NSTAR ELECTRIC

NSTAR ELECTRIC & GAS MERGER SAVINGS REPORT

December, 2003

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December 5, 2003

Mary L. Cottrell, Secretary
Department of Telecommunications and Energy
One South Station
Boston, MA 02110

Re: D.T.E. 99-19, Boston Edison Company, Cambridge Electric Light Company, Commonwealth Electric Company, NSTAR Gas Company, NSTAR Merger Savings Report

Dear Secretary Cottrell:

Enclosed for filing is the Merger Savings Report (the "Report") of Boston Edison Company, Cambridge Electric Light Company, Commonwealth Electric Company and NSTAR Gas Company ("NSTAR" or the "Company") in the above-referenced proceeding. The Company is filing this Report in compliance with an order of the Department of Telecommunications and Energy (the "Department") in BEC Energy-COM/Energy Merger, D.T.E. 99-19 (1999), which directed NSTAR to file a one-time report of cost-savings measures taken and the results achieved during the rate freeze. D.T.E. 99-19, at 86.

This Report presents the actual cost reductions achieved by the Company in 2001 and 2002 and compares those reductions to the savings forecasts presented in D.T.E. 99-19 by the Company's expert witness, Mr. Thomas J. Flaherty. To facilitate this analysis, the Company adhered to the organization and methodology presented by Mr. Flaherty, which were reviewed and accepted by the Department in the rate plan proceeding. See, D.T.E. 99-19, at 68-73. Mr. Flaherty's testimony and exhibits (TJF-1 through TJF-5) from D.T.E. 99-19 are cited in this Report and are presented in Appendix 1. For each cost category, the Report describes:

- the anticipated source of the savings as set forth in D.T.E. 99-19;
- the basis of the savings-forecast calculation in D.T.E. 99-19;
- the actual results, indicating whether the Company achieved the forecast savings;
- the reason for any major deviations from the forecast level (above or below); and
- the methodology used to calculate actual merger savings for each category, which in all cases is consistent with the approach used by Mr. Flaherty

As discussed in the Report, the Company achieved or exceeded the forecasted merger-related savings in almost every cost area. In the aggregate, merger-related savings in operation and maintenance expenses totaled approximately $122 million in 2001-2002, compared to a forecast level of $93 million. The Company achieved an additional $38 million in merger-related energy-supply savings in 2001-2002, compared to a forecast level of $2 million. Merger-related capital savings for 2001-2002 were $63 million, compared to a forecast savings of $46 million.[1]

Please note that in D.T.E. 99-19, the Department granted the Company's Motion for Protective Treatment of sections C and J of Mr. Flaherty's savings analysis. See, Tr. 3, at 130-131, D.T.E. 99-19. These sections were included in copies of the Report delivered to the Department and the Attorney General, but are omitted from the copy filed for the public record.

This filing fulfills the Company's compliance obligations under D.T.E. 99-19. If there are any questions, please do not hesitate to call. Thank you for your attention to this matter.

Sincerely,

Robert J. Keegan

Enclosure

cc: Service List

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[1] As discussed in the Report, the achievement of savings in any particular cost category does not necessarily mean that the overall cost level of that category has decreased from year to year. In general, merger-related savings have offset, in whole or in part, cost increases experienced in each category as a result of a number of factors including, but not limited to, inflation, changes in tax rules, legislation, and regulatory requirements and overall economic circumstances. In addition, the Company has experienced significant cost increases in certain categories evaluated by Mr. Flaherty for system-reliability improvements.

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A. Overview

⇨ Purpose and Format

The NSTAR Merger Savings Report (the "Report") is filed in accordance with the directives of the Department of Telecommunications and Energy (the "Department") in BEC/COM Merger, D.T.E. 99-19 (1999). In D.T.E. 99-19, the Department approved a rate plan proposed in conjunction with the merger of BEC Energy and Commonwealth Energy System and directed the Company to file a subsequent report on the merger savings achieved during the rate freeze. Specifically, the Department stated that:

> To confirm the confidence in the forecast of savings and to document for future proceedings that merger-related cost-cutting measures were implemented during the rate freeze, the Department directs the Joint Petitioners to file a one-time report of cost-saving measures taken and results achieved during the rate freeze. That joint report of all four companies will be due not later than 90 days after the end of the rate freeze (or not later than the filing by any of the four companies of a future rate proceeding, should such a proceeding occur first). The report should draw upon contemporaneous documentation developed and maintained through the period of the rate freeze. A thorough and well-documented report can offer sufficient assurance that the savings achieved during the rate freeze can and will persist well beyond the initial period. The savings initiatives described by the Joint Petitioners are of a kind that, once instituted, will serve as a baseline for future rate proceedings.

D.T.E. 99-19, at 86.

In compliance with the Department's directives, this Report presents the actual cost reductions achieved by the Company in 2001 and 2002 and compares those savings to the forecasted cost reductions presented in D.T.E. 99-19 (the "MERGER FILING") by the Company's expert witness, Mr. Thomas J. Flaherty. To facilitate this analysis, the Company adhered to the organization and methodology presented by Mr. Flaherty, which were reviewed and accepted by the Department in D.T.E. 99-19, at 68-73. Mr. Flaherty's testimony and exhibits (TJF-1 through TJF-5) from D.T.E. 99-19 are cited in this Report and are presented in Appendix 1 to this Report. Please note that Exhibits TJF-1 through TJF-5 are bates stamped in a continuous sequence for ease of reference in this Report (i.e., pages 0001 through 00412).

⇨ Methodology

In D.T.E. 99-19, the Company forecast savings in nominal dollars for the ten-year period from 2000 through 2009, with actual savings projected to continue indefinitely into the future. See, D.T.E. 99-19, at 63, 84-85. The Report compares the forecasted savings for 2001 and 2002 with the savings actually achieved by the Company in those years. The Report does not compare data for 2000,

although it is the first full year of the merger, because the Company's integration efforts ramped up following the merger, and therefore, savings calculations are not comparable in this time period.

For each cost category, the Report describes the anticipated source of the savings and the basis of the savings-forecast calculation as presented by Mr. Flaherty in D.T.E. 99-19 (these descriptions are shown in italics at the top of each page). The Report then presents the "Actual Results," indicating whether the Company achieved the forecast savings and providing an explanation of any major deviations from the forecast level (above or below). The Report also indicates the methodology used to calculate actual merger savings for each category, which in all cases is consistent with the approach used by Mr. Flaherty.

⇨ Savings Achieved

As documented below, the forecasted levels of merger-related savings were met or exceeded in almost every area. In the aggregate, operations and maintenance ("O&M") expense savings for 2001-2002 were $122 million as compared to a forecast level of $93 million; energy supply savings were $38 million as compared to a forecast level of $2 million; and capital cost savings were $63 million as compared to the forecast level of $46 million.

It should be noted that the achievement of savings in any particular cost category does not necessarily mean that the overall cost level of that category has decreased from year to year. In general, merger-related savings have offset, in whole or in part, cost increases experienced in each category as a result of a number of factors including, but not limited to, inflation, changes in tax rules, legislation, and regulatory requirements and overall economic circumstances. In addition, the Company has experienced significant cost increases in certain categories evaluated by Mr. Flaherty for system-reliability improvements.

NSTAR Merger Savings Report

B. Savings Summary

As noted above, the Company's analysis shows that:

- Actual savings exceeded forecasted savings in most areas.
- The most significant savings were achieved in energy sourcing, field labor, employee benefit costs and professional services.
- In the area of procurement and contract services, actual savings were less than projected on an overall basis due to increased system-reliability investment.
- The summary comparison of forecasted savings to actual savings in O&M expenses, Energy Sourcing and Capital Spending, is as follows:

(in millions)	**Forecasted Savings (from D.T.E. 99-19)**		**Actual Savings**		**Variance (+/-)**	
	2001	2002	2001	2002	2001	2002
O&M	$45	$48	$54	$68	$9	$20
Energy Sourcing	$1	$1	$19	$19	$18	$18
Capital	$25	$21	$22	$41	($3)	$20
Total	$71	$70	$95	$128	$24	$58

O&M Expenses

The Company achieved savings in O&M expenses that significantly exceeded the forecasted target levels for two primary reasons. First, the Company gained greater efficiencies than expected from the consolidation of field labor in adjacent or proximately located service territories. Second, the Company successfully reduced employee benefit costs by reducing the number of plans, increasing employee contribution levels to be more in line with industry norms, streamlining plan administration and increased bargaining power.

