service work.

The growing backlogs in leak repair and meter change-outs highlight the effects of the redirection of street crews to new business construction, without increasing resources.

l. SJG's implementation of the *FieldBook* system will promote work efficiency and effectiveness.

SJG is in the process of implementing *FieldBook*, which is a system that will provide 24/7 remote access to the Company's maps, main records, service records, and customer location data. An outside contractor is developing the system. To date, all main and service records have been scanned into *FieldBook*. Data entry, scheduled for January 2005 completion, uses geo-coded records with mapping coordinates. Users are scheduled to have full access to the system by the end of March 2005. Once the system is complete, users will be able to access asset records through a web-based browser; electronic records will replace the physical library of service and main cards.

At the same time, the same contractor is updating SJG's mapping system to allow as-built maps and information to be automatically input into the network modeling system and the *FieldBook* system. Maps and models are complete and in full use at two divisions and the transmission system. The other three divisions will have complete access by summer 2005.

The system will provide significant gains through the reduction of clerical input and support. Additionally, SJG supervisors and managers will have remote access to asset records and maps.

m. Compliance tracking and reporting is cumbersome to prepare and difficult to use.

SJG relies on stand-alone databases to track leaks, valve inspections, and regulator inspections. In addition, paper files maintained in each division office document the installation, maintenance, and inspection of each piece of critical equipment. However, SJG has only automated the tracking of three compliance areas; *i.e.*, leaks, valve inspections, and regulator inspections. Other compliance items are not tracked electronically. As a result, required compliance reports are manually created monthly, semi-annually, and annually. The manual process requires pulling data from databases, manual logs, paper folders and files.

Each month, an exception report is manually produced to identify items that are nearing non-compliance or are out of compliance. This report is produced at Folsom and then distributed to each of the divisions. A color-coded summary has been added for one of the divisions, providing at a quick glance identification of required compliance items. Separate colors identify relevant categories; *i.e.*, non-compliance, nearing non-compliance, and to be completed within the year. This enhanced visual approach has helped focus division efforts, but exists in only one of the five divisions.

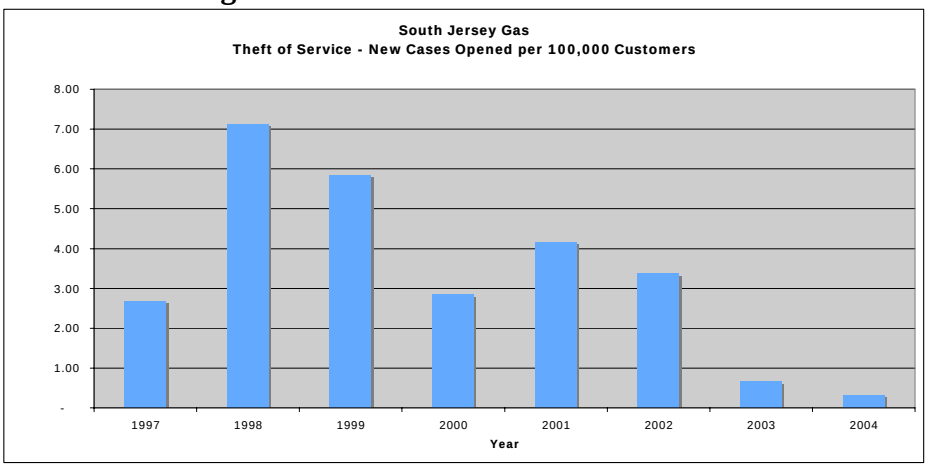
Even for those few areas that have been automated (leaks, valves, and regulators). the information provided represents only a current *snapshot*. Reports provide no inspection history, except for last inspection date and next inspection date. In areas not supported by these databases, inspection or survey history can only be obtaining through manual review of paper files for each item.

SJG has been *out of compliance* on 1 to 9 percent of items over the past five years. Improved reporting would better enable management to improve this performance. Compliance information should track, schedule, and manage all areas to be monitored. It is equally important that SJG provide a history of performance. Ideally, compliance activities should be incorporated into a work-management and personnel planning system to encourage better management and scheduling of tasks.

n. SJG does not make the pursuit of revenue protection a sufficient priority.

The following chart shows that very few theft of service or tampering cases have been identified in recent years. The number of cases identified has actually declined steadily since 1998. Only two cases were identified in 2003, and only one in 2004.

Figure IX-21. Theft of Service Incidents



Industry averages for theft of service range from .5 percent to 2 percent. Even the low end of this range far exceeds SJG's average of .0003 percent to .0071 percent. The disparity of SJG's incidence rate versus the industry suggests that SJG may not be applying the appropriate resources to identify theft of service. Even the prevention of a few hundred cases of theft would justify significantly more effort that SJG has made.

SJG has not actively communicated its theft of service program to employees or customers. SJG's employee communications have been limited to an annual article in the employee newsletter and posters placed on company bulletin boards. SJG's theft of service communications to customers took the form of an annual bill-insert message. MAS has dedicated two brief paragraphs in its training manual to theft of service. The instructions ask that MAS employees who suspect tampering fill out the appropriate form for the appropriate company. SJG provides for an additional award of $25 to $250 for energy charges recovered ($25 for up to $1,000 and 5 percent of all energy recovered over $1,000 up to $250). A review of payouts reveals that highest payment since 2002 has been $50 per incident.

SJG's annual communications do not create a sufficient level of awareness with employees or customers. Additionally, the MAS assumption of responsibility reading meters means fewer opportunities for SJG employees to report suspected theft or tampering. No employees are dedicated to SJG's program. The role is jointly performed on a part time basis by both divisional coordinators, customer service representatives, and corporate risk management employees.

D. Recommendations

37. Increase the SJG workforce or supplement it with contract labor to address growing backlogs.

SJG has accumulated significant backlogs in several areas of deferred workload, which include leak repair and meter age-changes. Growing leak backlogs increase safety risks, and exacerbate SJG's growing percentage of lost and unaccounted for gas. Growing backlogs in meter change-outs mean customers will be dealing with fast-meters for a longer period of time. SJG will be faced with refunding more and more for fast meters.

The growing backlog and reduced flexibility of the workforce suggest that SJG is not appropriately staffed to optimize maintenance of its distribution system. Additionally, the aging workforce and the recently introduced early retirement program will further reduce staffing levels. While management suggests there are potential productivity gains, performance and backlog indicate that SJG is on the verge of a significant resource shortage that cannot be solved simply by getting more work out existing resources.

SJG's loss of resources and flexibility has been producing an increasing backlog. In addition, SJG has experienced difficulties in complying with Federal DOT and NJ BPU regulations. SJG should increase its workforce or supplement it with contract labor such that it can significantly reduce these backlogs and ensure compliance with regulations. Increasing staffing within utility services area will help reduce meter change-out backlog as well as facilitate the improvement in leak response.

38. Develop leak repair timeframes to ensure the prompt repair of "B" leaks.

SJG has a growing backlog of grade "B" leaks. Unrepaired leaks increase safety risk. SJG should work to quickly and efficiently clear or repair "B" leaks. SJG relies on its main replacement and 20 percent programs to address "B" leaks. The Company should also overlay minimum repair requirements for "B" leaks to ensure that leaks do not remain unrepaired for extended periods. Additionally, a large leak backlog further burdens SJG with the responsibility of monitoring semi-annually until a leak is cleared. Prompt repair avoids the need for further monitoring.

The Office of Pipeline Safety recommends that grade 2 leaks be repaired at a minimum within 12 months, and sooner under certain conditions. SJG should adopt these recommendations at a minimum to ensure the prompt repair of these leaks.

SJG states that the Office of Pipeline Safety modifies the recommendation by specifically allowing a leak to be repaired no later than 15 months from the date of its report, and that it is further not required to adopt this guidance. SJG notes instead that what it must do is to adopt operating and maintenance procedures and then comply with them. SJG notes that its Operations and Maintenance Manual requires all "B" leaks to be rechecked every six months. SJG believes its current program gives the flexibility to adequately monitor "B" leaks, but does agree that a more formal leak prioritization program is appropriate. SJG accepts the propriety of providing more detailed guidance to assist operating supervision in managing and repairing its "B" leaks.

39. More aggressively promote the *NJ One Call* program within the SJG service territory.

Every third-party damage incident is a potentially serious public safety issue, and repairs take money and people to address. SJG should do everything possible to make sure all requests are properly and timely marked. In addition, SJG should increase its emphasize and communication of the importance of the *NJ One Call* notification system with contractors and customers, in an attempt to eliminate the 48 percent of third-party damage incidents in which no call was made to request a mark-out.

SJG should also expand education efforts regarding proper excavation practices after the *NJ One Call* system has been notified and after the underground facilities have been marked. One such way to expand awareness is to sponsor safety seminars for the excavating community and contractors. SJG should evaluate its outreach efforts and identify areas or types of excavators that result in the largest damage and target problem excavators to strive to reduce these damages. Although it is the excavators' duty to use the one-call system and be aware of the laws that apply, SJG can influence excavator behavior though outreach efforts.

40. Improve compliance tracking and reporting.

Liberty believes that management reporting in this area has not been supportive. Compliance information should track, schedule, and manage all areas to be monitored. It should also provide a history of performance. Ideally, compliance activities should be incorporated into a work-management and personnel planning system to encourage better management and scheduling of tasks.

SJG should develop an integrated compliance tracking and reporting system to help division managers track compliance items and performance. Databases should be added to capture all items mandated by the DOT and BPU. These databases should provide exception reporting, compliance history, and compliance performance. They should also be integrated with work management and manpower planning systems to ensure that manpower is appropriately forecasted, scheduled, and managed. These databases should also be closely tied to the asset database.

41. Pursue a more aggressive revenue protection program.

Nationally, energy diversion accounts for approximately $6 billion annually. Energy diversion is a crime and a public safety issue. Most U.S. energy companies have some form of theft of service program in place. They typically place primary reliance on leads from employees and customers. More aggressive utilities are employing customer analytics, technology applications, and awareness systems to predict, identify, and confirm tampering and theft. Studies have shown that utilities can recover anywhere from $4 to $6 for every $1 invested to recapture stolen or diverted energy, averaging $10 to $20 per customer per year recovery. SJG should pursue a more proactive and aggressive revenue protection program, which incorporates theft of service, losses, billing errors, slow meters, and non-registering meters. This program should be focused within the Customer Service organization, and should clearly define responsibilities. SGJ should assign ownership of the program. SJG should be more active in emphasizing the program with all contractors, including MAS. SJG should strive to create a greater awareness of the company's program throughout the company and community.

SJG should build public awareness about the safety, ethical, and criminal aspects of energy theft through such activities as speaking to civic and church groups, placement of educational articles or copy in local newspapers and media, addition of theft of service information to corporate web site, and perform high-visibility sweeps of neighborhoods.

SJG should increase the scope and frequency of its communications with employees and customers, and should communicate the seriousness of its efforts to eliminate tampering and

diversion. SJG should become active in revenue protection associations to promote the sharing of experience and tactics.

While SJG does use exception reporting to identify suspicious or unusual patterns in usage, SJG should investigate the use of customer analytics and modeling to identify suspected tampering or theft. Customer demographics, payment histories, and behavioral analysis can help predict potential situations or pinpoint actual cases of diversion.

SJG should also develop specific approaches to detect and investigate theft and tampering within commercial and industrial markets. Industry experiences indicates a growth in tampering for these segments. Additionally, the risk is much greater with these customer segments and usually much harder to detect.

X. Dispatch

A. Background

The Company refers to the Gas Control function as *Gas Allocation*. SJG links the pertinent activities of System Operations and Gas Supply at the Operations Center in McKee City. The General Manager, System Delivery & Control, who is based in McKee City, reports both to the Executive Vice President & Chief Operating Officer (through the Assistant Vice President, Distribution Operations) and to the Senior Vice President, Gas Supply, Delivery and Sales. The Company's Gas Supply Staff includes the Manager, Transportation Services Administration, who is responsible for administration of the Company's programs for transportation of customer-owned gas. This manager operates from in McKee City, as does the Measurement & Production group, which is responsible for operation of the Company's LNG facility. Allocation & Communications, which conducts the Gas Control function, also operates from McKee City.

Gas Supply and Operations (including Measurement & Production and Allocations & Communications) personnel work in close proximity to each other in the same building; there is considerable face-to-face interaction. The two groups also communicate through a series of plans, particularly during the heating season. Seasonal plans, prepared by Gas Supply, provide an overview of sources to be used to supply the load over the course of the winter. These plans include injection and withdrawal plans for storage gas. Gas Supply also prepares monthly Game *Plans* late in the month prior to flow, but after monthly purchases have been set. These monthly plans provide estimated flows for an average day during the month in question.

Gas Allocation initiates the *Daily Game Plan* process by estimating sendout, based on the weather forecast. With the sendout estimate, Gas Supply fills out the daily plan with quantities to be taken from each source, including storages and LNG if necessary. The daily plan includes estimated flows of customer-owned gas. SJG's Transportation Services group provides these estimates. The daily plan also included the *asset stack* for system supply and off-system sales. The Daily Game Plan also provides rank orders for increasing supplies in the event that requirements vary from forecast, which usually results because actual weather is colder or warmer than forecasted.

Gas Supply addresses pipeline nominations, including storages. Gas Allocation regulates and monitors flows, and receives reports from the pipelines regarding operating conditions. Gas Supply also indicates when to vaporize LNG. Measurement & Production turns the LNG on when required, sometimes for pressure stabilization. The LNG facility is located on the *downstream* side of the service territory. The Executive Vice President and COO decides whether it is necessary to curtail interruptible customers (if necessary).

B. Findings

Liberty generally found supply analysis and scheduling activities to be appropriately coordinated. Seasonal, monthly and daily Game Plan processes and products, including rank ordering of supply sources for increasing or decreasing supplies as necessary, ensure that the key players in the process of making gas flow to customers are operating off of the same information.

For estimates of daily sendout the Allocations Supervisor calculates base and heat factors by comparing observed weather data with observed sendout. The supervisor uses only the most recent year's data for this calculation, because growth in the number of customers and changes in use per customer make prior-year data obsolete. Very cold days cause a separate calculation using weather and sendout information for a number of recent, but very cold, days.

The results of these calculations, times degree-day information from the weather forecast, yields his estimate of the next day's sendout, which starts the Daily Game Plan process. The Allocations Supervisor may adjust the estimate for wind, and for prior-day weather. Separate calculations address each week-day/week-end. SJG records actual weather at five stations, and compares measurements carefully with weather forecasts. Any patterned differences are reported to the Company's weather services provider (Meteorologix), in order to allow recalibration of SJG forecasts for the Company's service territory.

C. Conclusions

a. SJG's dispatch processes meet or exceed industry standards.

Gas deliveries to the SJG system can be set more precisely to meet system requirements by improving forecasting. Forecast errors are caused by imprecision in the equations for estimating sendout, and by imprecision in the daily weather forecast. Both sources of error can sometimes be reduced by more intensive analysis.

Liberty found that SJG's current practices are sound. They at least meet and perhaps exceed industry standards. If peak-day sendout gets close to peak-day supply capacity, or if curtailment becomes a frequent occurrence, it might then become important to examine tightening up requirements estimation before it contracts for the next increment of capacity. Greater precision in this area in that circumstance might serve to defer additional peak-day capacity for a year or two.

D. Recommendations

Liberty has no recommendations in this area.

XI. Customer Services

A. Background

The Customer Care Center (CCC) provides a series of services to SJG and to other SJI subsidiaries. The mission of the CCC is:

> *To provide timely and effective response to the needs of both our internal and external customers. To deliver quality service and emerge as the service provider of choice for customers.*

CCC performs most of the functions generally classified as *customer services*; *i.e.*, customer contact, billing, credit and collection. The CCC performs the following functions:

- Call center for SJG
- Overflow call center for SJ Energy Plus
- Call Center for third party marketers' customer billing inquiries on transportation services
- Credit and collection services for SJG
- Customer accounting services for SJG
- Customer relations services for SJG.

CCC divides its organization into two areas, each of which performs a number of functions:

- Customer Service & Collections
  - Credit & Collections
  - Customer Services (Call Center)
  - Customer Service technology
- Customer Accounting
  - Meter Reading (contractor)
  - Billing
  - Payment processing and reconciliation
  - Revenue reporting.

Business offices and counter payments fall under the responsibility of the Distribution Operations divisional organizations. SJG maintains four company-operated walk-in locations at division offices; they operate from 10am to 2pm, Monday through Friday. SJG also offers a network of 58 payment locations in New Jersey and 66 payment locations in the Philadelphia area. Third parties operate these SJG bill payment locations. These payment locations generally operate for longer hours and have more convenient locations than do the four located at SJG division offices. The CCC balances and coordinates customer payments received at these payment locations and through electronic and phone payment options. The SJG Information Systems Department processes payments received by mail.