Energy Sourcing
The Company achieved significantly greater savings from energy sourcing than expected because of the increased buying power that resulted from the combined procurement of electric-service supply (default and standard offer) for all three electric companies, as well as increased diversity in the existing purchase power contracts.

Capital
Capital cost savings exceeded the forecast targets because the Company obtained a higher-than-forecast sale value for facilities identified in D.T.E. 99-19. In addition, capital cost savings were realized as a result of the reduction in labor and benefit costs (thereby reducing the capitalized component of labor and benefit costs). The standardization of inventory also reduced capital costs.

Actual capital costs savings were less than projected in terms of procurement costs and contract services because, in the 2001-02 time frame, the Company significantly stepped up its capital investment program, which had the effect of increasing overall expense levels for procurement and contract services. However, even though capital investments increased significantly, the investments increased by less than they would have in the absence of the merger because the per-unit cost decreased as a result of improved bargaining leverage and purchasing power. The Company has not included per-unit cost savings or price/unit savings in the calculation of total merger-related savings set forth in this Report, which means that the merger-savings analysis is a relatively conservative assessment.

NSTAR Merger Savings Report

TABLE A

2002 Synergies Summary

	Merger Filing		Actual		Variance	
O & M	2001 synrg.	2002 synrg.	2001 synrg.	2002 synrg.	2001 Actual vs Merger Filing	2002 Actual vs Merger Filing
Col.A	Col.B	Col.C	Col.D	Col.E	Col.F	Col.G
Labor - Corporate	$23	$24	$22	$26	($1)	$2
Labor - Field	6	7	19	16	13	9
Administrative & General Overhead	1	2	(1)	1	(3)	(1)
Public Relations	1	1	1	1	(0)	0
Benefits Administration	1	1	7	10	6	8
Insurance	1	2	3	2	2	0
Information Systems - O&M/PCs	3	3	7	8	4	5
Professional Services	2	3	2	2	(0)	(1)
Facilities	4	4	(1)	4	(5)	0
Shareholder Services	0	0	1	1	0	0
Vehicles	0	0	0	0	0	0
Directors Fees			0	1	0	1
Association Dues	0	0	0	0	0	0
Credit Facilities	0	0	0	0	0	0
Procurement	1	1	(5)	(3)	(5)	(4)
Contract Services	0	0	(2)	(0)	(2)	(1)
Energy Sourcing	1	1	19	19	18	18
Total O&M	$46	$49	$73	$87	$27	$38
Capital						
Labor - Corporate	$2	$2	$2	$2	($0)	$0
Labor - Field	3	3	8	7	6	4
Administrative & General Overhead	0	0	(0)	0	(0)	(0)
Benefits Administration	0	0	2	3	2	3
Information Systems Capital	15	11	15	11	0	0
Facilities	1		2	15	1	15
Procurement	2	2	(11)	(6)	(13)	(8)
Inventory	1	1	7	8	5	7
Contract Services	1	1	(4)	(1)	(4)	(1)
Total Capital	$25	$21	$22	$41	($3)	$20

B1. Financial Assumptions

In all cost categories evaluated by Mr. Flaherty, the merger-savings forecast incorporated an inflation factor (as described below for each cost category). Table B shows the inflation factors used in the MERGER FILING at Exhibit TJF-5B (00086).

TABLE B

Financial Assumptions (continued)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Escalation Rates (All years)											
Labor (Blended Salary and Benefits)											
Corporate Employees	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%
Field Employees	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%
General											
Administrative and General Overhead	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Advertising	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%
Insurance	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Facilities	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Shareholder Services	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Director's Fees	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Association Dues	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Regulatory Expenses	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Benefits	6.35%	6.35%	6.35%	6.35%	6.35%	6.35%	6.35%	6.35%	6.35%	6.35%	6.35%
MIS (Operating Costs)	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
MIS (Development Projects)	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Professional Services	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%
Research & Development	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Lines of Credit	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Procurement	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Inventory	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Contract Services	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%
Cost to Achieve	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Pre-Merger Initiatives	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Vehicles	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%

C. Savings Area: Labor Summary - O&M and Capital

MERGER FILING Rationale for savings: *Corporate and Administrative: Reductions in personnel will result from the elimination of duplicative and overlapping Corporate and Administrative functions performed by the two companies. Savings do not include potential re-engineering or downsizing opportunities that may be available to each company. See, Exhibit TJF-5C (00088). Electric Transmission & Distribution: Electric Transmission & Distribution includes both system operations and field employees. In system operations, savings result primarily in supervisory and support functions from the consolidation of dispatch centers, bulk power operations, and engineering support operations. For field employees, savings occur in subfunctions, such as major facilities and construction and engineering and support, as a result of reconfigured geographic coverage area responsibility, potential utilization of mobile construction crews, and reduced need for supervisory personnel. See, Exhibit TJF-5C (00091-92).*

MERGER FILING Basis for Calculation: *Salary and benefits assumptions were based on internal information unless otherwise noted. Average salaries by function were determined for both companies and loaded for benefits at 42.86%. See, Exhibit TJF-C (00088, 91). Salaries were escalated at 3.5% annually and benefits were escalated by 6.35%. Id. A capitalization percentage of 7.9% was applied for corporate and administrative personnel and 34.0% for electric field personnel. Id. Projected Corporate and Administrative personnel reductions total 252, excluding the Customer Service area (44 positions). See, 00079, 88; D.T.E. 99-19, at 64. Electric Transmission & Distribution and field service personnel reductions total 110, including Customer Service. See, 00079, 91; D.T.E. 99-19, at 64.*

Quantification of Savings: In the MERGER FILING, labor-related savings were determined by multiplying the number of forecast personnel reductions by the average (loaded) salary level in 2000 by function (as presented in Mr. Flaherty's analysis) and then escalating the total through 2001 and 2002 using the relevant inflation factor. See, 00093-94; D.T.E. 99-19, at 64, 69. To calculate savings for this Report, the Company applied the same methodology using the same forecast salary levels by functions and multiplying it by the actual number of personnel reductions. Thus, merger-related savings are the difference between forecasted labor savings and actual labor savings.

Actual Results: The Company achieved the forecast savings for Corporate and Administrative personnel and substantially exceeded the target level for Electric Transmission & Distribution personnel. Significant savings were achieved through the consolidation of electric field labor in adjacent or proximately located service territories as a result of greater than expected productivity gains. No synergies were forecast for gas operations in the MERGER FILING and, in fact, gas operations has increased its workforce to meet service requirements.

TABLE C
Synergies Summary - Labor

	Merger Filing		Actual		Variance	
	2001 TJF synrg.	2002 TJF synrg.	2001 synrg.	2002 synrg.	2001 Actual vs Merger Filing	2002 Actual vs Merger Filing
Col.A	Col.B	Col.C	Col.D	Col.E	Col.F	Col.G
Labor & Benefits - O&M						
Corporate	$23.3	$24.4	$21.9	$26.0	-$1.5	$1.6
Electric Field	6.0	7.3	19.9	16.9	13.9	9.6
Gas Field			(0.6)	(0.9)	(0.6)	(0.9)
Total Field	$6.0	$7.3	$19.4	$16.0	$13.3	$8.7
Total O&M & Benefit expense	$29.4	$31.7	$41.2	$42.0	$11.9	$10.3
Labor & Benefits - Capital						
Corporate	$2.0	$2.1	$1.8	$2.2	-$0.1	$0.1
Electric Field	2.6	3.2	8.7	7.4	6.1	4.2
Gas Field			(0.3)	(0.4)	(0.3)	(0.4)
Total Field	$2.6	$3.2	$8.5	$7.0	$5.8	$3.8
Total Capitalized Labor & Benefits	$4.6	$5.2	$10.3	$9.2	$5.7	$3.9
Total Labor and Benefits						
Corporate	$25.3	$26.5	$23.7	$28.2	-$1.6	$1.7
Electric Field	8.7	10.4	28.6	24.3	20.0	13.8
Gas Field			(0.8)	(1.3)	(0.8)	(1.3)
Total Field	$8.7	$10.4	$27.8	$23.0	$19.1	$12.5
Total O&M & Benefit expense	$34.0	$36.9	$51.5	$51.2	$17.6	$14.2

C0. Savings Area: Labor Summary – Employee Levels

MERGER FILING Rationale for savings: *See Section C, above.*

MERGER FILING Basis for Calculation: *See Section C, above.*

Corporate
The Company achieved labor-related merger savings as forecast in most areas with the exclusion of the Information Technology area. Although system-integration efforts commenced on schedule and are ongoing, the Company has not reduced personnel levels as forecast in order to facilitate systems implementation and to provide adequate systems support and training on the new systems.