SJG has since 1999 contracted out meter reading to Millennium Account Services (*MAS*), a service company jointly-owned by SJI and Conectiv. The CCC manages day-to-day communications and coordination with MAS.

B. Findings

1. General

The CCC has executed service agreements with each party (internal and external) to whom it provides services, in order to document service-level expectations and costs.

CCC has completed in the last three years the following initiatives to improve the level of service provided:

- Interactive Voice Response System
- Web-based customer service
- PC workstations
- AMR for high-read cost accounts
- Virtual Hold (automated call backs to customers in wait queue).

2. Meter Reading

MAS reads meters for SJG under a service contract. Nightly routes are downloaded from the SJG Customer System to handhelds. MAS readers work the routes and then upload the readings to SJG's system the following day. SJG reads the meters of large industrial customers automatically through a Metretek telephone-based AMR (*Automatic Meter Reading*) system. The system has approximately 236 Metretek devices installed. SJG reads all accounts served by Metretek metering daily.

Meters get read on cycles generally about 30 days long. SJG uses 20 meter reading cycles to read all 300,000 accounts each month. On average it takes three days for MAS to read the meters, upload the information in the *Customer System*. MAS receives a daily meter reading file containing all meters in service, both active and inactive. SJG sends this file two to three days prior to the scheduled read date. After reading the meters in the file, MAS electronically transfers the file back to SJG on the scheduled billing date. Edits occur each night prior to bill printing and insertion. Any errors or rejected bills go to the Customer Accounting group within the CCC for resolution. The *Customer System* automatically produces an estimate for accounts where no readings have been obtained.

SJG has begun deploying Automated Meter Reading (*AMR*) devices for some of its residential accounts. SJG plans to replace older technology with radio-based AMR devices at the rate of about 500 per year over the next three years. SJG has adopted a deployment strategy common to the industry. It consists of replacing high read-cost meters with AMR capable meters. SJG has also been is deploying a certain number of AMR meters in concentrated growth areas. These ERT AMR devices are read through the MAS handhelds. They can also be read through a drive-by collection device.

3. Billing

SJG's objective is to bill each of its customers in an accurate and timely manner. Areas within its service franchise have designated billing cycles and route numbers. Meter data is downloaded to the electronic handheld computers at MAS two days prior to the scheduled read date. After the route has been completed, MAS uploads the read data into SJG's Customer System. That night, the system runs edit routines to verify the accuracy of the readings and produce the bill. Any unacceptable bills are routed to the Customer Accounting group for manual review and correction, if necessary.

SJG developed its *Customer System* in-house around 1970. The Company has made continuing modifications and enhancements over the years. Each billing specialist uses a PC workstation that interfaces with the mainframe *Customer System*. They make any billing adjustments online. The resulting rebills are printed that night, and mailed the next day.

4. Credit & Collection

Problems in receivables relate generally to customer ability and willingness to pay bills. SJG applies to outstanding accounts receivables a variety of collection actions, which depend upon the status of the account and the customers' credit history. Active accounts receive a system-generated reminder letter, a telephone contact from an outside collection agency, or a field visit from an SJG Collector.

SJG uses field collectors, whose primary responsibility is to turn-off meters, talk to customers about the status of their accounts, and to collect payments. SJG Collectors work out of the Company's four operating divisions. During the winter moratorium, which lasts from November 1 through April 1, SJG will not terminate residential customers for non-payment. Instead, it requires customers to agree to an extended payment schedule to pay off any arrears. During non-moratorium months, SJG does not terminate service for non-payment on Fridays, weekends, or the days prior to a holiday.

Field collectors report to the Customer Service & Collections organization, but also have a dotted line responsibility to divisional office management. Field collectors work out of division offices, and perform field collection functions that result in receipt of payment, satisfactory payment arrangements, or termination of service. Each morning, collectors download the day's work to laptop computers. After reviewing the *Customer System* for any last minute payments or order changes, the Collectors head to the field. At the end of the day the collectors upload worked orders to the *Customer System*. Division office managers oversee the day-to-day personnel issues of the collections, but not the assignment of work, which CCC prioritizes.

SJG requires a deposit from all residential customers. SJG may waive deposits with proper credit or a letter of credit from another utility. All commercial customers must make deposits.

SJG refers unpaid accounts to an outside collection agency for a pre-write off collection attempt at 60 days. At 90 days, accounts with balances exceeding $1,000 are referred to a second outside agency for final collection prior to write-off. Accounts become eligible for write-off at 120 days.

Once written off, an account is referred to an outside collection agency for collection. Any subsequent payments received are credited against the earlier write-off.

5. Complaints and Inquiries

Customers can call SJG's CCC between the hours of 7:00 a.m. and 9:00 p.m., Monday through Friday. Customers contact the CCC for issues related to new-service connections, service disconnection, gas leaks, billing-related issues, credit- or collection-related issues, and general customer-relations questions. SJG routes after hours, emergency calls to the McKee City dispatch center.

SJG's goal in responding to customer inquiries is to make customers wait, on average, no more than 1 minute to reach a customer-service representative. SJG measures performance against that goal by using the information produced by its automatic call-distributor (*ACD*) system to monitor call-answering performance hourly, daily, *etc.*, and manages its representatives' workloads to meet this service level. SGJ also has a goal to keep abandoned calls under 5 percent.

Customers with complaints about a bill, hardship-status determination, or payment arrangement contact customer-service representatives at the phone center. The representative and a supervisor first handle these complaints. They get transferred to a Customer Relations Specialist if the first process produces no satisfactory resolution. When a complaint is received from an outside source (such as the NJ BPU or Better Business Bureau) they get referred initially to a Customer Relations Specialist. The NJ BPU sends verbal complaints to SJG electronically and written complaints by fax. SJG also receives complaints by phone and mail.

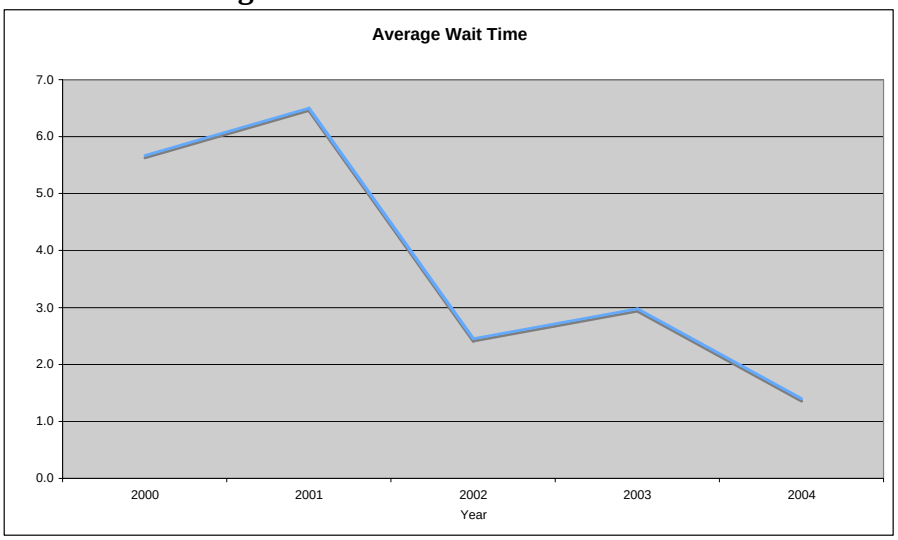
The Customer Relations Specialist reviews each complaint and investigates the matter as a third-party. The customer is then contacted, the matter discussed, and an attempt is made to reach a resolution. Resolution is communicated to the customer, the NJ BPU, and the President of SJG. Each complaint is logged and filed.

C. Conclusions

a. SJG's customer service response has improved significantly.

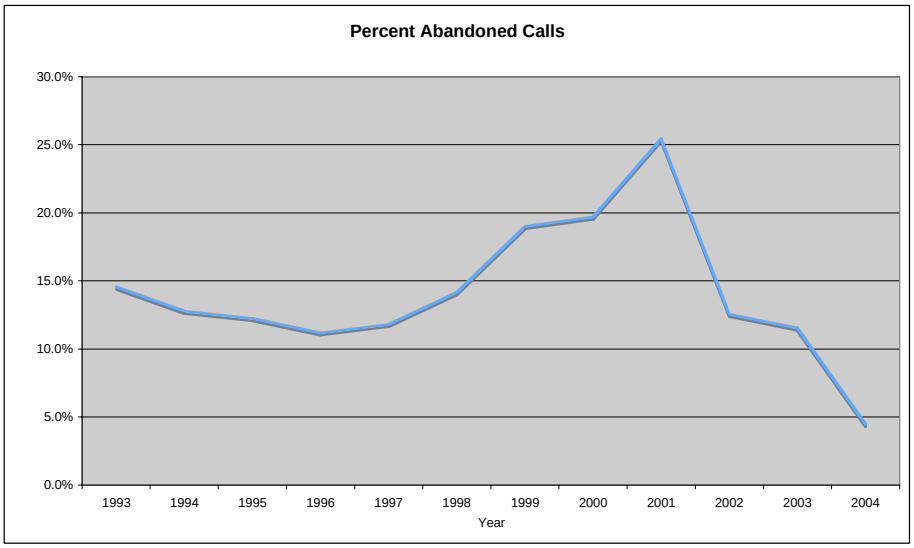
Over the past five years, the CCC has significantly improved its service delivery, which the following two charts demonstrate. The first presents the average wait time in queue, at year-end, in minutes.

Figure XI-1. Customer Wait Times



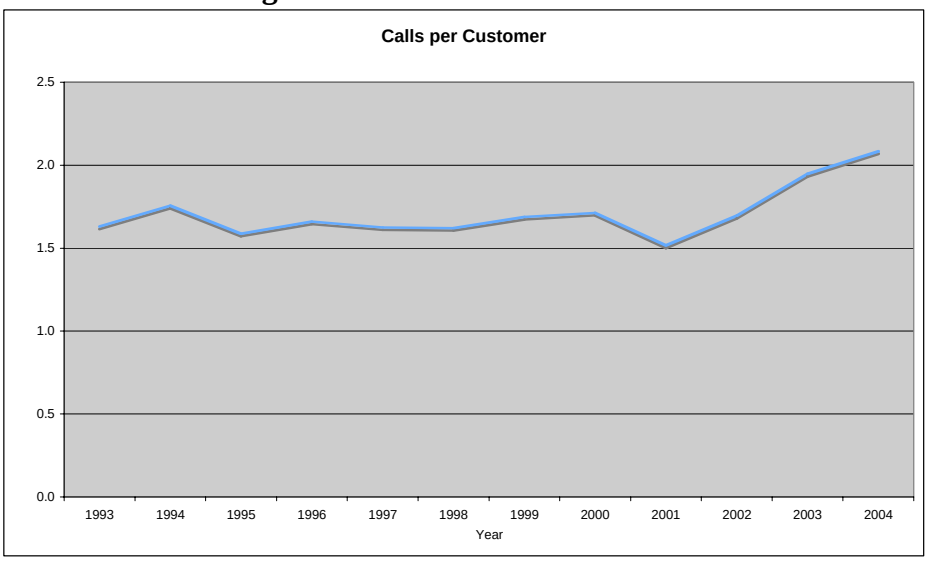
The second chart presents the abandoned call rate—the percentage of callers abandoning while in queue. The CCC experienced a significant reduction of abandoned calls from 2001 to 2004.

Figure XI-2. Abandoned Calls



The number of calls per customer has climbed slightly since 2000. The addition of the self-service technologies, specifically the IVR, comprises the most likely reason. IVR promotes agent-less transactions for needs such as obtaining a bill balance or making a payment. Even with the escalation in calls per customer, SJG maintains a fairly low ratio as compared to the industry.

Figure XI-3. Customer Call Rates

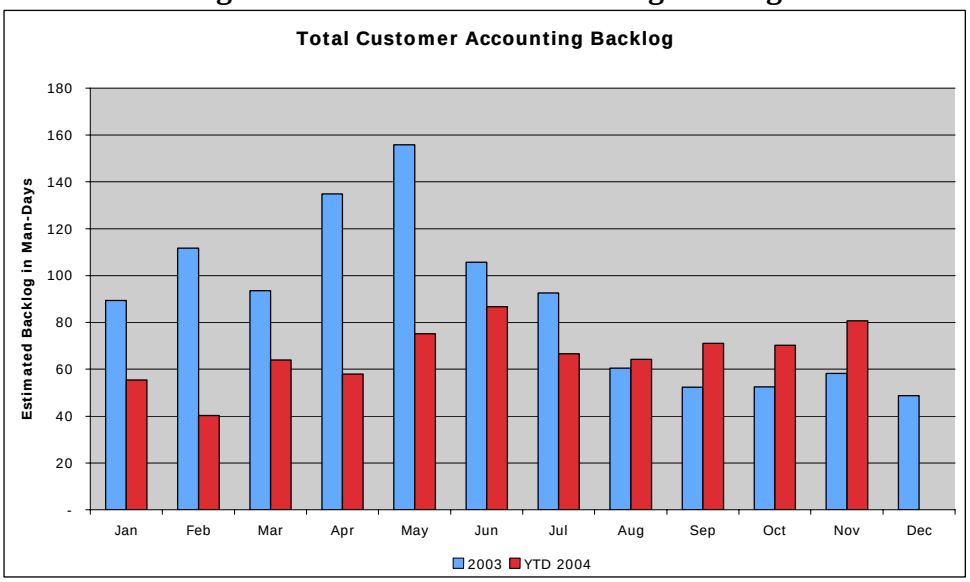


Overall, SJG has significantly improved customer service delivery through its phone center, primarily through the introduction of new call center technologies and better allocation of resources.

b. SJG processing of customer refunds is slow.

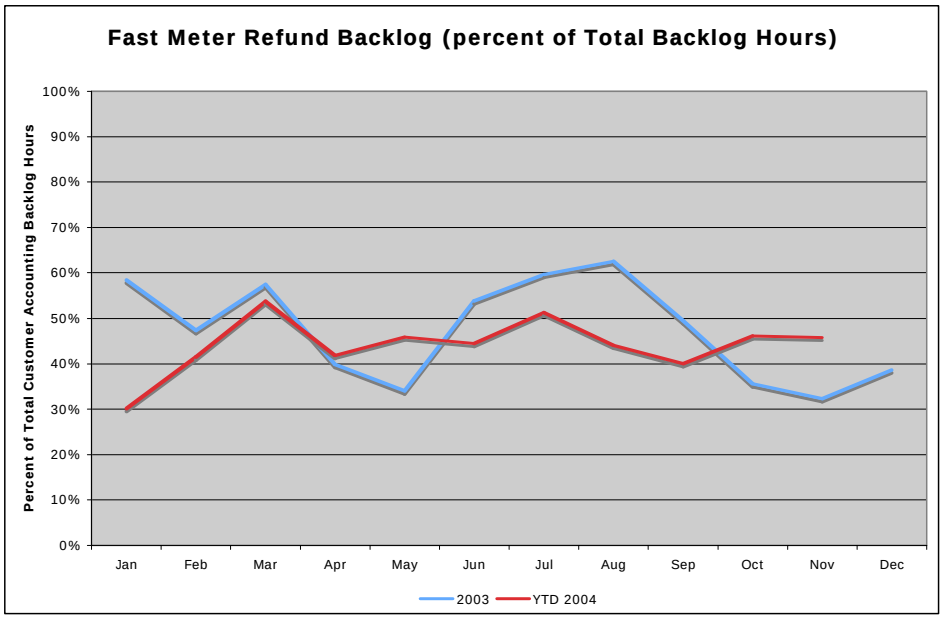
CCC's Customer Accounting group provides customer billing and customer receivables services for SJG. Audit representatives perform the day-to-day activities to ensure that all SJG customers receive accurate bills each month. Customer Accounting representatives perform a variety of tasks. Management uses the *Monthly Customer Accounting Backlog Report* to track and manage these tasks. The following chart shows that the Customer Accounting group has a significant backlog. It averages 90 to 100 person-days.

Figure XI-4. Customer Accounting Backlog



Processing refunds to customers for deposits and for *fast meters* form part of these day-to-day activities. When a meter is changed-out, either through the age-change program, at customer-request, or for other reasons, a refund must be calculated in those instances in which the meter has tested above the maximum allowable range (+2%). Each month, SJG's Customer System produces the *Report of Fast Meters*, which lists all accounts due a refund. Currently, one customer accounting representative has the task of investigating each account to determine the appropriate refund. This single task has made up approximately 46 percent of the total customer accounting backlog over the last two years, as the following table shows.

Figure XI-5. *Fast Meter* Backlogs



Pending backlog represents, in terms of the 2004 average, about 33 person-days of work. On average, SJG has added more than 100 new accounts to the backlog each month (3.4 person-days of work). SJG has maintained a constant backlog in this task. SJG issued an average of 1,365 fast meter refunds over the past five years. This represents an average of $155,672 per year refunded to customers for fast meters ($114 per refund, on average).

Petty cash funds represent another major portion of the monthly Customer Accounting backlog. These refunds to final accounts with a credit balance or active accounts that have overpaid represent 10 to 15 percent of total backlog.

These two refund tasks combined represent 50 to 60 percent of total backlog, and reflect about 40 to 45 person-days of work (using the 2003 and 2004 average). Backlog of this amount means refunds are delayed to the customer by at least 40 to 45 days.

c. The CCC promises and delivers a higher level of service to SJ Energy Plus than SJG.

Customers can call CCC between the hours of 7:00 a.m. and 8:00 p.m., Monday through Friday. Customers contact the CCC for issues related to new-service connections, service disconnection, gas leaks, billing-related issues, credit- or collection-related issues, or general customer-relations questions. After hours, emergency go to the McKee City dispatch center.

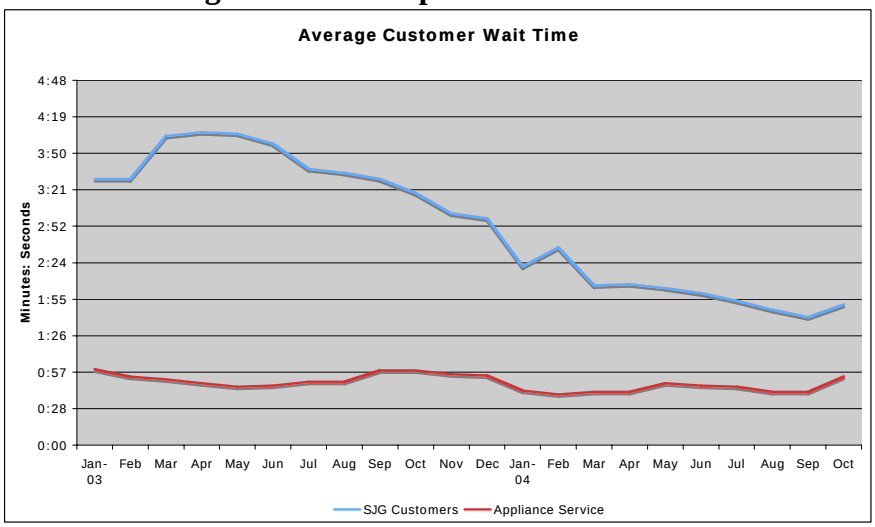
SJG's goal in responding to customer inquiries is to make customers wait on average no more than 1 minute to reach a customer-service representative. SJG manages to that goal by using the information produced by its ACD system to monitor call-answering performance hourly, daily, *etc.*, and by managing its representatives' workload to meet service level. SGJ has another goal to keep abandoned calls under 5 percent.

In September 2004, SJG negotiated a service agreement with affiliate SJESP to provide overflow telephone customer service support, among other services. From 7am to 8pm, calls will be routed to the CCC in the event that all SJESP customer service representatives are already busy handling calls. This service reduces the chances that an SJESP customer will receive a busy signal.

As part of the service agreement, the CCC promises to achieve a customer wait time of less than 30 seconds and an abandoned call rate of less than 5 percent. To meet this goal, SJG has set up priority queuing in its call center to route SJESP calls to the appropriately skilled agents, ahead of SJG customers (with the exception of *I smell gas* calls).

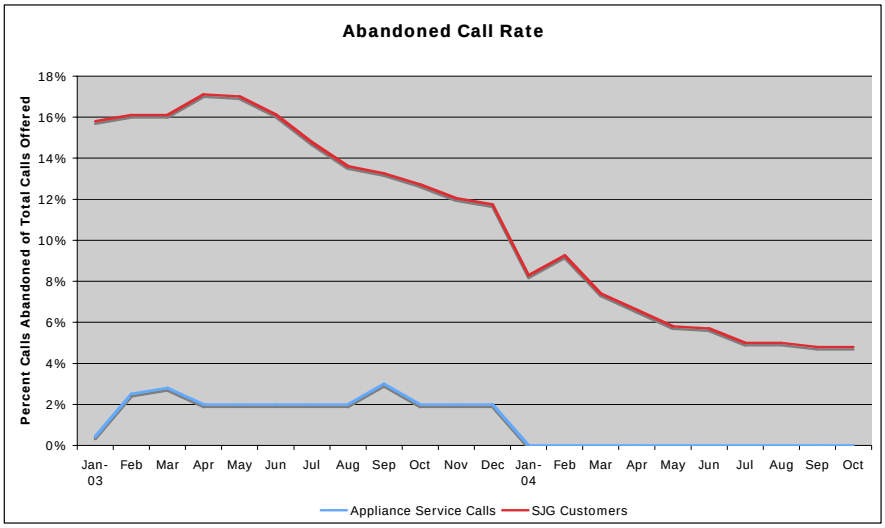
The CCC has separated appliance-service calls from other calls for several years, since SJI initiated its request to move the appliance-service business to a subsidiary. The following chart demonstrates the different levels of service provided to appliance service calls and SJG customers.

Figure XI-6. Comparative Wait Times



For the last two years, appliance-service callers have experienced significantly lower wait times, and have abandoned the line much less frequently than SJG customers, as the following chart demonstrates.

Figure XI-7. Comparative Abandoned Call Rates



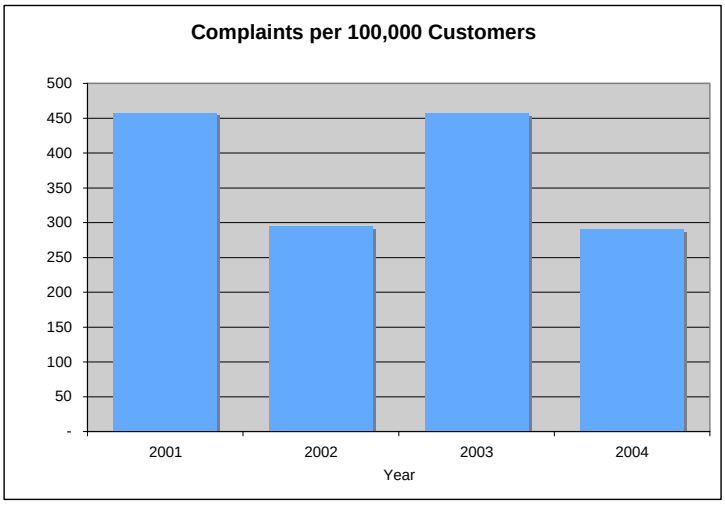
Since January 2003, the CCC's goal for appliance service calls is to achieve a 30 second wait time with fewer than 5 percent abandons. From January 2003 until May 2004, the CCC's goal for handling SJG customer calls was to achieve a 60 second wait time with fewer than 5 percent abandons. This goal was modified slightly in May 2004, shortly before the IVR was implemented. Now the goal is to achieve a 60 second wait time overall with a 90 second wait time for a live agent, with fewer than 5 percent abandons.

SJG should not be giving appliance-service calls priority over SJG customer calls, with the same resources. This effectively takes resources from SJG calls to handle appliance-service calls, and therefore constitutes a *premium* service.

d. SJG has a high level of customer complaints.

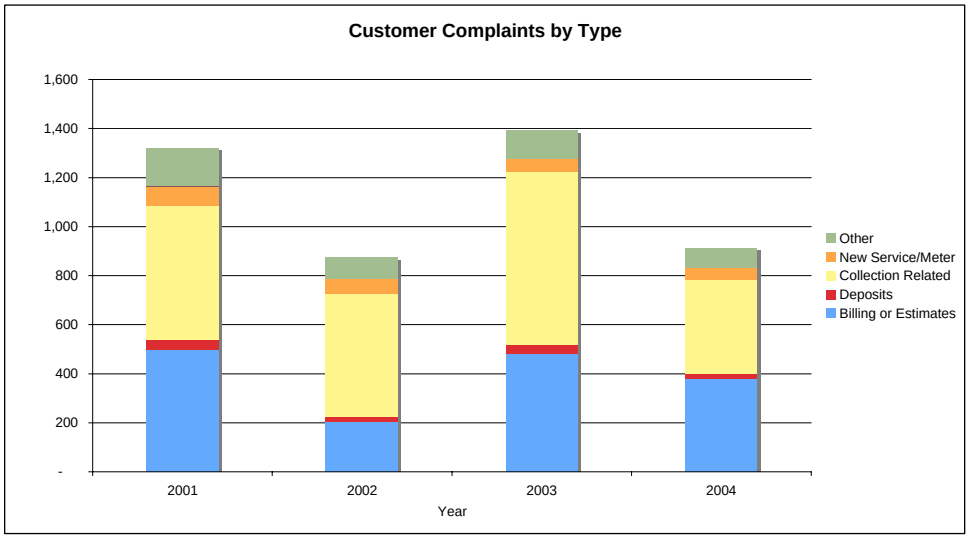
SJG has a significant number of complaints each year. The following chart shows the number of complaints (per 100,000 customers) to the NJ BPU and SJG Executives.

Figure XI-8. Complaint Rates



The following chart displays complaints by category. Billing and Collection are the two major areas of compliant.

Figure XI-9. Types of Complaints

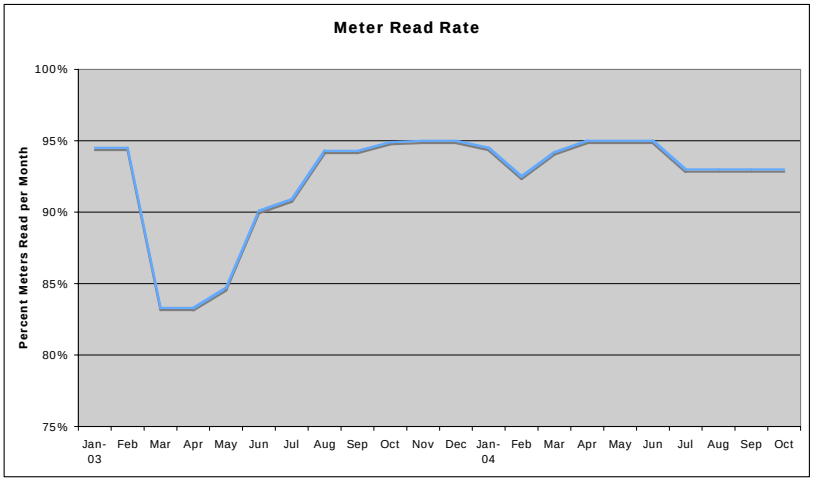


e. Millennium Account Services delivers adequate meter reading services to SJG.

MAS reads the majority of meters for SJG under a service contract. SJG has developed a service contract with MAS. As a means to encourage an improved level of service, the contract included a performance clause based on the percentage of meters read during a given month.

MAS has delivered a read rate of greater than 90 percent since June 2003. Currently, SJG has expectations of a read rate of 93 percent or better. MAS is charged for any un-billable reads each month, which has helped keep them to a minimum. The MAS meter reading accuracy rate for 2004 was 99.68 percent.

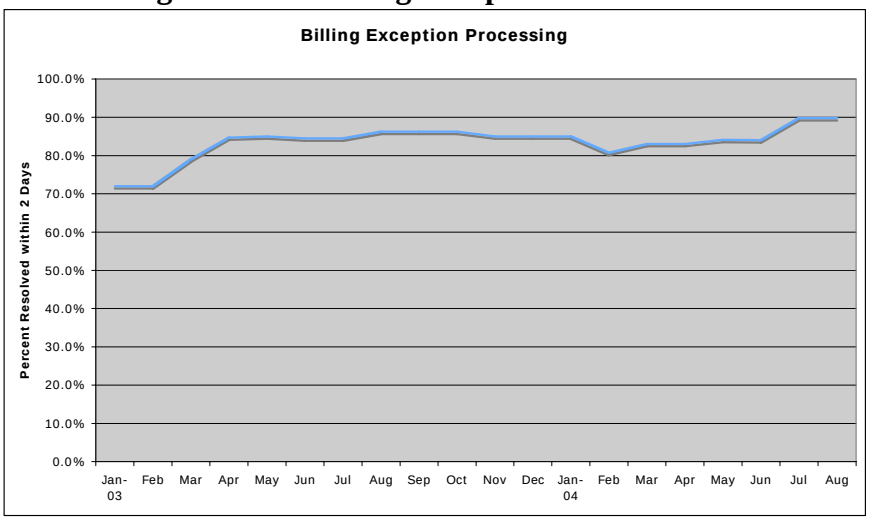
Figure XI-10. Meter Reading Rates



f. SJG billing performance is good.

Since early 2003, the CCC has been tracking billing exception performance, specifically the percentage of billing exceptions resolved within two days. The CCC has a goal of 95 percent, and has improved its response in this area steadily since 2003. SJG measures this performance to ensure timely and accurate billing. The CCC has not yet reached its 95 percent goal, but has brought its performance to an adequate level.

Figure XI-11. Billing Exception Performance



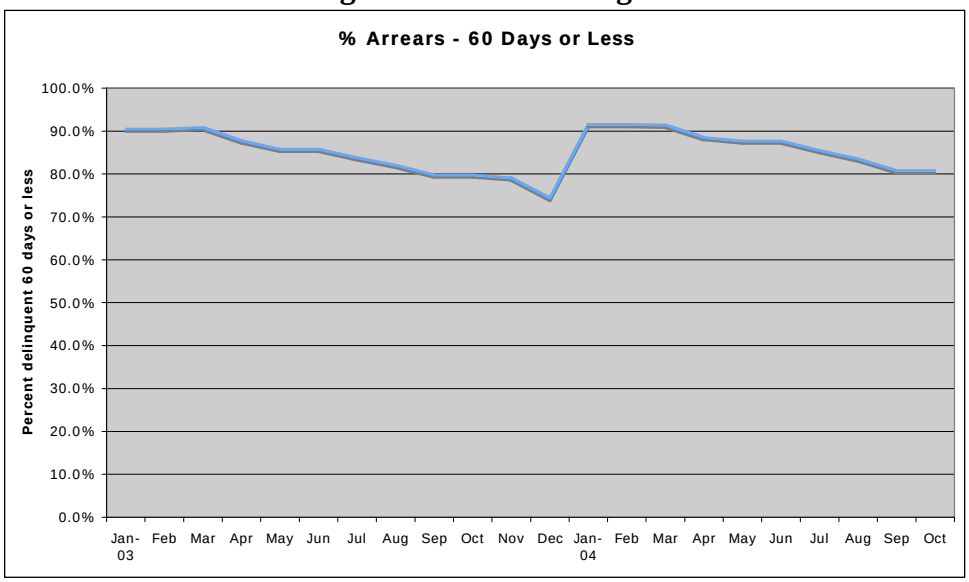
The addition of PC workstations has improved productivity. This improvement should continue as SJG proceeds to automate many of the tasks in the customer accounting group.

g. SJG's collection performance is good.

SJG has concentrated its efforts in collections and as a result, has seen a decrease in net write-offs of .40 percent of revenue in 2003 to .27 percent in 2004. The extremely cold winter season during 2002 to 2003 led SJG to refocus its collection efforts. A review of collection agency performance led to a realignment of agencies and process. Business accounts are now directed to an agency that specializes in that market. SJG has also consolidated the number of agencies dedicated to residential delinquent accounts, which makes it easier to monitor performance. Uncollectible accounts previously written-off and referred to an outside agency are now passed to a second agency after six months of inactivity.

Additionally, SJG is engaging in collection action earlier in the process, in an attempt to increase the percentage of receivables 60 days or less delinquent. In the following chart, receivables aged 60 days average 85.4 percent, with a clear seasonal variation.

Figure XI-12. Arrearages



SJG actively advises customers of the availability of financial assistance and works to establish payment arrangements to bring accounts current prior to winter.

D. Recommendations

42. Reallocate resources or increase staffing to ensure timely refunds to customers.

The Customer Accounting group has a significant backlog of work, which totals on average 90 to 100 person-days. A large portion of that backlog relates to the issuance of customer refunds for fast meters and refunds for final accounts. These refunds are delayed on average 40 to 45 days as a result of this backlog. SJG should reallocate resources or increase staffing to resolve this backlog so that refunds can be issued on a timely basis.

43. Reprioritize calls so that SJG customers do not receive a lower level of service than do SJESP customers.

CCC is giving SJESP callers priority over SJG customers in the wait queue. Handling these calls with near top-priority with the same CCC customer service representatives effectively takes resources away from SJG calls. SJG customers waiting in queue are not equally served.

The CCC should reprioritize the calling queue or supplement its workforce so that SJG customers receive the same service level as SJESP callers. SJG customers should not be required to wait in queue while a SJ Energy Plus customer arranges for appliance service with a SJG customer service representative.

44. Continue to research customer research to better understand customer expectations and perceptions.

SJG has a high level of customer complaints. It needs to better understand why customers are unsatisfied. SJG completed its first CCC survey in many years in 2002. It provided good

feedback on service level expectations as well as CCC performance. SJG should continue to measure customer satisfaction, however on a more frequent and consistent basis.