Field -- Electric
The Company achieved personnel reductions of 169 for field services, as compared to the forecast level of 110 for 2002. These personnel reductions are net of the field personnel added in 2001 and 2002 to improve system reliability. The Company achieved a higher level of workforce reduction in electric field operations by adopting the best practices from both companies as well as leveraging adjacent/proximate service territories to a larger extent than forecasted. In addition, the Company has sold its streetlights to several towns allowing for further personnel reductions.

Customer Service
The results for the Customer Service exclude 77 additional meter readers that were required when Boston Edison changed its meter-reading schedule from bi-monthly to monthly to meet service-quality requirements.

Field -- Gas – No merger-related synergies were forecast for field operations in the gas company.

TABLE C0
Labor - Employee Levels

		Merger Filing				Actual				$M Variance	
		2001 Level before synrg.	2002 Level before synrg.	Filing 2001 synrg.	Filing 2002 synrg.	2001	2002	Actual 2001 synrg.	Actual 2002 synrg.	2001 Actual vs Merger Filing	2002 Actual vs Merger Filing
	Col.A	Col.B	Col.C	Col.D	Col.E	Col.F	Col.G	Col.H	Col.I	Col.J	Col.K
C1	Executive Management	38	38	(9)	(9)	31	31	(7)	(7)	$0.7	$0.6
C2	Legal	20	20	(4)	(4)	15	13	(5)	(7)	0.2	0.5
C3	External Relations	35	35	(6)	(6)	32	31	(3)	(4)	(0.3)	(0.2)
C4	Finance Accounting & Planning	157	157	(40)	(40)	112	116	(45)	(41)	0.5	0.1
C5	Human Resources	103	103	(18)	(18)	83	75	(20)	(28)	(0.2)	0.8
C6	Information Systems	238	238	(68)	(68)	197	199	(41)	(39)	(2.9)	(3.3)
C7	Admin & Support	253	253	(43)	(43)	201	193	(52)	(60)	0.6	1.4
C8	Retail Marketing & Sales	182	182	(29)	(29)	149	137	(33)	(45)	0.5	1.6
C9	Purchasing & Materials Mgt	143	143	(35)	(35)	118	105	(25)	(38)	(0.7)	0.3
	Corporate	1,169	1,169	(252)	(252)	938	900	(231)	(269)	($1.6)	$1.7
C10	Customer Service	494	494	(26)	(44)	476	523	(18)	29	3.8	0.3
C11	Electric Transmission	193	193	(31)	(31)	160	162	(33)	(31)	$0.4	$0.2
C12	Electric Distribution	1,462	1,462	(31)	(31)	1,273	1,301	(189)	(161)	15.5	13.2
C13	Electric Systems Tech Support	20	20	(4)	(4)	13	14	(7)	(6)	0.3	0.2
	Field	2,169	2,169	(92)	(110)	1,922	2,000	(247)	(169)	$20.0	$13.9
	Gas Distribution	335	335	0	0	340	349	5	14	($0.0)	($0.8)
	Gas Transmission	56	56	0	0	65	60	9	4	(0.8)	(0.4)
	Gas Supply	7	7	0	0	7	7	0	0	0.0	(0.1)
C14	Gas Total	398	398	0	0	412	416	14	18	($0.8)	($1.3)
	Total	3,736	3,736	(344)	(362)	3,272	3,316	(464)	(420)	$17.6	$14.3
	Excluding Gas	3,338	3,338	(344)	(362)	2,860	2,900	(478)	(438)	$18.4	$15.6

NSTAR Merger Savings Report

Savings Area: Corporate & Administrative Labor Summary

C1. Executive Management

MERGER FILING: *Savings occur as a result of reduction of personnel managing overlapping responsibility areas. Average 2000 loaded salary is $216,411. Reductions of 9 FTEs, or 23.7% of affectable total compares to an average of 25% in recent transactions. See, Exhibit TJF-5C, at 00088.*

Actual Results: Overall savings for Executive Management exceeded the MERGER FILING forecast by $0.6 million in 2002. Although the Company did not reach the target level employee count, the savings exceeded the MERGER FILING forecast because the average salary for positions that were eliminated (Other Officers) was significantly higher than the salary for the positions that were maintained (Support Staff).

Description	Forecast Reductions	Actual Reductions	Variance	Explanation
Executive Council	5	5	-	Reduction as planned
Other Officers	0	4	4	Consolidation of functions
Executive Support Staff	4	-2	-6	Expanded duties to support broader span of control of Other Officers
Total	**9**	**7**	**-2**	

TABLE C1

Merger Filing vs. Actual Labor Savings

		Merger filing				Actual				$M Variance	
C1	**Executive Management**	2001 Level before synrg.	2002 Level before synrg.	Filing 2001 synrg.	Filing 2002 synrg.	2001	2002	Actual 2001 synrg.	Actual 2002 synrg.	2001 Actual vs Merger Filing	2002 Actual vs Merger Filing
	Col. A	Col. B	Col. C	Col. D	Col. E	Col.F	Col.G	Col.H	Col.I	Col. J	Col. K
A1	Executive Council	12	12	(5)	(5)	6	7	(6)	(5)	$0.4	
A2	Other Officers	11	11			8	7	(3)	(4)	$0.7	$1.0
A3	Executive Support Staff	15	15	(4)	(4)	17	17	2	2	($0.4)	($0.5)
C1	Executive Management	38	38	(9)	(9)	31	31	(7)	(7)	$0.7	$0.6

NSTAR Merger Savings Report

Savings Area: Corporate & Administrative Labor Summary (continued)

C2. Legal

MERGER FILING: *Savings will result from elimination of duplicative SEC, general corporate, and regulatory legal work. Levelizing of work will also help reduce legal support personnel. Average 2000 loaded salary is $114,336. Reductions of 4 FTEs, or 20% of affectable total compares to an average of 15% in recent transactions. See, Exhibit TJF-5C, at 00088.*

Actual Results: Overall savings for the Legal area exceeded the MERGER FILING forecast by $0.5 million in 2002. In total, the number of employees was reduced by 7 as compared to the MERGER FILING forecasted reduction of 4 employees. Total savings were partially offset by an increase in the work performed by outside counsel, as described under Professional Services.