XII. Environmental Remediation

A. Background

Much of what is now South Jersey Gas Company was formed in 1947 by a merger of Peoples Gas Company of Glassboro into Atlantic City Gas Company. Those companies had been assembled over the previous 50 years from a number of smaller gas companies, many of which operated plants for the manufacture of gas. These plants made gas was made from coal and from oil, using several different processes over time. Natural gas came to the area with the completion of the Transco pipeline in 1950. Many of the manufactured-gas plants (*MGPs*) continued operating through 1950s and some into the 1960s for peaking. At that time, natural gas finally displaced the last manufactured gas.

As is the case in other parts of the U. S., by-products of the gas manufacturing processes were left at the sites of the plants. Those by-products have proven to be unhealthful. Since the early 1980s, Federal and State environmental authorities have been requiring remediation to address the potential for such harm.

Dealing with legacy MGPs is a common problem for gas distribution companies in the U. S. Most State public utility commissions allow the companies to recover the costs of cleaning up the MGP sites, usually (as is the case with SJG) through some type of tariff rider that is *trued up* periodically; *i.e.*, the companies are allowed to recover the costs of remediation, again usually with some allowance for carrying costs, but with no margin.

Because there is no margin, it is possible that companies would not give this activity the attention that it needs. Adequate management attention is important, as remediation costs for a particular site can vary quite a bit. Experience has shown that active and attentive management is essential to a cost-effective program.

Liberty's examination focused on what the Company has done to evaluate the scope of its liability, and to plan for the timely discharge of its responsibilities. Particular areas of inquiry included the following:

- Company efforts to determine the nature and extent of contamination at the sites for which it is responsible, and the scope of any required remediation program;
- Status of Federal and State concerns regarding the contamination at the sites; and
- Company efforts to identify other potentially-responsible parties for each site.

B. Findings

SJG was initially responsible for 14 MGP sites. One turned out to be the responsibility of another part and another in Atlantic City has been closed. The Company remains responsible for 12 sites:

- Bridgeton
- Egg Harbor
- Florida Avenue

- Glassboro
- Hammonton
- Michigan Avenue
- Millville
- Penns Grove
- Pleasantville
- Salem
- Swedesboro
- Vineland.

The New Jersey Department of Environmental Protection (*DEP*) has placed strong emphasis on the clean-up of polluted sites. Consequently, SJG's parent company has been working on SJG's sites, plus some sites from non-utility affiliates, since the early 1980s. The Company reports that by December 31, 2004 it had spent $98.5 million on environmental remediation. The table below shows the Company's more recent remediation expenditures.

Table XII-1. Remediation Expenditures

Year	**Amount** ($)
1996	6,237,818
1997	8,718,347
1998	8,268,469
1999	7,883,939
2000	10,976,761
2001	11,395,222
2002	4,850,341
2003	4,184,665
2004	5,219,025
Total	67,734,587

In the early 1990s, the Company sought recovery of these costs from its comprehensive general liability insurance carriers. In February, 1997, the Company reached a settlement with its insurers. The settlement provided for cash payments of $24 million over three years, and an insurance policy against remediation costs in excess of approximately $50 million. The policy insures SJG against remediation expenditures above an agreed amount at each of 11 SJG sites. The total of the expenditure caps for the 11 sites is $50 million.

The BPU authorizes the Company to recover the costs that it incurs (net of insurance recoveries) through a Remediation Adjustment Clause (*RAC*). The RAC permits SJG to recover incurred costs in equal installments over seven-year periods, with carrying costs. The Company reports that SJG has recovered $43.9 million since implementing the RAC in 1992. At December 31, 2004, the Company had another $5.3 million of incurred costs awaiting recovery.

1. Efforts to Determine Scope of Responsibility

A principal driver of Company's efforts to determine the scope of its MGP problem has been financial reporting. The Company's current estimate of the undiscounted future costs of cleaning

up its 12 sites is $51.0-192.8 million. The book value of the Company's common equity at December 31, 2004 was $344.4 million. These costs and the prospects for their recovery are clearly material to the Company's financial position. New requirements associated with Sarbanes-Oxley have added some process descriptions to a reporting activity that had been in place for some time.

The Company reports that it prepares at least once per year a comprehensive assessment of the scope of its expected remediation activity, and the expected cost of that activity. This assessment relies upon a costing model that SJG applies site by site. Each year's assessment takes into account all information derived from all investigation and remediation activities of the prior year. SJG estimates for each site expected annual costs for the next nine years. The estimates include a single estimate for all years after the ninth. SJG applies confidence limits to these estimates. The results of this assessment become the basis for the information in the Company's financial statements. Liberty examined the report dated November, 2004.

2. Status of Federal and State Concerns

Liberty examined a sample of the correspondence between the Company and environmental protection authorities, and contacted the NJ DEP Case Manager for two of the Company's sites. The State of New Jersey has an active program for remediation of MGP sites; thus, the Federal government has little direct involvement in this activity.

The Company provided a sample of its correspondence with the NJ DEP. The sample provided was the most recent correspondence regarding each of the Company's 12 sites. Subjects covered included Remedial Investigations (Phases 1, 2 and 3), Remedial Action Selection Reports, Remedial Action Work Plans and a No Further Action Determination. The dates of the correspondence ranged from 2000 through 2004. The correspondence involved seven different NJ DEP Case Managers. Each site has its own Case Manager. In some cases, the same individual had responsibility for more than one site.

The correspondence that we examined suggested that the NJ DEP is satisfied with the Company's efforts, and with its progress in accomplishing the required remediations. Our contact with NJ DEP personnel confirmed this observation. The Case Manager with whom Liberty spoke is responsible for two of the Company's 12 sites. He advised that the Company is making satisfactory progress on both sites. His particular comments focused on the Company's knowledge of and adherence to the NJ DEP's regulations.

3. Other Potentially Responsible Parties

The Company reports that the manufactured gas plants that are the cause of the pollution at its sites, including some sites that it no longer owns but is responsible for cleaning up, were operated by predecessor companies. There is no question of the Company's responsibility for remediation. Investigation at each site sometimes turns up evidence of other contaminants, however, especially fuels and chlorinated compounds. When other contaminants are found, they can often be traced to other responsible parties, who may be required to assist with remediation. The Company provides its findings to the NJ DEP when other contaminants are found.

C. Conclusions

a. The Company's MGP program has been carried out in a cost effective manner.

Overall remediation costs per ton have varied among the sites, depending on the degree of contamination and the scope of the required remediation. The costs are consistent with those of other well-run programs that Liberty has reviewed. The Company's program is cost-effective due, in large part, to competing pressures on the program. Those pressures are: (1) the NJ DEP, whose interest is in comprehensive and complete resolution of the contamination at each site, and (2) the Company's insurance carriers, who are responsible for expenditures in excess of the cost caps at each site. Those competing pressures help to ensure that potential remedies are carefully explored prior to beginning field work, and that field work is planned and managed carefully once a remediation process has been selected.

The Company has shown strong and effective management here. The stakeholders at each remediation project are numerous and varied. It might be easy for remediation efforts to bog down in arguments over relatively minor differences in approach or emphasis. The Company has been responsive and flexible in identifying circumstances; *e.g.*, property redevelopment projects, where stakeholders' common interests in progress can help overcome the differences that might otherwise hinder progress.

b. The Company's management of its MGP program has been sound.

The Company has two staff people who manage the program on a day-to-day basis. Those people report to the Senior Vice President, Corporate Counsel & Corporate Secretary.

Consultants working under the direction of the Company's staff perform much of the analysis that goes into planning the remediation programs. Specialized contractors perform the remediation activities.

The Company is now in the late stages of a consultant effort to convert its program records to an electronic data retrieval system. Such a system will help to manage the massive amount of correspondence and information associated with such a large program, and its implementation is timely.

D. Recommendations

Liberty has no recommendations in this area.

XIII. Executive and Director Compensation

A. Background

The objective of Liberty's audit work in the area of the compensation of executives and outside directors was to provide the BPU with an assessment of the reasonableness of their compensation packages and to examine how SJG bears the cost of the compensation, including incentives, of its executives and those of SJI.

Executive compensation differs from the compensation of all management employees at SJI and other publicly-held companies, because it typically includes much larger cash and stock-based incentives than those received by most management employees and because some of it is disclosed publicly (that of the five executives who received the most compensation) in proxy statements.

Liberty presents its audit results on the structure of the executive-compensation program of SJI in the sections that follow. A logical structure is necessary in any compensation program, but the next, important question is whether the dollars that get distributed through the structure are sufficient to meet the accepted standard of attracting, retaining, and providing incentive to the employees in question without paying them too much.

Judging the success of a compensation program in attracting and retaining utility executives takes significant judgment, because such companies traditionally experience low turnover in executives, and because utilities in general have not been known to lose executives commonly for compensation reasons. The best measure therefore of how a compensation program meets the standard of *attracting and retaining* is through use of the proxy of *competitiveness*. The logic applied is that, if a program is competitive then all other factors being equal, it will succeed in attracting and retaining the kind of employees that an organization needs without paying too much to achieve that result.

In conducting this assessment Liberty relied primarily on SJI's studies of the compensation of executives and outside directors. These studies provide historical information on how a company has approached the development of its policy and philosophy toward executive and director compensation. Moreover, consultants' reports usually result from the analysis of proprietary data, access to which is generally not available to those outside the compensation-consulting or utility industries. Liberty also supplemented the data provided in SJI's studies with the reports of the compensation of outside directors and the five most-highly-compensated executives disclosed in the proxy statements of other utilities.

B. Executive Compensation

1. Background

All of SJI's officers participate in the Company's executive-compensation program. There are 17 such officers, who range in rank from SJI's CEO to assistant vice presidents of SJI and SJG.

The SJI executive-compensation program went into effect as it works today in 2000. It has three parts:

- Base salary
- *Annual cash award*—a cash bonus
- Long-term incentive, sometimes called long-term incentive program, or LTIP.

The latter two components comprise forms of incentive compensation; *i.e.*, they are structured in to provide financial incentives to executives to meet certain objectives. The company's policy with regard to each compensation component is as follows:

- Base salary: to be at the 50th percentile of the market, where the market is defined as peer companies
- Annual cash award: 75 percent of the award is determined by performance against a goal of earnings per share *(EPS)*, with the payout percentage targeted at the 50th percentile of the peer group, and 25 percent on achieving individual performance goals for each executive
- Long-term incentive: annual grants of restricted stock that executives earn as a function of how the Company's total shareholder return (*TSR*, consisting of the increase in stock price plus dividends) performance compares with its peers over a three-year period and targeted at the 50th percentile.

The measure of the company's EPS performance is net income from continuing operations. With respect to the EPS and TSR targets, SJI has met or exceeded the targets set by SJI's board of directors since 2000. The company's executives therefore have received payouts under both incentive plans every year.

2. Findings

Base Salary

Base salaries establish the level of compensation that executives earn before consideration of performance and they help to define incentive pay, which is often a direct function (a percentage) of base salary. SJI's approach to base salaries for executives is to increase them all generally in line with how other, similar employers are increasing executive salaries (essentially, a cost-of-living adjustment). SJI also periodically compares the base pay of each SJI executive against that of similar executives in peer companies in order to assure that SJI's base salaries remain competitive. The section below on the competitiveness of SJI's executive compensation describes in detail how SJI's compensation consultant, a leading firm in the field, has recently provided SJI's board of directors with evaluations of the competitiveness of the base salaries of SJI's executives.

Annual-Cash Awards

The annual-cash awards for all executives equal their base salary multiplied by the percent of their salary at risk and multiplied again by factors that depend on SJI's performance and their individual performance. The 2000 annual-cash percentage factor of base salary was 20 percent for the CEO and executive and senior vice presidents, and 15 percent for the other officers. For performance in 2001 the annual-cash percentage of base salary was increased to 30 percent for

the CEO, but not changed for the other officers, and in 2003 the annual cash percentage of base salary was increased to 25 percent for the COO.

The program uses threshold, targeted, and maximum levels to determine the portions of these percentages to be awarded. If SJI's financial performance exceeds a *threshold* level of EPS set by the board of directors, the executives are eligible to receive part or all of the 75 percent of their cash bonuses tied to financial results. If EPS performance reaches the level expected then the bonus payout is at a *targeted* level. Individuals can receive their *maximum* bonus for performance significantly above expectations. After this program, there remains 25 percent of the cash bonus tied to individual performance. The SJI board of directors sets the CEOs goals for this portion. The CEO sets the goals for his direct reports, and the executive and senior officers set the performance goals for their subordinates.

In the past three years SJI's financial performance has been sufficiently strong to merit eligibility to receive either the target or maximum payout of the 75 percent of cash bonus that depended on SJI's earnings. The following table shows these results.

Table XIII-1. EPS Performance for Annual-Cash Awards

	2002		2003		2004	
	EPS	% of Target	EPS	% of Target	EPS	% of Target
Minimum	$2.25	92.5%	$2.39	92.5%	$2.68	92.5%
Target	2.43	100.0%	2.58	100.0%	2.90	100.0%
Maximum	2.55	105.0%	2.71	105.0%	3.05	105.0%
Actual	$2.43	100.0%	$2.73	105.0%	$3.11	105.0%

SJI provided Liberty with the individual evaluations of the executives below CEO for 2003. These evaluations contain substantial detail, and provide the executive and the evaluator of the executive (the executive's superior) with considerable information on objectives for the year and their achievement. The measures used in the evaluations are not entirely financial.

The cost of these awards is calculated for each executive. The total cost of the annual-cash awards was $521 thousand for executive performance in 2003. The costs of these awards are distributed to the SJI subsidiaries that the executives in proportions equal to the distribution of the time of each executive.

Long-Term Incentive Program

The LTIP awards for all executives equal their base salary multiplied by the percent of their salary at risk, and multiplied again by a factor that is a function of SJI's TSR performance. The grants of restricted stock are made at the beginning of a three-year performance period. The degree to which the shares vest is the last factor in the equation, and is a function of how well SJI achieves TSR performance compared to a *financial* peer group for that 3-year period.

The structure of this program is like that of the annual-cash awards, in that it uses threshold, target, and maximum award levels tied to SJI's performance. The threshold performance level is

3-year TSR at the 35th percentile of the peer group. The award for performance at this level is 50 percent of the targeted stock grant for each executive. The target level (100 percent of the eligible percentage of base salary) requires that SJI performance be at the 50th percentile of the peer group's TSR performance. The maximum award of the LTIP is 150 percent of the target, and requires SJI's TSR to reach the 80th percentile of the peer group's performance. The payouts for performance between the threshold and target, and target and maximum levels of performance, are calculated as interpolations between the points, which is also true for the annual-cash award.

When the LTIP restricted-stock grant for a performance period is calculated at the beginning of that program, the number of shares granted is calculated using the stock price at that time. The value of the shares is reported as compensation when the shares vest, and is the value at the time of the grant. Dividends on the restricted shares are reinvested.

The structure of this program has multiple incentive effects, all of which are keyed to increasing the price and dividends of SJI's stock. First, how much of the stock the executives get (vests) depends on stock-price performance. Second, the value of the restricted stock granted is not fixed because shares are granted, not dollars. Executives therefore raise the value of the grants of restricted shares if their actions help increase the price of the stock. Third, unless SJI changes the LTIP, there are always three grants simultaneously at work, so the opportunity, and pressure, to maintain and increase the stock price affects a substantial portion of compensation for one, two, and three years into the future.

SJI in 2004 increased the LTIP's percentage of base salary at risk; at target performance the restricted stock granted now represents 60 percent of base salary for the CEO, 50 percent for the executive vice presidents, 30 percent for the senior vice presidents, and 20 percent for all other officers. Before 2004 the grants of restricted stock awarded were at 50 percent of base salary for the CEO, 40 percent for executive vice presidents, 20 percent for the senior vice presidents, and 15 percent for all other officers.

For the five-year period through 2003, two years of SJI's TSR compared to the peer group were above target, one year was close to the target, and two years were below target. The latest program that paid out started with grants issued on January 1, 2002, with the performance period ending on December 31, 2004. As of the end of the third quarter of 2004; *i.e.*, with 92 percent of the three-year period finished, SJI's TSR was at the 88th percentile of its peer group. This measurement place it above the level required for maximum payout. SJI's executives therefore received the maximum payout of restricted stock from that performance period.

The table below shows that, starting with 2001 the performance of SJI's TSR was superior to that of two broad Standard & Poors indexes.

Table XIII-2. Comparison of SJI and S&P Index TSR

	1999	2000	2001	2002	2003	2004
S&P 500	100	90.9	80.1	62.4	80.3	89.0
S&P UTIL	100	157.2	109.3	76.5	96.6	120.1
SJI 100	100	110.1	126.6	134.2	171.8	231.0

The cost of these LTIP awards is calculated for each executive. Their total cost was $970,400 in 2003, $579,900 in 2002, and $61,300 in 2001. LTIP and annual cash award costs are distributed to the SJI subsidiaries that the executives in proportion to the distribution of the time of each executive.

Competitiveness of SJI's Executive Compensation

The sections above describe the components of SJI's executive-compensation program and how they operate. In this section Liberty describes its assessment of whether the program is competitive without being overly generous. In the last three years, SJI has hired no executives, and any losses have been due only to retirements. This fact subjectively supports the achievement of the goal of retaining and attracting executives. The fact that no executives have left for other jobs does not, however, necessarily mean that SJI pays too much.

The compensation/pension committee of SJI's board of directors and SJI's executive management, like similar bodies of most corporations, generally justifiably depend on compensation consultants for analysis of the structure and competitiveness of the executive compensation program. Chief among the reasons that boards and management use consultants is that the data available outside of the compensation-consulting industry is not generally as detailed as the kind of survey information available to compensation consultants. Companies like SJI usually have access to survey information that is useful, and the disclosures of compensation in the proxy statements of the pay of the five most-highly compensated executives has some indicative value. SJI has, however, relied on the advice of its consultant over the past few years in evaluating the structure and competitiveness of its executive-compensation program.

The consultant provided a report to the compensation/pension committee of the board in November 2002. SJI views this *Executive Compensation Assessment* as an update of a 1998 study that resulted in the current structure of executive compensation. The report covered SJI's 17 executives, and concluded that SJI's base and total cash compensation were "competitive at 97% and 94% of the market median respectively" and that "Total Direct Compensation [total cash plus long-term incentive at target was]… below the competitive market at 75% …." In summary, the consultant's conclusion was that SJI was paying its executives at the median of the market or below the median, which meant that the company was paying its executives in line with its policy.

This conclusion came after a study of SJI executives in comparison with executives in other companies. The consultant used its own 2001 surveys and a survey conducted by another compensation-consulting firm, adjusted as necessary or possible to assure comparability of positions and companies by size. The consultant used revenues as its indicator of size, as is the usual custom among compensation consultants. The consultant compared SJI with 17 other natural-gas distribution companies, including New Jersey Resources and NUI.

The consultant adjusted SJI's revenues to account for differences in sources of revenue by analyzing the relationship between the market value of a company and its revenues. The consultant also adjusted the pay data to a common date of January 1, 2003. After all adjustments, SJI's revenues were at 80 percent of the median of the companies, and its market value was half

of the median. Eleven of the 17 comparator companies had revenues greater than that of SJI. SJI's size when compared to the other companies therefore fell at about the same place as its compensation; *i.e.*, at about three quarters of the median.

The consultant validated its analysis of all of SJI's executives by examining the compensation disclosed in proxy statements of gas and electricity distribution utility companies whose revenues were one-half to twice that of SJI. It included the other two New Jersey gas companies because the compensation/pension committee had shown an interest in them earlier, even though New Jersey Natural fell outside the size range because of its larger size. With 16 companies in this peer group, the consultant concluded that the base salaries of SJI's top five executives were below the competitive range at 79 percent of the median of the peer group. The consultant also found that:

- The total cash compensation of SJI's five most-highly compensated executives was at 90 percent of the peer group median.
- Total direct compensation (annual cash plus long-term incentive, typically equity-based) was at 77 percent (*i.e.*, below) the peer-group median.
- The structure of SJI's executive-compensation package was similar to that of the other companies.

The table shows the results of the consultant's proxy analysis of the two New Jersey companies and a summary of the results of the others in the proxy peer group (the data are for the average of three years ending 2001, as presented in proxy statements for 2002). (Note that the consultant's analysis is not a match of positions; *i.e.*, CFO with CFO, but of ranking within the top five.)

Table XIII-3. Consultant's Analysis of Proxies

Company	Base Salary (000)	Annual Incentive (%)	Total Cash Comp (000)	Long-term Incentive (%)	Total Direct Comp (000)
	Position: CEO				
NJR	$420	40	$590	143	$1,190
NUI	421	49	628	73	934
Median	461	43	683	91	1,152
SJI	351	75	614	37	745
	Position: 2nd-most-highly paid				
NJR	$200	27	$254	109	$470
NUI	274	50	411	25	479
Median	264	39	389	47	475
SJI	214	65	354	31	420
	Position: 3rd-most-highly paid				
NJR	$182	25	$228	62	$340
NUI	205	46	300	28	356
Median	238	35	318	37	369
SJI	186	50	279	31	337
	Position: 4th –most-highly paid				
NJR	$166	24	$205	66	$314
NUI	164	37	226	31	292
Median	218	33	305	58	397
SJI	186	50	279	31	337
	Position: 5th-most-highly paid				
NJR	$170	33	$227	96	$390

NUI	167	28	213	27	273
Median	195	31	256	29	326
SJI	149	50	223	18	250

The data indicates that, with the exception of the fourth most-highly paid executive, at the time SJI had been consistently paying its executives less than had the other LDCs.

As part of the same *Executive Compensation Assessment* the consultant analyzed *pay-for-performance* relationships using proxy data. The consultant concluded that with the exception of the CEO, whose pay was found to be below what the consultant considered to be at the competitive market, total direct compensation of SJI's second through fifth highest-paid executives was aligned with how the Company ranked with its peers in total return to shareholders.

The number of shares of restricted stock granted in the LTIP ultimately depends on how SJI's TSR performance compares against its financial peers over each plan's three-year period. The selection of a financial peer group must be made and updated as the other companies change, because of alterations in business mix, acquisitions, and other factors that might render a company unfit for purposes of comparison as a competitor for capital.

In May 2003 the consultant provided the compensation/pension committee with its *Peer Group Selection and Review* before the May 29, 2003 meeting of the committee. At the meeting a consultant provided a report on the *Executive Compensation Peer Group Development* process, which was documented in the report. The financial peer group is comprised of a broad group of utilities and other energy companies, as opposed to the compensation peer group, whose mix of businesses is closer to that of SJI. This report described how the consultant and SJI had annually deleted companies from the peer group as necessary and added new companies every three years. The consultant suggested and the committee approved criteria for eliminating companies for more specific reasons; *i.e.*, they were acquired, changed their business so much that they were no longer competitors for capital, or changed their dividend policy. The *Peer Group Selection and Review* presentation offered an update of the peer group presented to the committee in November 2002. The same consultant had prepared this earlier report in September 2002.The consultant changed the peer group, after getting comments from the committee, and the committee adopted the peer group and a process for updating it regularly.

The financial peer group is made up of companies in the distribution and transmission of electricity, natural gas, or propane, as defined by standard industrial code, and the group members have had past three-year TSR similar to that of SJI. To get to the group of 50 companies that finally made up the financial peer group, the consultant eliminated firms whose financial performance was poor. Statistics of the peer group companies, drawing from the period 1998-2002, and the same measures for SJI, are shown below:

Table XIII-4. SJI versus Financial Peer Group

Measure	Group Average	SJI
Revenue	$2.1 billion	$505 million
TSR—1-year	-0.6%	6.0%
TSR—3-year	11.4%	10.3%
TSR—5-year	6.5%	7.0%
Dividend yield	5.2%	4.9%

The companies in that peer group included AGL Resources, NUI, and New Jersey Resources, but not Public Service Enterprise Group. The data indicate that over the period SJI's financial performance had generally been about the same as the average for its financial peers, who included of 16 natural-gas distributors (only 2 of which had less revenue than SJI), 15 electric "services" companies (only 3 of which had less revenues than SJI), 8 combination companies (only 2 of which had less revenues than SJI), 7 gas distribution and transmission companies (only 1 of which had less revenue than SJI), and 4 propane companies, all of which were larger than SJI.

The consultant did other studies for the committee beyond those discussed in this report. Over time SJI has made some increases to compensation to account for promotions, most notably, the naming of the current CEO and the two promotions of the Corporate Counsel. The effect of these promotions can be seen in the following table that shows compensation of the Company's five most-highly-paid executives. SJI has also made a few other adjustments to correct situations where an officer's compensation was too far below the median for the position.

The compensation/pension committee had the consultant perform an updated analysis of the competitiveness of SJI's executive in 2004, in order to give the committee the benefit of the analysis before its January 2005 meeting. That study showed that SJI's officers, excluding the CEO, were in aggregate at the consensus for base salary and total cash compensation and were 13 percent below the median for total direct compensation (cash compensation plus LTIP). The dispersion within the non-CEO officer group for cash compensation ranged from 83 percent to 123 percent of the median. For total direct compensation, it ranged from 71 percent to 122 percent of the median. The consultant's analysis of CEO 2005 compensation showed it to be at 84 percent of the median for base salary, 63 percent of the market median for total cash compensation, and 54 of the market median percent for total direct compensation.

The consultant's compensation analyses for SJI have correctly focused on a large group of like companies from which to draw conclusions about the competitiveness of the company's executive pay. It is also possible to make other comparisons that, despite not having a statistically-valid basis, can be useful for drawing judgments as to competitiveness. One such comparison is with other utilities in the region. There are several investor-owned utilities operating in New Jersey. Telecommunications and water companies are not sufficiently similar to make them useful for comparisons with SJI. The four distributors of electricity in New Jersey are so many times larger than SJI as to make comparisons with them instructive.

New Jersey had three locally operated natural-gas local-distribution companies until AGL Resources bought NUI in 2004. NUI started having serious financial problems at the beginning

of its 2003 fiscal year, which makes comparisons with NUI suspect. The last time that the three New Jersey LDCs could be used for a compensation comparison was the results of the companies' compensation programs for 2002. The compensation/pension committee has also been interested in how SJI's executive compensation compared with that of the other two New Jersey LDCs. The table below shows, that SJI's 2002 executive compensation by several measures was second of the three companies, as reported in proxy statements.

Table XIII-5. Comparison of 2002 Executive Compensation of New Jersey LDCs

	SJI	NJR	NUI
Top 5 Executives – Total Cash	$1,397,729	$1,622,060	$1,287,850
Top 5 Executives – Total Adjusted Cash-Equivalent	1,584,480	1,646,959	1,691,122
Top 5 Executives – Total Compensation	1,884,217	1,646,959	2,438,120
CEO – Total Cash	487,989	657,711	450,000
CEO - Total Adjusted Cash-Equivalent	561,231	661,711	658,944
CEO – Total 2002 Compensation	683,824	661,711	1,067,216

*Calculated by using ⅓ of the reported value of restricted stock awarded.

Given their relative size and apparent success at the time, it was generally right that SJI be between the other two companies on average. It nevertheless was Liberty's opinion in its focused audit of NUI that the company's executive compensation in that year was too high.

NJR now is the only New Jersey utility company against whom any valid comparisons can be made. NJR is a good comparator, but not perfect. Its businesses and business climate are quite close to those of SJI, it has close to the same number of employees, and its utility plant assets are not much more than that of SJI. Like SJI, its financial performance in the last few years has been excellent, as the next exhibit shows.

Table XIII-6. Comparison of NJR and S&P Index TSR

	1999	2000	2001	2002	2003	2004
NJR	100.0	106.0	120.2	139.4	158.3	187.8
NJR's Peer Group	100.0	113.8	117.1	116.6	138.0	158.3
S&P Utilities	100.0	143.3	107.2	69.4	84.9	101.4
S&P 500	100.0	113.3	83.2	66.2	82.3	93.7

NJR is larger than SJI in revenues, profits, and market value. It, it would therefore be logical to expect that, all other things equal, NJR's executives would make more than SJI's, all other factors being equal. The following two tables show, for the last four years, the cash compensation of the five most-highly-paid executives of NJR and all of the compensation of the five most-highly-paid executives of SJI. The data indicate that the cash compensation paid by NJR is significantly more than that paid by SJI.

Table XIII-7. SJI's Compensation of Top 5 Executives

		Annual Compensation			Restricted	All Other
		Base Salary	Annual Cash	Other	Stock Awards	Compensation
	2004	$33,213	$177,464	-	$384,264	$2,289
Chairman and CEO	2003	384,330	144,124	$9,868	230,598	29,900
	2002	367,780	110,335	9,874	183,890	11,945
	2001	351,020	108,155	4,436	175,634	11,365
	2004	375,000	140,630	8,476	225,018	7,130
CEO and President	2003	300,000	93,750	5,353	165,000	6,990
	2002	225,110	45,021	2,237	90,044	6,229
	2001	214,314	44,132	4,467	86,000	3,666
	2004	211,360	52,840	-	105,665	7,018
VP of SJI and CFO	2003	203,820	50,957	205	101,910	6,648
	2002	195,050	39,009	627	78,020	6,121
	2001	186,060	38,238	592	74,516	5,685
	2004	211,360	52,840	-	105,665	7,467
VP of SJI, EVP of SJG	2003	203,820	50,957	205	101,910	7,858
	2002	195,050	39,009	627	78,020	6,452
	2001	186,158	38,238	3,871	74,516	4,047
	2004	181,050	45,260	-	90,518	7,313
VP of SJI, EVP of SJG	2003	169,590	42,398	-	84,795	6,800
	2002	162,290	32,457	-	64,916	6,700
	2004	162,080	40,520	-	48,640	6,879
VP of SJI, SVP of SJG	2003	149,030	36,575	-	43,890	6,676
	2002	140,000	28,000	-	19,632	6,135
	2001	125,000	19,243	-	18,750	6,066

Note: Positions of these executives have changed over time; the Chairman/CEO retired as CEO in 2004; and the VP of SJI, EVP of SJG was not in SJI's proxy for 2004.

Table XIII-8. NJR's Compensation of Top 5 Executives

	Annual Compensation		
	Year	Salary	Bonus
Chairman	2004	$541,962	$300,000
and CEO	2003	486,154	250,000
	2002	437,711	220,000
	2001	396,923	160,000
CFO	2004	225,654	74,800
	2003	207,231	54,000
	2002	197,269	58,000
	2001	188,654	50,000
General Counsel	2004	215,269	71,300
	2003	196,400	50,490
	2002	183,723	54,000
	2001	172,019	45,000
SVP	2004	219,058	175,000
	2003	193,077	125,000
	2002	172,269	75,000
	2001	160,961	52,000
SVP	2004	189,196	60,000
	2003	179,170	45,401
	2002	175,088	49,000
	2001	165,308	45,000

The comparison of stock compensation is more complicated because the two companies use different vehicles. SJI makes grants of restricted stock and NJR uses stock options. Comparing the total values of restricted-stock awards to top SJI executives over recent years with stock-based compensation of NJR executives shows that NJR pays more for this form of compensation. This comparison assumes that the NJR options were accumulated over several years and does not include options that may have been exercised during intervening years. The following table provides the NJR amounts.

Table XIII-9. Value of NJR Unexercised Options,

Chairman and CEO	$4,908,000
CFO	1,884,203
General Counsel	1,073,452
SVP	867,335
SVP	841,442

End of 2004 Fiscal Year

3. Conclusions

a. The structure of the incentive-compensation package used for SJI's executives is straight-forward and understandable.

b. Using relative TSR as the performance measure for the LTIP is logical, because it rewards management for their performance for owners, without adjustments, and

takes into account SJI's performance against a reasonable group of financial peer companies.

c. The incentives offered to the company's executives reasonably correspond to SJI's strong outstanding financial performance in the past four years.

d. SJI correctly distributes the cost of the compensation of executives who serve SJG and other companies.

e. The measures that SJI uses in determining executives' payouts under the company's incentive-compensation program are mostly focused on corporate financial performance and encourage teamwork.

f. SJI's board of directors has used reasonable means in assessing the competitiveness of the compensation of the company's executives.

g. The goals of SJI's executive-incentive compensation have had enough *stretch, i.e.*, requirement performance be outstand to earn a high payout.

h. The last major study of the competitiveness of SJI's executive compensation (The consultant's 2002 assessment), showed SJI's board of directors that the company's position was appropriate; no major changes in structure were made thereafter, which was a reasonable course of action.

i. SJI's position as a payer of executive compensation among New Jersey utilities is reasonable, although this measure is not robust.

4. Recommendations

Liberty has no recommendations in this area.

C. Administration of Executive and Director Compensation

1. Background

The administration of executive compensation is different from the compensation of the entire management body, at least because the boards of directors of corporations are responsible for setting executive pay. It also can be different because of the size and thus sensitivity of compensation packages, and because incentive compensation can be tied to confidential corporate information involving goals for future performance.

2. Findings

Boards of directors of publicly-held corporations have the ultimate responsibility for the compensation of executives. The details of executive compensation are usually assigned to a committee of the board that is responsible for executive and outside-director compensation and the full board votes on the recommendations made by that committee. The chapter of this report addressing governance provides more information on the committee structure of boards of

directors. The compensation/pension committee of SJI's board of directors takes the lead board role in examining compensation matters.