Description	Forecast Reductions	Actual Reductions	Variance	Explanation
Attorneys	2	4	2	Additional regulatory support from outside counsel
Support Staff	2	2	-	
Corporate Secretary	0	1	1	Duties were taken on by the SVP Strategy & Law eliminating one position
Total	**4**	**7**	**3**	

TABLE C2

Merger Filing vs. Actual Labor Savings

		Merger filing				Actual				$M Variance	
C2	**Legal**	2001 Level before synrg.	2002 Level before synrg.	Filing 2001 synrg.	Filing 2002 synrg.	2001	2002	Actual 2001 synrg	Actual 2002 synrg	2001 Actual vs Merger Filing	2002 Actual vs Merger Filing
	Col. A	Col. B	Col. C	Col. D	Col. E	Col.F	Col.G	Col.H	Col.I	Col. J	Col. K
B1	Attornerys	11	11	(2)	(2)	9	7	(2)	(4)		$0.3
B2	Support Staff	8	8	(2)	(2)	6	6	(2)	(2)		
B3	Corporate Secretary	1	1					(1)	(1)	$0.2	$0.2
C2	Legal	20	20	(4)	(4)	15	13	(5)	(7)	$0.2	$0.5

NSTAR Merger Savings Report

Savings Area: Corporate & Administrative Labor Summary (continued)

C3. External Relations

MERGER FILING: *Savings occur as a result of reduction of personnel in duplicative operations to be consolidated upon combination. Average 2000 loaded salary is $98,083. Reductions of 6 FTEs or 20.7% of affectable total compares to an average of 24% in recent transactions. See, Exhibit TJF-5C, at 00088.*

Actual Results: Actual results include both External Relations (at 00088) and Economic Development because these areas were integrated. Overall, savings for External Relations were $0.2 million less in 2002 than the MERGER FILING forecast.

Description	Forecast Reductions	Actual Reductions	Variance	Explanation
Public Relations & Economic Development	6	5	-1	Additional focus on local relationships and combining the functional area with economic development
Government Affairs	0	-1	-1	
Total	**6**	**4**	**-2**	

TABLE C3

Merger Filing vs. Actual Labor Savings

		Merger filing				Actual				$M Variance	
C3	**External Relations**	2001 Level before synrg.	2002 Level before synrg.	Filing 2001 synrg.	Filing 2002 synrg.	2001	2002	Actual 2001 synrg.	Actual 2002 synrg.	2001 Actual vs Merger Filing	2002 Actual vs Merger Filing
	Col. A	Col. B	Col. C	Col. D	Col. E	Col.F	Col.G	Col.H	Col.I	Col. J	Col. K
C1	Public Relations (incl H8 Ec Dev)	28	28	(6)	(6)	25	23	(3)	(5)	($0.3)	($0.1)
C2	Governmental Affairs	7	7			7	8		1		($0.1)
C3	External Relations	35	35	(6)	(6)	32	31	(3)	(4)	($0.3)	($0.2)

NSTAR Merger Savings Report

Savings Area: Corporate & Administrative Labor Summary (continued)

C4. Finance, Accounting and Planning

MERGER FILING: Savings occur as a result of overlapping work activities in those sub-functions that are not volume-driven. Average 2000 loaded salary is $82,807. Merger reductions of 40 FTEs, or 25.5% of affectable total compares to 26% in recent transactions. *See, Exhibit TJF-5C, at 00089.*

Actual Results: Overall savings for Finance, Accounting & Planning exceeded the MERGER FILING forecast by $0.1 million in 2002.

Description	Forecast Reductions	Actual Reductions	Variance	Explanation
Finance and Treasury	4	10	6	Additional savings resulted from the use of lockboxes for receipt of funds for both companies, as was the practice of Boston Edison prior to the merger
Payroll Accounting & Admin	2	4	2	Additional personnel reductions resulted from the implementation of a new company-wide payroll system
Accounts Payable	6	7	1	
Property Accounting	5	4	-1	
GL Accounting	10	9	-1	
Internal Audit	5	5	-	
Tax	2	0	-2	
Budgeting	3	-3	-6	The Company implemented additional revenue controls and review, requiring additional personnel. The increase in personnel is offset by the reduction in "Load and Sales Forecasting" as described in item C8 below;
Financial Planning	1	4	3	
Strategic Planning	0	2	2	
Corporate Performance	0	-3	-3	Increased emphasis on performance management and performance measurement;
Investor Relations	2	2	-	
Total	**40**	**41**	**1**	

TABLE C4

Merger Filing vs. Actual Labor Savings

		Merger filing				Actual				$M Variance	
C4	**Finance Accounting & Planning**	2001 Level before synrg.	2002 Level before synrg.	Filing 2001 synrg.	Filing 2002 synrg.	2001	2002	Actual 2001 synrg.	Actual 2002 synrg.	2001 Actual vs Merger Filing	2002 Actual vs Merger Filing
	Col. A	Col. B	Col. C	Col. D	Col. E	Col.F	Col.G	Col.H	Col.I	Col. J	Col. K
D1	Financing &Treasury	18	18	(4)	(4)	7	8	(11)	(10)	$0.7	$0.7
D2	Payroll Accounting & Admin	10	10	(2)	(2)	6	6	(4)	(4)	$0.2	$0.2
D3	Accts Payable & Accts	19	19	(6)	(6)	13	12	(6)	(7)		$0.1
D4	Property Accounting	17	17	(5)	(5)	14	13	(3)	(4)	($0.2)	($0.1)
D5	GL & Corporate Accounting	34	34	(10)	(10)	26	25	(8)	(9)	($0.2)	($0.1)
D6	Internal Audit	17	17	(5)	(5)	12	12	(5)	(5)		
D7	Tax	6	6	(2)	(2)	7	6	1		($0.4)	($0.3)
D8	Budgeting	10	10	(3)	(3)	9	13	(1)	3	($0.2)	($0.6)
D9	Financial Planning	6	6	(1)	(1)	3	2	(3)	(4)	$0.3	$0.4
D10	Strategic Planning	4	4			3	2	(1)	(2)	$0.1	$0.2
D11	Corporate Performance	11	11			9	14	(2)	3	$0.2	($0.3)
D12	Investor Relations	5	5	(2)	(2)	3	3	(2)	(2)		
C4	Finance Accounting & Planning	157	157	(40)	(40)	112	116	(45)	(41)	$0.5	$0.1

NSTAR Merger Savings Report

Savings Area: Corporate & Administrative Labor Summary (continued)

C5. Human Resources

MERGER FILING: *Savings occur as a result of overlapping work in compensation, benefits, training, labor relations, which allow for consolidation of duplicative staff functions. Average 2000 loaded salary is $102,846. Reductions of 18 FTEs, or 17.5% of affectable total, compares to 23% in recent transactions. See, Exhibit TJF-5C, at 00089.*

Actual Results: Overall savings for Human Resources exceeded the MERGER FILING forecast by $0.8 million in 2002, with personnel reductions totaling 28 as compared to the forecast of 18. The incremental reductions resulted from a significant redesign within the Human Resources area that was not contemplated in the original forecast.

Description	Forecast Reductions	Actual Reductions	Variance	Explanation
Compensation	-	-	-	
Benefits	4	-2	-6	The number of benefit programs was reduced, which relieved administration burdens
Staffing	1	-1	-2	Administrative support is assigned directly to the staffing function
Labor Relations	3	5	2	Union consolidation has contributed to the achievement of additional savings
Skills Training	1	1	-	
Management Development	1	4	3	Management Development and Org. Planning & Design are managed within the same group
Employee Relations	3	15	12	Consolidated and streamlined corporate policies are available on the network to all users. Follow up by HR and management reduced the support requirements from HR. Peoplesoft software has also significantly improved employee productivity
Org, Planning & Design	0	-3	-3	
Medical & Health	2	1	-1	Medical & Health was combined with Safety to provide a consolidated service with improved efficiency
Safety	3	4	1	
Administration	0	4	4	
Total	**18**	**28**	**10**	

NSTAR Merger Savings Report

TABLE C5
Merger Filing vs. Actual Labor Savings

		Merger filing				Actual				$M Variance	
C5	**Human Resources**	2001 Level before synrg.	2002 Level before synrg.	Filing 2001 synrg.	Filing 2002 synrg.	2001	2002	Actual 2001 synrg.	Actual 2002 synrg.	2001 Actual vs Merger Filing	2002 Actual vs Merger Filing
	Col. A	Col. B	Col. C	Col. D	Col. E	Col.F	Col.G	Col.H	Col.I	Col. J	Col. K
E1	Compensation	2	2			2	2				
E2	Benefits	13	13	(4)	(4)	15	15	2	2	($0.6)	($0.7)
E3	Staffing	2	2	(1)	(1)	9	3	7	1	($0.7)	($0.2)
E4	Labor Relations	11	11	(3)	(3)	7	6	(4)	(5)	$0.1	$0.3
E5	Skills Training	24	24	(1)	(1)	15	23	(9)	(1)	$0.7	
E6	Management Development	4	4	(1)	(1)	1		(4)	(4)	$0.4	$0.4
E7	Employee Relations	20	20	(3)	(3)	5	5	(15)	(15)	$1.1	$1.2
E8	Organizaitonal Planning & Design	3	3			10	6	7	3	($0.9)	($0.4)
E9	Medical & Health	7	7	(2)	(2)	8	6	1	(1)	($0.4)	($0.1)
E10	Safety	13	13	(3)	(3)	12	9	(1)	(4)	($0.2)	$0.1
E11	HR Administration	4	4					(4)	(4)	$0.2	$0.2
C5	Human Resources	103	103	(18)	(18)	83	75	(20)	(28)	($0.2)	$0.8