The decisions and responsibilities of the compensation/pension committee are spread out through the year as it approves payments made on past performance and the programs and formulas for pay for forthcoming periods. The following chart shows the meeting calendar of the committee for executive compensation and the highlights of the approvals and decisions made at those committee meetings.

January

- Approve actual results of officer annual cash payments
- Approve restricted-stock program (LTIP) for current year.

March

- Approve restricted-stock awards earned.

May

- Evaluate the performance of the CEO
- Approve the scope of work for the executive-compensation consultant.

November

- Review and modify peer group for executive-compensation purposes
- Establish next year's EPS targets for executive-compensation purposes
- Review results from for executive-compensation study (if any)
- Review and approve study of adjustments to base salaries (if any).

The complexity of executive-compensation packages and the associated difficulty of performing analyses of the competitiveness of pay have led most publicly-held corporations to rely on compensation consultants. One of the important changes in recent years in the management of compensation consultants is that boards of directors have assumed responsibility in directing the work of these consultants. SJI's compensation/pension committee chooses the consultant, and approves the payment of the bills received. SJI has used the same consultant since 1997, and has not solicited services from other consultants. The consultant's fees are distributed among the SJI subsidiaries using the *Corporate & Fiscal* allocation factor, which is described in detail in Liberty's companion report addressing *Cost Allocations and Affiliate Relationships*. The fees paid to the consultant were at moderate levels for 2002 through September 2004.

SJI's vice president, corporate counsel and corporate secretary assumed the role of administering SJI's executive-compensation program in November 2004. The SJI vice president/SJG's executive vice president and chief administrative officer had this responsibility for the preceding eight years. That role has included:

- Preparation of all documents from SJI management to the board and compensation/ pension committee
- Use of financial data to make the calculations associated with incentive compensation
- Maintaining the company's relationship with SJI's consultant on executive compensation.

The vice president, corporate counsel and corporate secretary has also been responsible for the administration of board of directors compensation for the last several years.

3. Conclusions

a. The administration of executive compensation should be the responsibility of an executive who is a human-resources professional.

b. Having the corporate counsel and secretary responsible for the administration of the compensation of outside directors is reasonable.

c. SJI has appropriately limited its expenditures on its compensation consultants, and the distribution of those costs is reasonable.

d. The role of the compensation/pension committee of SJI's board is appropriate.

4. Recommendations

45. Place responsibility for administering executive compensation with the assistant vice president for human resources, the company's officer responsible for managing the compensation of all other management personnel.

D. Compensation of Outside Directors

1. Background

The boards of directors of public corporations face increased pressure from shareholders and regulators for reasons that have been well-publicized. As a result of this new pressure and the requirements of the Sarbanes-Oxley Act, directors' workloads have become greater. One response of corporations has been to increase the compensation that they provide to outside (non-employee) directors to recognize these changes.

Liberty's assessment of this issue focused on whether the compensation that SJI provides to the outside members of its board of directors is competitive with what other, similar boards provide. This is the best measure of whether the pay is sufficient to attract and retain the quality of directors that SJI may need to assure that it can meet the challenges of the future.

2. Findings

The base compensation package of all of SJI's outside directors, as of January 1, 2004 consists of cash and restricted stock. The base cash compensation is comprised of three parts:

- Annual retainer of $17,500
- In-person meeting fee of $1,000 per meeting
- Telephonic meeting or participation $500 per telephonic meeting.

Directors also receive extra cash compensation for serving on committees and their attendance at meetings. The following chart shows the structure of that additional cash compensation.

Committee-Chair Retainers and Fees

- Retainers
  - Audit Committee chair—$5,000
  - Executive Committee chair —$4,000
  - Compensation/Pension Committee chair —$4,000
  - Nominating and Governance Committee chair —$4,000
  - Executive Committee-member—$2,500
- Fees
  - Environmental Committee—$300/in-person meeting; $150/telephonic
  - Management Development Committee —same as Environmental
- Meeting fees
  - $500/board meeting day or telephonic meeting
  - $1,000/in-person meeting and not a board meeting day
  - $1,000 meeting fee for first committee meeting held on a non-board day;
    - $500 per additional committee meeting held on a non-board day.

All directors also receive a grant of restricted stock every year. The current value of the grants of restricted stock is $13,000. The restricted-stock program for directors started in September 1996 and the latest version of the program was approved in November 2003. The grants of stock vest on the third anniversary of each award, and are forfeit if a director voluntarily leaves before vesting.

As a point of comparison, NJR's directors receive an annual retainer of $24,800 (cash plus stock), similar fees for meeting attendance and retainers for being chairs of committees. The chairs of the audit and executive committees receive retainers that are $5,000 higher. The cash-equivalent compensation of NJR's directors is less, but every year they receive options to buy 1,500 shares of stock; to the extent that these options could be worth more than $3, which can be assessed only through analysis, NJR's directors appear, from a total-compensation standpoint, to receive somewhat more than do those of SJI.

SJI also provides the directors with some other, minor benefits, including $50,000 life-insurance coverage and $250,000 24-hour accident-protection insurance. SJI allows its directors to defer the payment of their fees, reimburses their travel expenses, and covers their potential liability with directors-and-officers insurance of $35 million with no deductible. SJI does not offer its directors a retirement program.

Outside directors not on the executive committee had received a cash retainer of $14,100 until the changes that took effect in 2004. Members of the executive committee received an annual stipend of $2,500. The annual grants of restricted stock to non-employees were worth $9,000 when granted. The schedule of meeting fees did not change after January 1, 2004.

SJI's management reports that the Company has not had a problem attracting and retaining directors because its director compensation was inadequate. For some years SJI executives had compared the company's director compensation with other companies by using the information contained in proxy statements. Changes in director responsibilities due to the requirements of the Sarbanes-Oxley Act and other regulatory requirements led SJI's board of directors in 2003 to

have a consultant (which also studies executive compensation for SJI) perform a study of the competitiveness of the compensation of its outside directors.

The consultant's November 2003 *Board of Directors' Compensation Analysis* concluded that SJI's then-effective:

- Annual retainer was competitive between the 25th and 50th percentiles
- Board-meeting fees were competitive with the 25th percentile
- Committee-meeting fees were competitive with the median
- Equity compensation was competitive with the 25th percentile.

The consultant's peer group for this study was made up of the following companies: AGL Resources, Atmos Energy, Black Hills, CH Energy Group, Cascade Natural Gas, Energen, Laclede Group, NJR, Northwest Natural Gas, NUI, Piedmont Natural Gas, Southwest Gas Corp, and WGL Holdings. This peer group was essentially the same as the one that the consultant used in its November 2004 analysis of executive compensation, described above. The changes were to omit DPL and add Cascade Natural Gas. The consultant's objective in putting this peer group together was to identify and use companies with revenues between 50 and 200 percent of SJI's 2002 revenues of $630 million. For this group the 25th percentile of revenues and market capitalization were, respectively, $641 and $691 million. SJI's revenues and market capitalization were $505 and $402 million, which made SJI considerably smaller than most of the other companies. SJI had revenues greater than only two companies and market cap greater than only one company (NUI).

The consultant's data source for the study was proxy statements for 2003, which described director compensation for 2002. The consultant valued awards of equity on an expected-value basis using the Black-Scholes model and assumed each director to be a member of two committees and the chair of one.

In addition to the conclusions noted above, the consultant found that SJI's total cash compensation of $31,800 was at 84 percent of the median. NJR's directors' total cash compensation was at $37,300 and NUI's was $54,000. With respect to the equity component of compensation, the consultant determined that when SJI was providing its outside directors with stock worth $9,000 it was at 69 percent of median. NJR's equity compensation for directors was valued at $18,000 and NUI's at $5,700.

The consultant's analysis of total compensation put SJI's $40,800 at 69 percent of the median and below the 25th percentile. The consultant considered this level to be below "competitive norms." Only two companies in the peer group provided less total compensation. NJR's total director compensation was $55,250 and NUI's was $59,700. The consultant noted that the components, or structure, of cash compensation (cash retainer, board-meeting fees, committee-meeting fees, and committee-chair retainers) was "consistent with market practice."

The consultant's recommendations for changes to the directors' compensation are shown below, compared with SJI's program in 2002 and its analysis of SJI's peers.

Table XIII-10. 2003 Director's Compensation Analysis

Item	Current Program	Peer Median	Proposed
Annual Retention	$16,600	$20,000	$20,000
Board Meeting Fees	6,000	9,000	6,000
Committee Meeting Fees	8,000	8,800	8,000
Committee Chair Retainer	1,200	4,000	4,000
Total Cash	31,800	38,000*	38,000
Equity	9,000	13,000	13,000
Total Direct Compensation	40,800	59,259*	51,000

*Totals not additive because they are true medians. A*nnual retention* includes the stipend for executive-committee members.

SJI adopted the consultant's recommendations, so as of the beginning of 2004, and at least through 2005, SJI would be its directors at the 2002 median of the consultant peer group.

3. Conclusions

a. **It is appropriate that directors now receive compensation below the median of the 2003 peer group because SJI is smaller than most of the companies in the group used in that analysis of director compensation.**

b. **The three-year vesting provision of the restricted-stock program serves to help assure that directors are committed to serving SJI's stockholders.**

4. Recommendations

Liberty has no recommendations regarding the compensation that SJI provides to its directors.

E. Consulting Agreement with SJI's Chairman

1. Background

Corporations sometimes find that a retiring executive has knowledge, experience, or contacts that are of special value, and they want to be able to take advantage of that even after the executive retires. One way of doing that is to ask the executive to serve as a consultant. The issues that such consulting arrangements raise include whether their costs are reasonable and how the substantive involvement of a retired executive affects the management of the company; the latter issue concerns corporate governance, which is treated in the chapter on that subject.

2. Findings

SJI has a consulting agreement with its immediate past CEO and current chairman. He and the chairman of the compensation and pension committee signed this agreement on January 23, 2003. This former CEO retired from that position as of January 31, 2004; the consulting agreement became effective on February 1, 2004. The services to be provided to SJI's board of directors include:

- Observation of the leadership transition

- Advising the CEO and Board
- Serving as advisor/mentor to the CEO and senior management
- Maintaining relationships with key stakeholders.

The agreement states that the Company will use its best efforts to assure that the consultant continues on the board of directors, that the consultant will determine the specific manner of performing the services, and that the consultant will mutually agree with SJI on the hours needed to fulfill the agreement's obligations.

The agreement calls for an annual payment of $125,000 for two years, in addition to the payments that he receives for being an outside member of SJI's board of directors. The payments continue even if he dies or is disabled during the term of the agreement. The agreement ends on January 31, 2006. SJI did not disclose this agreement in its 2004 proxy statement, but did disclose its existence in the proxy statement for 2005.

The fees paid are charged to an account for consulting fees, which is then distributed using the *Corporate and Fiscal Expense* allocation method. This means that SJG bears about 80 percent of the cost of this consulting contract.

3. Conclusions

a. The accounting treatment of the cost of the consulting contract with SJI's former CEO is inappropriate.

SJG bears an unreasonably high percentage of the cost of this consulting arrangement. The scope of work does not show that the services that the consultant has performed and will perform will benefit SJG's operations even indirectly. In addition, SJG has a full complement of officers, including a chief operating officer, chief financial officer, and chief administrative officer, all of whom are executive vice presidents, as well as three senior vice presidents, and three vice presidents. Given this depth of management at the utility, it seems unlikely that SJG will be benefiting much from this consulting agreement.

b. The two 2-year duration of the consulting agreement is acceptable, but a renewal would raise questions about SJI's succession planning.

4. Recommendations

46. Retain the cost of the consulting agreement with the former CEO at SJI, without further distribution to SJG.

F. Employment Agreements

1. Background

It is common for corporations to have employment agreements with senior executives. These agreements, such as those that SJI has, are often written with the primary purpose of anticipating circumstances involving a change of control. They provide incentive for the executive to stay

with the company if another company takes it over. The incentive for the company and shareholders to execute these contracts is that they provide some assurance that if another company proposes to buy SJI that the officer corps will stay in place during the buyer's due diligence and after the purchase is consummated.

2. Findings

SJI has employment agreements with eight of its executive and senior officers. They end on December 31, 2005. The agreements cover SJI's CEO and vice presidents of SJI, most of whom are top officers of SJG as well. If there is a change in SJI's control these agreements extend for three years from the time of that change. The agreements provide that if new management terminates a covered officer (except if for cause) or makes the officer's continuing employment untenable, the officer is entitled to a severance payment of three times his or her average annual compensation during the prior 5 years. Payouts at a higher ratio require a corporation to pay a special surtax. If there is no change in control, the agreements provide severance equal to 1½ times the employee's average compensation during the prior 5 years, except if the termination is for cause.

3. Conclusions

a. SJI's employment agreements strike a reasonable balance between the interests of shareholders and executive management.

4. Recommendations

Liberty has no recommendations in this area.

G. Stock Ownership Requirements

1. Background

It is common for publicly-held corporations to require senior leadership to own some minimum level of company stock. The goal of such a rule is to tie executive and director personal wealth to company stock at levels sufficient to add a material incentive to act in the best interest in stockholders. In the case of SJI this rule supplements the two types of incentive compensation in the executive-compensation package, both of which are tied to the performance of the company's stock.

2. Findings

In March 2001 SJI put in place a policy that requires those who have been an officer for six years to own SJI stock at the following levels:

- Chief executive officer: 3 times base salary
- Executive officers: 1.5 times base salary
- Other officers: 1 times base salary.

Most of SJI's 15 officers have been recently promoted into their positions; therefore the rule does not apply to them until March 2007.

SJI's chief administrative officer, in his role as the administrator of SJI's executive-compensation program, annually checks the prospective adherence of officers with the stock-ownership requirement. The last analysis, performed in March 2004 for the period ending December 31, 2003, projected that seven of the current officer group would not own enough shares by March 2007. These officers are, however, not projected to be too far from their likely requirement. They would need to buy stock in the amount of about $65,000, and more frequently less than $50,000.

The burden of the requirement is reduced by recognizing the shares that executives own along with their vested restricted shares awarded under the Long-Term Incentive Program and also vested shares that they owned in employee benefit plans.

SJI's outside directors are required within six years to own stock worth five times the current value of their annual cash retainer.

3. Conclusions

a. The requirement that executives and outside directors own a minimum amount of the common stock of SJI is a desirable policy because it helps assure that the interests of executives is in line with that of stockholders.

b. SJI's management appropriately monitors the progress of the company's leadership in meeting the stock-ownership requirement.

4. Recommendations

Liberty has no recommendations about this issue.

XIV. Information Systems

A. Background

Liberty's examined the functions and operations of SJG's Information Systems *(IS)* department. Information systems are critical to operations and work of all employees, generally much more so than any other single support function. Moreover, SJG's IS department is by far the largest of any support function in SJI/SJG, in terms of number of employees and spending. Information systems are also fundamental to the capture and reporting of financial and operational information. The reporting of that information provides a key tool for management in verifying that all corporate work groups and functions are effective, including the allocation of costs among subsidiaries and departments and the management of performance in all organizations.

IS does some limited work for all SJI companies even though it is part of the SJG organization. The non-utility affiliates of SJG generally do not have a high level of day-to-day dependence on IS. They nevertheless all make some use of IS's human and infrastructure resources. SJG is by far IS's most important customer, which is not surprising given the size of SJG (employees, assets, and margin) compared to the other SJI companies. This means that the responsiveness of IS to the needs of its primary internal customers is a potentially-important factor in assuring the effectiveness and efficiency of SJG in undertaking its responsibilities as a distributor of natural gas.

B. Organization, Functions, and Infrastructure

1. Background

IS provides design, development, and maintenance of information, voice, and data communications systems for SJI companies. The services of IS include mainframe production, billing and remittance services, mailroom service, voice and Internet telecommunications, private-radio network services, and off-site data and records-retention services (described in the section below on business continuity and disaster recovery).

IS has historically had the responsibility for managing all of SJG's information systems, with the exception of the SCADA system that controls the SJG's pipeline system. IS does, however, provide the communications infrastructure for the SCADA; it bought the servers, it set up the computers, and it installed the operating systems. Information technology has generally been migrating to distributed services; SJG is no exception. Primary *accountability* for information systems has increasingly moved to users as this migration has progressed. For example, SJG's controller has primary accountability for the Lawson system, described at length below, with support from IS. SJI's other business units, all of whom SJG serves to varying degrees, have flexibility to outsource their IS needs; *i.e.*, use third parties instead of SJG's IS department.

2. Findings

The IS department is divided into three units:

- Information Systems, which is responsible for planning, enhancing and maintaining SJG's mainframe applications, assessing new systems and recommending solutions,

analyzing and implementing new mainframe applications, disaster recovery, and procuring mainframe hardware. The Manager of Information Systems has a staff of six, made up of a database analyst, a systems programmer, an analyst, and three senior programmers.

- Management Systems, which is responsible for planning and maintaining all non-mainframe systems, including those that run on personal computers and servers, the networks (local-area networks and a wide-area network), and all telecommunications equipment and services and radio equipment. The staff of this department includes a Lawson administrator, four analysts and a specialist, a network administrator, and a receptionist.
- Computer Operations, which is responsible for running SJG's mainframe computer, printing and mailing bills, processing customers' remittances, performing data entry, and running the mailroom in SJI's headquarters in Folsom. This unit is run by the Manager, Data Center and Mailing Services, and a staff of nine:
    - Supervisor, Data Center Services
    - 4 key-punch/verifiers
    - Supervisor, computer operations
    - Senior data processing operator
    - Production clerk
    - Mail clerk.

The function of processing customers' remittances (*cash processing*) comprises the largest component of work this unit performs. The most important data-entry work for the handwritten time sheets submitted by the technicians in the Street department of SJG. Other data-entry work is for the meter-history system, the stores system, and some paper transactions of the Customer Care Center *(CCC)*. The workload of this unit has decreased with the implementation of the Lawson payroll and purchasing modules, which are described below, and because CCC staff is now doing more of its own data input. Computer Operations' monthly workload includes processing bills and payments for all SJG customers, and payments received for 85,000 marketer customers and 65,000 appliance service and warranty customers of SJESP.

The following table shows the IS department's recent staffing by sub-organization unit.

Table XIV-1. IS Staffing

	2002	2003	Plan 2004
VP/Managers	4	4	4
Information Systems staff	6	6	6
Management Systems staff	7	7	8
Computer Operations staff	11	10	10
Total	28	27	28

IS supports the following distributed computing and telecommunications resources:

- 445 desktop and laptop personal computers *(PCs)*. 179 of the PCs have access to SJG's mainframe.
- 125 touch-screen PCs used for the Automated Dispatching System used by SJG's field personnel who have touch-screen terminals in their vehicles.
- 7 local-area networks that are connected in a wide-area network.
- 280 voice radios and 130 data radios.
- 160 cellular telephones.
- All other telecommunications facilities.

IS has an IBM mainframe computer that it bought in 2000. IS's monitoring of the performance of the computer and its associated peripheral equipment, such as printers and disk and tape storage, leads it to conclude that the current capacity of the mainframe will be sufficient to meet the demands on it through 2007. SJG has been considering the acquisition of a new mainframe, because it will need some additional disk space over the next year and because of the opportunity to reduce expense through changes in vendor charges. SJG's mainframe, associated peripheral equipment, and networked servers, are located in its headquarters building.

Computer Operations also operates the large peripheral equipment associated with the mainframe, and the equipment used to support the revenue cycle, which includes printers, mail processor, bill slitter, bill burster, payment extractor, and cash processors.

The IS department maintains 20 mainframe-based systems and 65 PC- and communications-based systems and services. The following major systems, which IS describes as critical, run on the mainframe computer:

- Customer Billing System, which IS re-wrote in 1991. The original system was designed by IBM, and provides the basis for the customer-information system *(CIS)*. CCC uses the CIS to answer customers' questions and to schedule appointments. CIS serves as the system through which order information is accepted, account inquiry is conducted, work is scheduled, and adjustments are made to accounts.
- Large Account Billing System, developed in 1991-1992, and used for those customers whose bills are sent to them at the beginning of the month and reflect daily use and transportation of natural gas. SJG uses LABS to bill 150 accounts.
- Cash Processing, a system installed in 2001 coincident with the installation of new equipment.
- Meter Reading, upgraded in 1994 and revised since then, and used in conjunction with an affiliate, Millennium Account Services *(MAS)*, which reads most customer meters.
- Dispatch Order Tracking System *(DOTS)* and Automated Dispatching System *(ADS)*, which are used to for scheduling customer work. SJG developed DOTS in 1991 and ADS in 1996. These systems provided SJG with the capability to communicate with service technicians through wireless mobile terminals. DOTS is used by the dispatcher who controls the work being done.

- Meter History (meter inventory). This system was written in 1973 to track the location of meters, now tracks other devices, and has been enhanced over time. The system provides information that helps make decisions on when meters should be changed because of age.
- Unbilled Revenue, which provides information for revenue estimation for financial reporting with an internally-developed algorithm that applies customer usage and weather conditions to calculate unbilled revenue.
- Collection System, used to communicate orders for collections to the laptop computers used by customer-service field collectors and by CCC personnel and collections agencies who do telephone collections.
- Customer Budget System, a part of the Customer Billing System, which makes budget billing for customers possible.
- Service Order Tracking System *(SOTS)*, the major work for which was done in 2000, and which is used for tracking customer orders through installation. SOTS is the front end of the process used to place an order for service. The Gas Sales Tracking System *(GSTS)* will eventually replace SOTS. SOTS has limited interface now with GSTS, which eventually feeds a record through SOTS to set up a skeleton customer account.
- Work Measurement System, whose reports SJG's Service department uses, and which accepts data directly from divisional ADSs, and for the Street department uses payroll information.
- Stores Accounting System, a mainframe application that does not yet interface with the purchase-order module of the Lawson system, described below.

IS also is responsible for maintaining the following PC- or server-based systems shown in the following table.

Table XIV-2. Systems Maintained by IS

Personnel Requisition	Stationary Stores	SJI Fast Stock 2000
Engineering CAD	Natural Gas Pricing Model	PC Billing Support Services
Gas Sales Tracking	Collection	SJE Billing
Corrosion Protection	Inventory of Main & Services	PC Hardware & Software Database
Gas Supply Forecast Model	Load Management Reporting	Main Authorization Reporting
Divisional Cash Registers	Meal & Telephone Reimbursement	Contractor Damages
Mark Out Monitoring	Optical Imaging	Automated Dispatching
Solomon Acctg (SJI corporate)	Electronic Cash Payments	Call Accounting
NJ Wage Reporting	Direct Deposit Processing	Construction Bid File
ITRON Meter Reading	Operating Procedures	Positive Cash Payments
Call Management	Records Center Database	Dictaphone Recording
Lawson ERP	BPU e-mail Complaint	Street Dept. Work Measurement
Eng. Network Analysis (Stoner)	Service Record Card	Electronic Data Interchange (SJI)
Electronic Report Distribution	Main Evaluation	Data Entry Balancing
Construction Order	Transportation Reporting	Interactive Voice Response
Distribution and Maintenance	Network Operating	RADAR System for SJRG
Electronic Mail	Intuity Voice Mail	Construction Permit Checks
METRETEK (AMR)		

3. Conclusions

a. **SJG has the full complement of the basic information-technology equipment and software that a utility needs to meet the needs of its operations.**

4. Recommendations

Liberty has no recommendations in this area.

C. Planning, Resources, and Initiatives

1. Background

A utility's information-systems function must always be coping with change caused by the many forces that affect the needs of its internal customers and with advances in technology. The information-systems function has to anticipate change because catching-up after the need has been recognized may well hamper the operation of business operations. For this reason, the information-systems function must anticipate the short- and long-term needs of the business and the infrastructure of computing and communications software and hardware that it maintains, and plan to have the resources ready before they are needed.

With this as context, Liberty's audit work on the information-systems function included examination of how SJG's IS department plans to accommodate change and support its users with the resources they will need to accomplish their missions.

2. Findings

The judgment of SJG's senior executive responsible for IS is that the company has not had any significant problems in information technology over the past decade, and that the performance of the function has been good from the standpoint of the support it has provided to its internal customers. He does believe, however, that the company was behind on technology over last half dozen years, and has been trying to catch up in several areas, including the usage rate of desktop computers. Liberty discusses SJG's past approach to information technology and recent activity in this section and the two that follow.

IS has a variety of information-gathering methods to support planning. For longer-range planning and budgeting IS's managers have discussions with user departments. The other method is to be aware of what is happening in user departments by attending the officer/staff director meeting that is held every two weeks, and which also serves as a venue to report on the status of major projects. In addition, IS has service-level agreements with user groups, which help to delineate expectations and requirements.

IS has not been working under the direction of a *steering committee*. Such groups, which are fairly common, usually include user departments and the senior management of the information-technology organization. The vice president of IS has plans to propose the formation of a steering committee, which is likely to made up of SJI's executives. SJG understands that creating such a steering committee would conform to *best practices* in meeting requirements of the Sarbanes-Oxley Act.

IS regularly prepares a strategic plan. The latest version is the *2004 Strategic Plan*, which IS issued in December 2003. The vice president of IS and his three direct reports prepared this plan. The plan covers a three-year horizon, with the greatest focus on the next one to two years. It receives an annual review. The latest version has a review of progress against objectives for the plans for 2001 through 2003.

The plan contains a large and detailed document that covers activities, initiatives, and concerns. It notes, for instance that the average age of the staff of mainframe-systems programmers is over 55 years.

The latest plan identified 40 key projects. Some highlights of IS's recent major projects, by business unit, are:

- SJG
  - Several projects for the Customer Care Center.
  - Supporting the implementation of the second phase of the Gas Sales Tracking System, used by SJG's sales force.
  - Implementation of Lawson modules (this is discussed in detail in a section below).
- SJE
  - Potentially working on a new customer-information system.
- SJESP
  - Potentially working on a new work-management and dispatching system, and at least helping the business unit evaluate the desirability of using such a new system.
- Millennium Account Services *(MAS)*
  - Helping MAS with a file-transfer capability.
  - Providing MAS with Internet access to SJG's customer data.
  - Supporting MAS with the purchase of an additional server that would be used for business-continuity assurance.
- Other infrastructure work
  - Web-enable mainframe systems.
  - Finish conversion to Microsoft Office (replace Lotus SmartSuite with Microsoft Office on some personal computers).

Liberty found the last item surprising. Years ago SJI had settled on Lotus SmartSuite, as opposed to the Microsoft Office product, because it was cheaper. More recently, however, Microsoft products have become more powerful and the *de facto* standard, and more importantly, management realized that employees needed more tools. The company therefore started to convert to Microsoft Office, which is not fully compatible with the Lotus software that SJG had installed. As of the end of 2004 SJI still had 36 desktop units that were running Windows 98. The plan is to change those computers out for new ones that run Windows XP in 2005, which is the final year of the company-wide conversion of desktop computers.

The situation with personal-computing software is emblematic of the broader problem that SJI has had in information technology, which is now acknowledged as chronic under-spending and a bias against buying software packages (most of SJI/SJG's legacy systems were programmed in-house).Liberty also describes in detail, below, how SJI has been late in replacing an old financial system with a modern one.

The table that follows shows IS's recent plans for operations and maintenance (expense), and capital investments.

Table XIV-3. Expense Budgets ($ 000)

	Actual 2003 8&4	Plan 2004	Plan 2005
Total IS*	2,553	2,579	2,624
Total communications**	400	501	521

* Combined summary of accounts 921.21 and 921.7.
** Combined summary of accounts 921.31 and 932.2.

Table XIV-4. Planned Capital Requirements for IS

Year	2004	2005	2006	2007	2008
Planned spending	$304	$505	$535	$215	$315

Dollars in thousands.

In addition to the initiatives described above, SJG expects to replace its ADS with new equipment in 2005. The ADS is over seven years old. Failure rates of the terminals in utility and appliance service vehicles and the radio-communications hardware are increasing. The objective of the new system, in addition to replacing old, troublesome equipment, will be to provide direct data-transfer capability to the mainframe computer. This enhancement will reduce the points of potential failure, and add Internet and corporate Intranet access.

SJG's next step is to consider putting an ADS-like system in the vehicles of SJG's Street Department. SJG does not perceive the need to make this change as urgent, because Street workers do not report to work directly from home and do not do work for customers. Nevertheless, SJG will conduct a pilot test of such a system in 2005, using a Web-based system developed by IS.

SJG's understanding is that its internal customers are satisfied with the services it provides. For instance, the executive officer responsible for both the IS and customer-service functions believes that the company's customer-information system (developed by SJG perhaps thirty-some years ago) meets SJG's needs and that IS can modify the customer system well.

In addition to informal methods of gathering feedback, IS has surveyed its internal customers twice recently. A survey conducted in May 2002 showed that 61 percent of users were extremely or very satisfied, 30 percent rated their support as neutral, and 9 percent were dissatisfied. To respond to what it learned, IS established a help desk, replaced the Customer Care Center's terminals with personal computers, and started a program of rotating weekly visits to divisional locations. IS also began upgrading the personal computers used by other users with newer equipment, and converting the desktop software from Lotus SmartSuite to Microsoft Office.

In the late summer of 2004 IS again surveyed its customers; *i.e.*, supervisors, managers, directors, and officers. There were 105 survey respondents, which represented a response rate of 46 percent. On a scale of 1 to 5 the respondents rated the various departments and functions in the range of 3.3 to 4.1, where 5 was the highest score. The composite satisfaction rating was 3.95.

SJG does not regularly compare IS's operations with those of other similar companies. It did, however, participate in a benchmarking study that was organized by Pennsylvania Power & Light. That study showed that in 2002, with data from 2001, SJG had the lowest annual average information technology *(IT)* cost per end user, at $2,700 (the survey average was $6,500). This result confirms Liberty's finding that SJI has not spent much on IT. This result is further noteworthy because SJG, as one of the smallest companies in the survey group, would be expected, all other things equal, to have relatively higher spending per end user. The reason is that its comparatively small size means it has lesser economies of scale.

IS does more than manage the information-technology infrastructure for SJG. Almost one-third of the IS complement is responsible for conducting the remittance cycle for SJG's customer-service function. IS has compared part of this operation against the offerings of prospective vendors, and found that it could do the work at lower cost, while maintaining its service at a level that its internal customer finds acceptable. SJI's cost for bill paper, printing and insertion is 7 cents per bill *versus* vendors who would have to charge 11 cents..

3. Conclusions

a. The IS department accomplishes much with a small staff.

b. IS has well-documented plans.

c. SJI does not have plans to pursue important new systems.

4. Recommendations

47. Make the first order of business of the new IS steering committee a commitment to a comprehensive study of SJG's needs for more distributed systems and enhancements to existing systems, unconstrained by stringent budgetary limitations.

SJG's investment in capital during the period 1997-2004 was over $380 million, but the investment in information technology as a proportion of that was less than two percent. SJG has still not discarded its heritage of restricting its vision in what it can do in enhancing its business processes by investing in more systems.

The problem is not that SJG lacks systems; the basics are in place. A philosophy of being careful and not having systems go wrong is appropriate to a point (for more on this issue see the section below on Lawson), but without significant enhancements in existing systems and new systems SJG will not be able to improve the robustness of its controls, and increase its efficiency and service quality the way it should.

SJG's user community is not working hard enough on using systems to improve; where it does, as in the customer-service function (see the chapter on this for more details), the company was able to improve service significantly without adding staff.

In the absence of impetus from the user community IS needs to provide leadership and vision about what SJG can use in the next few years to meet its forthcoming challenges, including the aging of the SJG workforce generally and that of IS specifically. IS should lead the change and show how new systems and enhancements to existing systems will be beneficial.

D. Arrangements for Business Continuity and Disaster Recovery

1. Background

The criticality of a utility's being able to serve its customers without interruption is self-evident. With that in mind, Liberty assessed how SJG's IS department has prepared itself to provide its users with service in case there is some unplanned outage in the computing and telecommunications infrastructure it maintains.

2. Findings

IS has a business-continuity/disaster-recovery plan for the mainframe and server systems located in the Folsom headquarters building. IS last revised the plan revised in October 2004. The plan, which started with a draft in June 2002, describes in detail how, in the case of a *disaster* that causes a *loss* of the Folsom building, the company could resume critical operations.

The plan and arrangements include the use of a disaster-recovery set-up at a SunGard *hot site*. This facility houses equipment that allows a customer to use saved data to resume some or all of its computer-dependent operations. The set-up is to be tested twice a year, and makes use of additional or redundant equipment located in other SJG buildings for the recovery of server-based systems, such as electronic mail. The first agreement with SunGard, a leader in providing this kind of service, was signed in 1999. After beginning with SunGard, the hot-site set-up has been tested and found to work.

In addition to the current arrangement, SJG recently signed a new agreement with SunGard for SJG's IBM mainframe computer. This agreement provides for additional services, including a firewall and Internet-protocol capability and a back-up for the Lawson system. SJG is currently testing these services. SJG also recently signed an agreement with Dell/SunGard for hot-site recovery for the Lawson ERP system (described in detail below), which runs on server computers.

If SJG were to lose the use of its Folsom IS facility and the equipment housed there, it would still be able to do the basics of:

- Running its IBM mainframe computer and server-based systems
- Process payments from customers and do related data-entry work
- Run the network through which desktop computers communicate with each other and the mainframe and servers

- Accept some of the customer telephone calls normally received in the CCC.

The Folsom headquarters building of SJG and SJI has an uninterruptible-power system that will run the mainframe, some terminals, and telephone switches and servers for 15 minutes until its natural-gas-powered emergency generator is fully operational.