NSTAR Merger Savings Report

Savings Area: Corporate & Administrative Labor Summary (continued)

C6. Information Systems

MERGER FILING: *Savings occur as a result of duplicative information systems development and operations personnel. Average 2000 loaded salary is $94,472. Reductions of 68 FTE's (44 FTEs in 2000 and 24 FTEs in 2001), or 28.6% of affectable total compares to an average 27% in recent transactions. See, Exhibit TJF-5C, at 00089.*

Actual Results: Overall savings for Information Systems were $3.3 million less than forecast.

Description	Forecast Reductions	Actual Reductions	Variance	Explanation
Applications System Development	30	16	-14	Information Systems did not achieve the target level of personnel reductions because of the need to provide adequate support and training on the major systems that were integrated to one common system including the Customer Information System, Work Management, Purchasing, General Ledger, Payroll and Human Resources Information System. In addition, significant regulatory requirements such as supplier payment allocation and standard market design have required resources not anticipated in the original estimate of merger savings.
Database Admin.& Security	2	-5	-7	
Computer Operations	25	20	-5	
End User/Information Center	9	4	-5	
Telecommunications	2	4	2	
Total	**68**	**39**	**-29**	

TABLE C6
Merger Filing vs. Actual Labor Savings

		Merger filing				Actual				$M Variance	
C6	**Information Systems**	2001 Level before synrg.	2002 Level before synrg.	Filing 2001 synrg.	Filing 2002 synrg.	2001	2002	Actual 2001 synrg.	Actual 2002 synrg.	2001 Actual vs Merger Filing	2002 Actual vs Merger Filing
	Col. A	Col. B	Col. C	Col. D	Col. E	Col.F	Col.G	Col.H	Col.I	Col. J	Col. K
F1	Applic Systems Developmt	102	102	(30)	(30)	84	86	(18)	(16)	($1.3)	($1.6)
F2	Database Admin & Security	10	10	(2)	(2)	14	15	4	5	($0.7)	($0.8)
F3	Computer Operations	79	79	(25)	(25)	62	59	(17)	(20)	($0.7)	($0.5)
F4	End User/Information Center	29	29	(9)	(9)	23	25	(6)	(4)	($0.3)	($0.6)
F5	Telecommunications	18	18	(2)	(2)	14	14	(4)	(4)	$0.2	$0.2
C6	Information Systems	238	238	(68)	(68)	197	199	(41)	(39)	($2.9)	($3.3)

NSTAR Merger Savings Report

Savings Area: Corporate & Administrative Labor Summary (continued)

C7. Administrative and Support Services

MERGER FILING: *This function includes Transportation, Real Estate, Facilities Maintenance, and Records Management among others. Savings occur as a result of reductions of personnel in duplicative operations to be consolidated upon combination. Average 2000 loaded salary is $75,464. Merger reductions of 43 FTEs or 17% of affectable total compares to an average of 14% in recent transactions. See, Exhibit TJF-5C, at 00089.*

Actual Results: Overall savings for Administrative & Support Services exceeded the MERGER FILING forecast by $1.4 million in 2002.

Description	Forecast Reductions	Actual Reductions	Variance	Explanation
Transportation	16	24	8	Adopted best practices of both companies
Real Estate	4	-3	-7	Increased leasing sales and development effort
Facilities Management	15	13	-2	
Security	-	1	1	
Claims & Insurance Admin	-	2	2	
Office Services	4	11	7	Exceeded facilities consolidation target
Records Management	2	1	-1	
Investigative Services	-	2	2	
Other	2	9	7	
Total	**43**	**60**	**17**	

TABLE C7
Merger Filing vs. Actual Labor Savings

		Merger filing				Actual				$M Variance	
C7	**Administration & Support Services**	2001 Level before synrg.	2002 Level before synrg.	Filing 2001 synrg.	Filing 2002 synrg.	2001	2002	Actual 2001 synrg.	Actual 2002 synrg.	2001 Actual vs Merger Filing	2002 Actual vs Merger Filing
	Col. A	Col. B	Col. C	Col. D	Col. E	Col.F	Col.G	Col.H	Col.I	Col. J	Col. K
G1	Transportation	103	103	(16)	(16)	87	79	(16)	(24)		$0.7
G2	Real Estate	17	17	(4)	(4)	15	20	(2)	3	($0.2)	($0.6)
G3	Facilities Maintenance	85	85	(15)	(15)	72	72	(13)	(13)	($0.2)	($0.2)
G4	Security	2	2			1	1	(1)	(1)	$0.1	$0.1
G5	Claims & Insurance Admin.	8	8			6	6	(2)	(2)	$0.2	$0.2
G6	Office Services	22	22	(4)	(4)	15	11	(7)	(11)	$0.2	$0.5
G7	Records Management	4	4	(2)	(2)	2	3	(2)	(1)		($0.1)
G8	Investigative Services	3	3			3	1		(2)		$0.2
G9	Other	9	9	(2)	(2)			(9)	(9)	$0.5	$0.5
C7	Admin & Support	253	253	(43)	(43)	201	193	(52)	(60)	$0.6	$1.4

NSTAR Merger Savings Report

Savings Area: Corporate & Administrative Labor Summary (continued)

C8. Retail Marketing and Sales

MERGER FILING: *Savings occur as a result of the reduction of duplicative functions in marketing. Average 2000 loaded salary was $88,536 for retail marketing and sales. Merger reductions of 29 FTEs or 12% compares to 11% in recent transactions. See, Exhibit TJF-5C, at 00090.*

Actual Results: Overall savings for Marketing & Sales exceeded the MERGER FILING forecast by $1.6 million in 2002.

Description	Forecast Reductions	Actual Reductions	Variance	Explanation
Load & Sales Forecasting	2	8	6	Additional savings are partially offset by the Revenue Control Group in the Budgeting area as mentioned above
Mkt Products & Sales Plan	2	3	1	
Market & Cust. Research	-	4	4	Additional savings are partially offset by the Revenue Control group in the Budgeting area as mentioned above
Rates & Regulatory	3	13	10	Streamlined filings, improved integration with accounting, and employee development;
DSM	6	-5	-11	Additional DSM work because DSM funding was extended by legislation
Marketing/Sales Rep.	13	18	5	The Company achieved additional savings through an organizational review of the Sales and Marketing functions, job reevaluations and consolidation not anticipated in the original study. In particular, certain functions were consolidated into other organizations to better streamline the forecasting and budgeting functions.
Economic Area Devel.				
Management & Admin	3	4	1	
Total	**29**	**45**	**16**	