3. Conclusions

a. SJG has taken sufficient steps to be prepared for a loss of its information-technology infrastructure.

4. Recommendations

Liberty has no recommendations in this area.

E. Implementation of the Lawson System

1. Background

Many utilities and other companies took the occasion of the need to assure that its software would work starting on January 1, 2000 (because of the change from 19XX dates to 20XX, the phenomenon known as *Y2K)* to implement new financial systems before making the conversion investment, and also to take advantage of the advances in software that made possible greater integration of different functions and use new features.

SJG, however, did not do that, even though it might have made sense to do so. Before Y2K there was no corporate momentum to make the investment in new systems and there was an aversion to buying software supplied by vendors. As a result, SJI is now in the middle of a multi-year project of installing a new financial system, bought from a vendor called Lawson, to replace its *legacy* (mainframe, COBOL-based) financial, accounting, and payroll systems that SJI developed itself about 30 years ago. The Lawson system is in a class of systems known as enterprise-resource planning, or ERP. This designation means that the system is used by all departments and the sub-systems work with one another, and the system provides functionality beyond the usual financial functions.

The system project is a recent and still-on-going project; the Company's experience with it provides some opportunity to gain insight about how it has approached information systems development. The implementation of the Lawson system is also a big project; it replaces essentially all of SJG's accounting systems and also several other significant systems that have interfaces with the accounting system. Finally, the Lawson software is important because it has features, functionality, and flexibility that the old systems do not. This means that users should experience productivity, control, and reporting improvements and benefits, among others. Because of the timing of the installation, Liberty was able to make some observations about how SJG has been progressing in taking advantage of these benefits.

2. Findings

SJG decided in 2000 that it should replace its financial systems, and started looking soon after the Y2K started, *i.e.*, after that conversion work was done. In early 2001 SJG's Vice President of IS and Comptroller evaluated new system options. In July 2001 they recommended that SJG proceed with Lawson software, and at the time estimated the cost of buying and installing all Lawson modules at $500,000.

SJI's goal in converting from its old system to the Lawson system was to replace all of its programs that support the following functions with a new system made up of sub-systems, or *modules*, that would handle the following functions:

- Accounts payable
- Purchase order
- General ledger
- Inventory
- Accounts receivable
- Fixed assets
- Budgeting and forecasting
- Consolidation
- Job costing
- Time and expense reporting
- Payroll
- Human-resources information system *(HRIS)*.

SJG's plan in going about the implementation of the new systems was to do so slowly. The document that describes the justification for going forward with the Lawson system said:

> *"To control the scope and cost of the … installation, it was decided to implement only the Accounts Payable and Purchase Order modules this year and phase in other modules over the next few years. ….*

and:

> *"A 'phased in' approach was chosen to control the amount of change the company has to deal with and gradually expose employees to the new software, while maintaining the integrity of the existing processes."*

and:

> *"Eventually the [general ledger] and Inventory modules would be purchased, eliminating these data transfers and the applications from the mainframe. The current requisition process would be replaced with an online preparation and approval process …."*

The philosophy of following a *phased-in* approach is, by itself, sound. Much-larger companies have had serious problems of delays, cost overruns, and even failures in implementing major systems. Thus, it can be prudent to take a new-system implementation at a deliberate pace and also to wait to see how *early-adopters* have fared before undertaking a major project that involves the conversion of key systems.

The SJG executive with the ultimate responsibility for the performance of SJG's information systems believes that, as the company's first major conversion project, the Lawson system implementation has shown no significant problems. He believes that the project has proceeded reasonably well, although slower than expected, and will provide the functionality that SJG needs. The reason for the slow implementation is that most of the work has been done with SJG employees, with some help from contractors because of their familiarity with the software.

The analysis of SJG's vice president of IS about the implementation of the Lawson modules is that:

- The company should not have pursued it with greater speed.
- The way it has been done has been both efficient and effective, and over a reasonable period of time.
- Looking to the implementation of the remaining modules to be installed, SJG does not need to go faster because the modules that remain to be done are smaller and therefore will provide smaller benefits.
- Finishing the implementation of the modules that SJG ultimately plans on using in 2006 or 2007 is not a problem (the inventory module is currently the last budgeted for implementation in 2005).

Liberty's view is that these assessments are reasonable, but only to a point. It would not be prudent to rush implementation work and thereby risk serious problems. Moreover, it is correct to consider the ability of users to do their work in implementation and learning to use a new system. In addition, SJG used a module-by-module approach to implementation, instead of one massive project to install the entire system in a single effort. This tactic has important merits. As an example, it makes sense that the implementation of the budgeting module waited until after the general-ledger module was done.

On the other hand, it has taken a long time to implement the modules that are now working, more time than SJG planned, and SJG has borne greater expense. Further, with experience each module should be easier to install than the previous one. Smaller modules should also take less work and be less risky. This last point implies that it could make sense to just get on with the work, and finish the entire project.

It is notable that SJG never developed a plan for the project of implementing the Lawson software. There was no schedule developed; therefore, SJG did not manage its installation work to time-based measures. The objective was to do the implementation correctly, and missing projected dates has not been viewed as a problem.

SJG has not achieved its original goal with the Lawson project from the standpoint of schedule effectiveness. The harm that results is that the realization of the benefits that the new system makes available has been deferred. SJG was considerably behind the utility industry, for instance, in having on-line timesheets and responsibility-center accounting. The latter remains in its infancy at SJG, even many years after other companies have had this basic control tool in place.

In addition, and perhaps more importantly, SJG hopes to keep its staffing level flat while continuing to meet the needs of a growing customer base. The only way that the company can do this is to increase productivity, and a key way to do that is to have better systems than it does now. The Company needs improvements and new information and communications technology to support assumptions that resource growth really is not necessary to increase work amounts and effectiveness.

The obstacle does not appear to be reluctance on the part of IS. If anything, IS has been pushing harder than users to implement new Lawson modules. Instead, the barrier appears to be a lack of emphasis on the role of systems in improving measurement, productivity, and management control. Specifically, Liberty did not see an emphasis on making available the resources needed to implement new systems. This lack of urgency, or misplaced unease about spending money that should save more money, is of concern to Liberty.

The first authorization for spending for Lawson software was approved in January 2001, in the amount of $125 thousand for the accounts-payable and purchase-order modules. In August 2001 the authorization was increased to $177 thousand. In March 2002 the authorization was increased to $241 thousand, which covered capitalized interest and internal payroll costs, and an estimated additional $30 thousand for more implementation work and training. As it turned out, the total of costs incurred were $236 thousand, almost all of which was incurred by the end of April 2002.

Expenditures for the general-ledger *(G/L)* and purchase-requisition modules were approved in December 2001 for $155 thousand. In February 2002 this amount was divided into $69 thousand for the purchase-requisition system and $86 thousand for the G/L module. In June 2003 an increase of $259 thousand for the authorization for the G/L module was approved. The largest causes of the increase came from adding the activity and project-accounting module ($25 thousand), internal labor costs ($130 thousand), and consulting services ($85 thousand). Spending on the G/L/purchase-requisition implementation was finished in May 2004, in the total amount of $314 thousand.

The implementation of the payroll and HRIS system was originally budgeted at $184 thousand in December 2002. In March 2003 the authorized amount was increased to $309 thousand, including $40 thousand in consulting fees and about $85 thousand for internal labor. The final cost of the implementation of the payroll and HRIS system was $295 thousand, most of which was spent by April 2004. The last IS strategic plan anticipated that this work would be done at the beginning of 2004; SJG actually did not convert to the Lawson payroll system until July 2004.

The main reason for buying and installing the Lawson system was to reduce costs, but the document used to justify the investment has no quantification of expected savings and no *ex post* analysis has been done of the costs or the benefits. SJG does know that the conversion to the Lawson modules has reduced its system-maintenance workload compared to that of the legacy mainframe-accounting system required, and the amount of data-entry work is also much less.

Until 2004 there were no formal meetings of the employees involved in the implementation of the Lawson modules. Also, there has been little regular, formal reporting to the various constituencies and management about implementation progress and problems.

As of the end of 2004, the implementation status of the originally-planned Lawson modules was the following:

- Accounts payable - *done January 2002.*
- Purchase order and purchase requisition - *done January 2002 and September 2003.*
- General ledger - *October 2004.*
- Inventory - *Budgeted for installation to be done in the third quarter of 2005 and implementation finished at the end of 2005.*
- Accounts receivable - *will not be done, handled in the customer-information system.*
- Fixed assets - *not in plans, was never done in the mainframe, and now done in spreadsheets and log books.*
- Budgeting and forecasting - *Will probably go in budget for 2006; have to wait for G/L module to be fully operational.*
- Consolidation - *no plans to install, using SJI's Solomon system and spreadsheets.*
- Job costing - *no plans to install.*
- Time and expense reporting - *Don't really need this module, HRIS and payroll module provides what is needed.*
- Payroll - *July 2004.*
- Human-resources information system - *July 2004.*
- Project and activity accounting - *started running August/September 2004, used for capturing and tracking capital project expenditures and in the future will be used for tracking expenses.*

As discussed at length in the chapter on accounting, SJI's financial system (based on Solomon software) is different from either the Lawson or legacy financial systems. As a result, although SJI's books could be run on the Lawson system, SJI has not chosen to make the conversion, and therefore the entire SJI entity is not consolidated automatically and two separate financial systems must be maintained, extra costs that are paid primarily by SJG because it bears the majority of the costs of running the SJI corporate operation.

3. Conclusions

a. SJG was comparatively very late to replace its financial system, and has been too slow in implementing the Lawson system.

b. IS does not use strong tools for project management and does not have an effective process for reporting on its progress in implementing projects.

4. Recommendations

48. Institute a process for managing IS projects, supported by appropriate tools, and reporting on project status.

49. Apply the resources needed to expedite the full implementation of all of the Lawson modules that SJG and SJI can reasonably use.

XV. Legal Services

A. Background

Legal affairs at SJI and its subsidiaries fall generally under the Vice President, Corporate Counsel, and Corporate Secretary. This person is also the Senior Vice President, Corporate Counsel, and Corporate Secretary for SJG. He manages legal affairs for all of the SJI entities. The functions for which he has responsibility extend beyond legal matters and corporate secretary activities. They include environmental, human resources, and government relations. This last function excludes the BPU, which falls under regulatory relations, and reports to the CFO.

He became assistant secretary in 1998 and corporate counsel in 2002. No employee with legal training performed legal functions prior to his appointment as counsel. At the time of that appointment, three firms had traditionally performed the vast majority of SJI and SJE legal work:

- Fitzgerald/McGroarty, a local firm that did environmental, real estate, and local defense work
- Deckert, Price & Rhoads from Philadelphia, which handled ERISA and SEC matters
- An individual local attorney who handled regulatory work.

B. Findings

There have been significant changes in the outside counsel used by SJI and SJG since 2002. The corporate counsel began to add to the internal legal roles and resources in mid-2002. He has brought in one attorney. This attorney had been in private practice, then in state government with the executive branch. She handles contracts and provides general legal advice. She does work for SJI and is corporate counsel for SJE. She also handles Government Relations maters. The Insurance Department makes its own arrangements for selecting and managing lawyers who handle defense work.

The following table shows total costs incurred by SJI for legal costs in the preceding two years. The costs for the largest law firm generally represent those billed for the 12 month period ending the preceding October. All charges were allocated out by SJI except for the items noted as follows in the table:

1. Retained by SJI
2. Charged to SJG
3. Charged to another affiliate

Table XV-1. Outside SJI Legal Costs

	2003	2004
Year Total		
Year Totals		

Year Totals		
Year Totals		
Year Totals		
Year Total		
Year Total		
Year Total		
Year Total		
Grand Totals		
	$339,778.54	$339,416.49

Liberty examined the nature of the work underlying these services. In general, SJI assigned or allocated them properly. There were, however, two exceptions, which the following table summarizes. In both cases, SJI assigned all charges for a certain matter to SJG. Instead, SJI should have allocated the charges back to all subsidiaries through an allocator

Table XV-2.
Legal Charges Incorrectly Assigned to SJG

Item	2003	2004
EMI Matters	$140,975.86	$157,774.95
ERISA	$51,462.86	$10,411.66
Total	*$192,438.72*	*168,186.61*

In both years, the amounts incorrectly treated amount to more than half of all legal charges. SJG, however, would still have paid the vast majority of them even had charging been correct, because they would have been allocated back to all subsidiaries according to number of employees.

Liberty specifically examined the question of where important legal work for affiliates was performed. The corporate counsel handled most of the legal work for Borgata himself, supported on specialty tasks by the outside firm that provides most of the legal services by used by SJI and its subsidiaries, including SJG. Most of the work on gas contracts is done internally.

Two firms have submitted bills directly to SJG. The others send a single bill to SJI, which assigns and allocates the costs among subsidiaries. Most of SJG's outside work for which such separate bills are rendered is by Cozen, O'Connor. The following table summarizes the firm's recent charges to SJG.

Table XV-3. Outside Counsel Charges to SJG

Year	Amount
2002	$
2003	$
2004	$

The 2000 figures are for 11 months. The other firm that bills SJG directly is Fitzgerald, McGroarty, & Lipari. All of this firm's work came in the area of environmental remediation and related insurance matters, plus several small environmental or property damage matters. SJG paid invoices totaling $ through November 29, in 2004 and $ in 2003.

Invoices for legal services to SJI and to SJG showed a breakdown by matter with sufficient detail to allow knowledgeable employees to make informed assessments of the work types. The invoices demonstrate routine review of charges, timely accounting for costs, and summarization of charges by individual matter. It appears, however, that review by client departments, rather than by legal personnel occurred regularly for many of the matters on which outside counsel worked.

There are no structured or common guidelines on retention, work management, or billing by outside counsel. For example, the Insurance Department reviews the invoices of counsel it retains. Financial personnel retain and manage insurance and regulatory attorneys, and review the invoices of outside counsel in these two areas. The human relations vice president, who does report to the corporate counsel, reviews the bills of outside labor counsel.

The corporate counsel has a goal to establish under the management of legal personnel a formal process for evaluating the effectiveness of legal services, including competitive bidding, retention, and invoice review.

SJI used the substantial ERISA work needed in the past year or so as an opportunity to examine the use of bidding by multiple firms for outside legal work. The corporate counsel considers it a successful exercise. SJI received three bids. The Company selected the same firm that had done

categorically related work in the past. Nevertheless, the corporate counsel's observation was that the process helped to keep hours down, and produced a fixed total cost.

The outside firm that provides most of the legal services by used by SJI monitors FERC activities. SJI does not, however, commit significant dollars to this monitoring or actively participate in FERC proceedings.

C. Conclusions

a. The structure of legal resources is effective, given the size of SJG.

SJG makes as much use of internal legal resources as one would expect for a company of its size. Internal resources define appropriate functions for internal performance and use a range of counsel specializing in remaining matters requiring legal services.

b. Advances in retention and management of outside counsel have been made, but are not complete.

Outside counsel provide routine billings that allow the Company to make a meaningful assessment of the work activities and levels billed. Invoices show routine review and assignment of costs. The recent effort to test the use of competitive solicitation for services is noteworthy. It shows that benefits can be gained even without switching providers.

The goal to provide more central coordination of outside counsel retention and management is sound, but has not advanced sufficiently far. A number of departments continue to retain their own counsel and manage them. It is important to provide outside counsel that these departments trust and with whom they can work effectively. Those objectives, however, can be met even if retention and management responsibility is centralized under legal professionals. That centralization will serve the added goals of assuring the Company receives the best rates and terms of service and that it makes clear that billings will receive scrutiny from sources most knowledgeable about the particular needs, activities, and resource requirements associated with legal work.

c. There should be greater diligence shown in the matter of allocating SJI legal costs.

There is regular and full attention to assigning/allocating outside legal costs by particular matter. This attention constitutes a strength. However, it is of concern that such a significant portion of outside legal bills to SJI in the past two years were assigned solely to SJG, instead of to all benefiting entities. The net effect of the error is small, considering SJG's dominance in size. Nevertheless, the errors underscore the need for greater diligence.

This conclusion will not produce a separate recommendation here. The corrective actions it suggests have been fully addressed in Liberty's companion reporting addressing *Cost Allocations and Affiliate Relationships.*

D. Recommendations

50. Centralize responsibility for retaining and managing outside counsel.

Client departments should remain sufficiently involved to assure consideration of their substantive and administrative needs to the extent that their personnel will work closely with outside counsel. The key changes required are to bring a more formal structure to the process of retaining counsel, to assure that agreements with such counsel are optimum, to assure that internal legal resources have a role in judging past legal performance and its relevance to future engagements, to promote the greater use of competitive solicitations for legal work, and to make clear to outside counsel that billings must bear the scrutiny of persons with an understanding of legal work activities and requirements.