TABLE C8
Merger Filing vs. Actual Labor Savings

		Merger filing				Actual				$M Variance	
C8	**Retail Marketing & Sales**	2001 Level before synrg.	2002 Level before synrg.	Filing 2001 synrg.	Filing 2002 synrg.	2001	2002	Actual 2001 synrg.	Actual 2002 synrg.	2001 Actual vs Merger Filing	2002 Actual vs Merger Filing
	Col. A	Col. B	Col. C	Col. D	Col. E	Col.F	Col.G	Col.H	Col.I	Col. J	Col. K
	H1 Load and Sales Forecasting	13	13	(2)	(2)	6	5	(7)	(8)	$0.5	$0.6
	H2 Mkt Products & Sales Plan	8	8	(2)	(2)	9	5	1	(3)	($0.3)	$0.1
	H3 Market & Customer Research	4	4					(4)	(4)	$0.3	$0.3
	H4 Rates and Regulatory Affairs/Pricing	21	21	(3)	(3)	8	8	(13)	(13)	$1.1	$1.1
	H6 DSM	30	30	(6)	(6)	25	35	(5)	5	($0.1)	($1.2)
	H7 Marketing/Sales Representatives	96	96	(13)	(13)	90	78	(6)	(18)	($0.6)	$0.5
	H8 Economic/Area Development										
	H9 Management & Administration	10	10	(3)	(3)	11	6	1	(4)	($0.4)	$0.1
	C8 Retail Marketing & Sales	182	182	(29)	(29)	149	137	(33)	(45)	$0.5	$1.6

NSTAR Merger Savings Report

Savings Area: Corporate & Administrative Labor Summary (continued)

C9. Purchasing and Materials Management

MERGER FILING: *Savings are attributable to overlapping responsibilities in purchasing, Stores and inventory functions. Average 2000 loaded salary is $77,555. Merger reductions of 35 FTEs or 24.5% of the affectable total were taken. See, Exhibit TJF-5C, at 00090.*

Actual Results: Overall savings for Administrative & Support Services exceeded the MERGER FILING forecast by $0.3 million in 2002. Additional reductions in Management and Administration are the result of job consolidations not anticipated in the original savings study.

Description	Forecast Reductions	Actual Reductions	Variance	Explanation
Buyers	5	4	-1	
Purchasing Mgt & Admin	4	7	3	
Inventory Control & Planning	2	3	1	
Storeroom Personnel	20	20	-	
Management & Admin	4	4	-	
Total	**35**	**38**	**3**	

TABLE C9
Merger Filing vs. Actual Labor Savings

		Merger filing				Actual				$M Variance	
C9	**Purchasing & Materials Management**	2001 Level before synrg.	2002 Level before synrg.	Filing 2001 synrg.	Filing 2002 synrg.	2001	2002	Actual 2001 synrg.	Actual 2002 synrg.	2001 Actual vs Merger Filing	2002 Actual vs Merger Filing
	Col. A	Col. B	Col. C	Col. D	Col. E	Col.F	Col.G	Col.H	Col.I	Col. J	Col. K
	J1 Buyers	19	19	(5)	(5)	15	15	(4)	(4)	($0.1)	($0.1)
	J2 Purchasing Management & Admin	15	15	(4)	(4)	8	8	(7)	(7)	$0.3	$0.4
	J3 Inventory Control & Planning	18	18	(2)	(2)	17	15	(1)	(3)	($0.1)	$0.1
	J4 Storeroom Personnel	80	80	(20)	(20)	69	60	(11)	(20)	($0.7)	
	J6 Materials Management & Admin	11	11	(4)	(4)	9	7	(2)	(4)	($0.2)	
C9	Purchasing & Materials Mgt	143	143	(35)	(35)	118	105	(25)	(38)	($0.7)	$0.3

NSTAR Merger Savings Report

Savings Area: Corporate & Administrative Labor Summary (continued)

C10. Customer Service

MERGER FILING: *Savings occur as a result of the reduction of duplicative functions in customer service. Average 2000 loaded salary was $65,622 for customer service. Merger reductions of 44 FTEs or 12% compares to 11% in recent transactions. See, Exhibit TJF-5C, at 00090.*

Actual Results: Overall savings for Customer Service were $0.3 million above the forecast level, excluding the increase in meter readers (77 positions) required to move from a bi-monthly to a monthly meter reading schedule for Boston Edison.

Description	Forecast Reductions	Actual Reductions	Variance	Explanation
Meter Reading	0	0 (excl. 77 new positions for meter readers)	0	The Company's actual employee level in 2002 for this function showed an increase of 77 positions due to the change in the meter-reading schedule to meet service quality requirements, which was not anticipated in the original study. These positions have been excluded from the financial analysis.
Customer/Revenue Acctg	14	27	13	
Cash Remittance/Bill Processing	11	35	24	Increased efficiency by moving customers to lower cost payment options – electronic or draft
Customer Inquiries	8	-22	-30	Improved service levels
Community Outreach	0	3	3	Better technology support through web
Credit & Collections	10	1	-9	Team segregated from Cash Remittance to service credit customers
Revenue Protection	0	4	4	Higher efficiency
Management & Admin	1	0	-1	
Customer Service Total	**44**	**48**	**4**	

TABLE C10
Merger Filing vs. Actual Labor Savings

		Merger filing				Actual				$M Variance	
C10	**Customer Service**	2001 Level before synrg.	2002 Level before synrg.	Filing 2001 synrg.	Filing 2002 synrg.	2001	2002	Actual 2001 synrg.	Actual 2002 synrg.	2001 Actual vs Merger Filing	2002 Actual vs Merger Filing
	Col. A	Col. B	Col. C	Col. D	Col. E	Col.F	Col.G	Col.H	Col.I	Col. J	Col. K
	I1 Meter Reading	125	125			184	202	59	77		
	I2 Customer/Revenue Acctg	65	65	(4)	(14)	21	38	(44)	(27)	$2.8	$1.0
	I3 Cash Remiltance/Bill proces	75	75	(11)	(11)	38	40	(37)	(35)	$1.9	$1.8
	I4 Customer Inquiry	151	151	(2)	(8)	184	173	33	22	($2.6)	($2.3)
	I5 Community Outreach	8	8			5	5	(3)	(3)	$0.2	$0.2
	I6 Credit & Collections	54	54	(8)	(10)	34	53	(20)	(1)	$0.9	($0.7)
	I7 Revenue Protection	11	11			7	7	(4)	(4)	$0.4	$0.4
	I8 Management & Administration	5	5	(1)	(1)	3	5	(2)		$0.1	($0.1)
C10	Customer Service	494	494	(26)	(44)	476	523	(18)	29	$3.8	$0.3

NSTAR Merger Savings Report

Savings Area: Electric Field Labor

C11. Electric Transmission

MERGER FILING: *Electric Transmission includes both system operations and transmission related field employees. In system operations, savings result primarily in supervisory and support functions from the consolidation of dispatch centers, bulk power operations, and engineering support operations. For transmission field employees, savings occur in subfunctions, such as major facilities and construction and engineering and support, as a result of reconfigured geographic coverage area responsibility, potential utilization of mobile construction crews, and reduced need for supervisory personnel. Average 2000 loaded salary is $80,215 for electric transmission personnel. Reductions total 31 FTEs, or 12.4% of affectable total. See, Exhibit TJF-5C, at 00091.*

Actual Results: Overall savings exceeded the MERGER FILING forecast by $0.2 million. On an overall basis, the Company achieved forecasted reductions in the Electric Transmission functions, although expected savings in the Systems Operations or Dispatch area did not occur as estimated. This is because the Company did not combine the Dispatch Centers as suggested in the MERGER FILING. Because of significant differences in the complexity of the urban (Boston) system versus the suburban (Cape Area) system, the Company determined that a combination would not be advisable. However, other functions, such as Management and Administration and Other Functions achieved greater savings than planned as a result of job consolidations and organizations restructuring requiring less management.

Description	Forecast Reductions	Actual Reductions	Variance	Explanation
Bulk System Planning	0	-1	-1	See comment above.
Transmission Engineering	10	12	2	
Transmission Line Crews	0	1	1	
Transformer & Substation Maint.	0	-2	-2	
Systems Operations	10	4	-6	
Electric Systems & SCADA	2	1	-1	
Bulk Power Marketing & Sales	6	7	1	
Management & Admin	3	6	3	
Other	0	3	3	
Total	**31**	**31**	**0**	

TABLE C11

Merger Filing vs. Actual Labor Savings

		Merger filing				Actual				$M Variance	
C11	**Electric Transmission**	2001 Level before synrg.	2002 Level before synrg.	Filing 2001 synrg.	Filing 2002 synrg.	2001	2002	Actual 2001 synrg.	Actual 2002 synrg.	2001 Actual vs Merger Filing	2002 Actual vs Merger Filing
	Col. A	Col. B	Col. C	Col. D	Col. E	Col.F	Col.G	Col.H	Col.I	Col. J	Col. K
		369	369	(26)	(44)	292	321				
	K1 Bulk System Planning	6	6			8	7	2	1	($0.2)	($0.1)
	K2 Transmission Engineering & Suppor	49	49	(10)	(10)	37	37	(12)	(12)	$0.2	$0.2
	K4 Transm.l ine Crews&Mgt	11	11			10	10	(1)	(1)	$0.1	$0.1
	K6 Transformer&Substation Maint	33	33			36	35	3	2	($0.3)	($0.2)
	K8 System Operations	53	53	(10)	(10)	45	49	(8)	(4)	($0.2)	($0.6)
	K9 Elec Systems Com & SCADA	7	7	(2)	(2)	6	6	(1)	(1)	($0.0)	($0.0)
	K11 Bulk Power Mktg & Sales	18	18	(6)	(6)	10	11	(8)	(7)	$0.2	$0.1
	K12 Management & Administration	9	9	(3)	(3)	3	3	(6)	(6)	$0.3	$0.4
	K13 Other combined in K1	7	7			5	4	(2)	(3)	$0.2	$0.4
C11	Electric Transmission	193	193	(31)	(31)	160	162	(33)	(31)	$0.4	$0.2

NSTAR Merger Savings Report

Savings Area: Electric Field

C12. Electric Distribution

MERGER FILING: *Savings occur primarily in management and supervision of subfunctions, such as major facilities and construction and engineering and support, as a result of reconfigured geographic coverage area responsibility, and reduced need for supervisory personnel. Average 2000 loaded salary of $86,085. Reductions total 31 FTEs, or 1.6% of affectable employees. See, Exhibit TJF-5C, at 00092.*

Actual Results: Overall savings for Electric Field exceeded the MERGER FILING forecast by $13.2 million in 2002.

Description	Forecast Reductions	Actual Reductions	Variance	Explanation
Dist. System Planning	2	7	5	The Company realized significant savings in the area of Electric Distribution as a result of exceeding the target level of reductions by 130, including staffing additions in 2001 and 2002 for reliability purposes. These savings were achieved mainly as a result of utilizing the best practices from both companies and through unanticipated productivity gains made possible by the consolidation of adjacent/proximate service territories. An additional area of note is streetlighting. Approximately 38 of the 88 towns in the electric company service territories now own and maintain their streetlights.
Dist. Engineering&Support	14	70	56	
Dist. Facilities Construction	-	48	48	
Dist. Line Crews & Maint	-	29	29	
Transf. & Substation Maint	-	-7	-7	
Meter Shop & Testing	10	-3	-13	
Streetlight Personnel	-	10	10	
Management & Admin	5	13	8	
Other	-	-6	-6	
Total	**31**	**161**	**130**	

NSTAR Merger Savings Report

TABLE C12

Merger Filing vs. Actual Labor Savings

		Merger filing				Actual				$M Variance	
C12	**Electric Distribution**	2001 Level before synrg.	2002 Level before synrg.	Filing 2001 synrg.	Filing 2002 synrg.	2001	2002	Actual 2001 synrg.	Actual 2002 synrg.	2001 Actual vs Merger Filing	2002 Actual vs Merger Filing
	Col. A	Col. B	Col. C	Col. D	Col. E	Col.F	Col.G	Col.H	Col.I	Col. J	Col. K
L1	Distribution System Planning	27	27	(2)	(2)	13	20	(14)	(7)	$1.4	$0.6
L2	Distrib Engineering & Support	228	228	(14)	(14)	150	158	(78)	(70)	$6.3	$5.8
L3	Distrib Facilities Construction	199	199			139	151	(60)	(48)	$5.7	$4.7
L4	Distrib Line Crews & Mgt	704	704			688	675	(16)	(29)	$1.5	$2.8
L6	Transformer&Substation Maint	134	134			129	141	(5)	7	$0.4	($0.7)
L8	Meter Shop & Testing	109	109	(10)	(10)	113	112	4	3	($1.2)	($1.1)
L9	Streetlight Peresonnel	23	23			11	13	(12)	(10)	$1.0	$0.9
L10	Management & Administration	15	15	(5)	(5)	6	2	(9)	(13)	$0.4	$0.9
L11	Other	23	23			24	29	1	6	($0.1)	($0.8)
C12	Electric Distribution	1,462	1,462	(31)	(31)	1,273	1,301	(189)	(161)	$15.5	$13.2

Savings Area: Electric Field Labor

C13. Electric Systems Technical Support

MERGER FILING: *Savings can result from the consolidation of dispatch centers, bulk power operations, and engineering support. Average 2000 loaded salary of $101,139. Reduction of 4 FTEs, or 15.8% of affectable total, compares to an average of 17% in recent transactions. See, Exhibit TJF-5C, at 00092.*

Actual Results: Overall savings exceeded the MERGER FILING forecast by $0.2 million in 2002.

Description	Forecast Reductions	Actual Reductions	Variance	Explanation
Environmental	3	4	1	More efficient use of personnel
Test laboratory	1	2	1	Most of the environmental testing is performed by third-party laboratories
Total	**4**	**6**	**2**	

TABLE C13
Merger Filing vs. Actual Labor Savings

		Merger filing				Actual				$M Variance	
C13	**Electric Systems Technical Support**	2001 Level before synrg.	2002 Level before synrg.	Filing 2001 synrg.	Filing 2002 synrg.	2001	2002	Actual 2001 synrg.	Actual 2002 synrg.	2001 Actual vs Merger Filing	2002 Actual vs Merger Filing
	Col. A	Col. B	Col. C	Col. D	Col. E	Col.F	Col.G	Col.H	Col.I	Col. J	Col. K
S1	Environmental Affairs	14	14	(3)	(3)	9	10	(5)	(4)	$0.2	$0.1
S2	Test Laboratory	6	6	(1)	(1)	4	4	(2)	(2)	$0.1	$0.1
C13	Electric Systems Tech Support	20	20	(4)	(4)	13	14	(7)	(6)	$0.3	$0.2

Savings Area: Gas Field Labor

C14. Gas Operations

MERGER FILING: *No forecast savings.*

Actual Results: Overall savings for Gas Operations were less than the MERGER FILING forecast by $1.3 million in 2002.

Description	Forecast Reductions	Actual Reductions	Variance	Explanation
Distributions	-	-14	-14	Expansion of the distribution system
Transmission	-	-4	-4	
Supply	-	-	-	
Gas Operations Total	**-**	**-18**	**-18**	

Growth initiatives such as Pine Hills, Ponds of Plymouth and Buttermilk Bay as well as in Somerville, Cambridge and other areas required an increase in workforce. In addition, new regulations like Operator Qualifications has caused increased pressure on the gas operations staffing level. It is also worth noting that Dig Safe orders have increased by 50% from pre-merger levels.

TABLE C14
Merger Filing vs. Actual Labor Savings

		Merger filing				Actual				$M Variance	
C14	**Gas Operations**	2001 Level before synrg.	2002 Level before synrg.	Filing 2001 synrg.	Filing 2002 synrg.	2001	2002	Actual 2001 synrg.	Actual 2002 synrg.	2001 Actual vs Merger Filing	2002 Actual vs Merger Filing
	Col. A	Col. B	Col. C	Col. D	Col. E	Col.F	Col.G	Col.H	Col.I	Col. J	Col. K
	LG1 Distrib Engineering & Support	34	34			17	18	(17)	(16)	$1.5	$1.5
	LG3 Street Crews & Management	129	129			169	175	40	46	($3.6)	($4.3)
	LG5 Gas Service Pers and Mgmt	138	138			132	137	(6)	(1)	$0.5	$0.1
	LG6 Meter Shop and Testing	11	11			15	14	4	3	($0.3)	($0.3)
	LG7 Corrosion Control	1	1					(1)	(1)	$0.1	$0.1
	LG8 Management & Administration	22	22			7	5	(15)	(17)	$1.8	$2.1
	Gas Distribution	335	335			340	349	5	14	($0.0)	($0.8)
	KG1 Gas Control and Dispatch	15	15			20	16	5	1	($0.4)	($0.1)
	KG2 Gas Measurement SCADA	13	13			6	5	(7)	(8)	$0.7	$0.8
	KG4 Transmission Pipelines	16	16			23	23	7	7	($0.6)	($0.6)
	KG6 Gas Storage	5	5			5	5				
	KG8 Management & Administration	7	7			11	11	4	4	($0.5)	($0.5)
	Gas Transmission	56	56			65	60	9	4	($0.8)	($0.4)
	GSC1 Supply & Transp. Planning	6	6			6	5		(1)		$0.1
	GSC7 Management Administration	1	1			1	2		1		($0.2)
	Gas Supply	7	7			7	7				($0.1)
C14	Gas Total	398	398			412	416	14	18	($0.8)	($1.3)

D. Savings Area: Administrative & General Overhead

MERGER FILING Rationale for savings: *Administrative and general overhead costs include office supplies, telephone expenses, employee business expenses, and other miscellaneous costs. Examples of variable administrative and general overhead costs include office supplies, telephone expenses, and business expenses. Administrative and general overhead will decrease as corporate personnel are reduced. See, Exhibit TJF-5C, at 000159.*

MERGER FILING Basis for Calculation: *Variable costs were estimated based on discussions with the companies. Detailed expenses charged to account 921 were provided and fixed costs were eliminated, the remaining costs were variable. The weighted average cost per employee was applied to the number of personnel reductions to estimated savings. See, Exhibit TJF-5C, at 00159.*

Quantification of Savings: In the MERGER FILING, savings in non-labor overhead costs were determined by separating fixed and variable components. The weighted average variable cost per employee was then multiplied by the total number of A&G corporate position reductions with the total escalated through 2001 and 2002 using the relevant inflation factor. See, 00046, 00159-160. To calculate savings for this Report, the Company compared actual costs in 2001 and 2002 to the forecast expense levels in the MERGER FILING. Therefore, merger savings equal the difference between the forecast expense levels and the actual expense levels.

Actual Results: On an overall basis, actual savings were $0.7 million less in 2002 than the MERGER FILING forecast. An increase in telephone costs resulted from the use of cellular phones on a company-wide basis to facilitate internal communications, which could not be achieved using existing (disparate) radio systems. However, this course of action enabled the Company to avoid a capital project to build a common communications system. The cost of postage increased due to changes enacted by the USPS. Employee and office supply expenses decreased due to staffing level reductions.

NSTAR Merger Savings Report

TABLE D
2002 Synergies Summary

	Merger Filing				Actual				Variance	
Administrative & General Overhead	2001 Level before synrg.	2002 Level before synrg.	2001 synrg.	2002 synrg.	2001	2002	2001 synrg.	2002 synrg.	2001 Actual vs Merger Filing	2002 Actual vs Merger Filing
Col.A	Col.B	Col.C	Col.D	Col.E	Col.F	Col.G	Col.H	Col.I	Col.J	Col.K
Telephone	$5.6	$5.8	$0.5	$0.6	$7.7	$7.2	($2.1)	($1.4)	($2.6)	($2.0)
Employee Expenses	2.8	2.9	0.3	0.3	2.6	1.9	0.2	1.0	(0.1)	0.7
Postage	4.4	4.6	0.4	0.5	5.2	5.0	(0.7)	(0.5)	(1.1)	(0.9)
Office Supplies	3.1	3.1	0.3	0.3	1.9	1.2	1.2	1.9	0.9	1.6
Total	$15.9	$16.3	$1.5	$1.7	$17.3	$15.3	($1.4)	$1.0	($2.9)	($0.7)
O&M	$15.1	$15.5	$1.5	$1.6	$16.4	$14.6	($1.3)	$0.9	($2.8)	($0.6)
Capitalized	$0.8	$0.8	$0.1	$0.1	$0.9	$0.8	($0.1)	$0.0	($0.1)	($0.0)

E. Savings Area: Public Relations

MERGER FILING Rationale for savings: *The combination of public relations programs eliminates the need for duplicative advertising design and production and will reduce agency fees. Some overlapping coverage from various media will also occur. See, Exhibit TJF-5C, at 00175.*

MERGER FILING Basis for Calculation: *Public Relations services savings fixed production and agency costs were estimated to be 25% of the smaller company fees. Public relations savings were estimated at 100% of the smaller company fees. See, Exhibit TJF-5C, at 00175.*

Quantification of Savings: To calculate savings for this Report, the Company compared actual costs in 2001 and 2002 to the forecast expense levels in the MERGER FILING. Therefore, merger savings equal the difference between the forecast expense levels and the actual expense levels.

Actual Results: The Company achieved savings consistent with the levels forecast in the MERGER FILING.

NSTAR Merger Savings Report

TABLE E
2002 Synergies Summary

	Merger Filing				Actual				Variance	
Public Relations	2001 Level before synrg.	2002 Level before synrg.	2001 synrg.	2002 synrg.	2001	2002	2001 synrg.	2002 synrg.	2001 Actual vs Merger Filing	2002 Actual vs Merger Filing
Col.A	Col.B	Col.C	Col.D	Col.E	Col.F	Col.G	Col.H	Col.I	Col.J	Col.K
Donations	$0.3	$0.4			$0.2	$0.3	$0.1	$0.1	$0.1	$0.1
Advertising - Equipment rental	0.2	0.2	0.1	0.1			0.2	0.2	0.1	0.1
Advertising - New Equipment	0.3	0.4	0.1	0.1			0.3	0.4	0.2	0.2
Advertising - Informational Safety	0.1	0.1	0.0	0.0			0.1	0.1	0.1	0.1
Advertising - Misc	1.4	1.5	0.5	0.5	1.7	1.5	(0.2)	(0.0)	(0.7)	(0.6)
Customer Education	0.8	0.9			0.5	0.5	0.3	0.3	0.3	0.3
Special Services/customer surveys	0.1	0.1			0.2	0.1	(0.2)	(0.0)	(0.2)	(0.0)
Public Relations	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	(0.0)
Communications	0.0	0.0					0.0	0.0	0.0	0.0
Total Public Relations	$3.4	$3.5	$0.7	$0.8	$2.7	$2.5	$0.7	$1.1	($0.0)	$0.3
Lobbying included below the line										
Shanley Flemming					$0.3	$0.3				
Corey Associates										
Total Lobbying					$0.3	$0.3				

F. Savings Area: Benefits Administration

MERGER FILING Rationale for savings: *Cost Savings can occur in several areas, primarily driven by increased purchasing power in negotiating third party administration fees. Savings are also available by reducing the per dollar cost of benefits provided through the combined company through purchasing leverage from the combinations of plans. See, Exhibit TJF-5C, at 00194.*

MERGER FILING Basis for Calculation: *Combined benefit costs were reduced consistent with forecasted personnel reductions. Administrative costs were reduced by 25% to reflect the re-negotiation of administrative fees. In addition, total benefit costs were reduced by 4% to reflect consolidation of provider savings. See, Exhibit TJF-5C, at 00194.*

Quantification of Savings: To calculate savings for this Report, the Company compared actual costs in 2001 and 2002 to the forecast expense levels in the MERGER FILING. Therefore, merger savings equal the difference between the forecast expense levels and the actual expense levels.

Actual Results: Total non-pension benefit costs decreased substantially due to the merger. The benefit cost decrease is a direct function of personnel reductions. Therefore, benefit cost savings were calculated in the savings discussed above in Section C (i.e., employee costs in Section C are grossed up for pensions and benefits). In this section, Mr. Flaherty examined the benefits savings that would result from the reduction in the average cost per employee or per-unit cost (as compared to the total level of savings included in the computations above). In that regard, the MERGER FILING estimated that non-pension benefit costs would escalate at 6.35% (in line with actual increases in regional benefit costs). However, NSTAR costs actually de-escalated at the rate shown below:

Year	Forecast Cost	Actual Cost	Difference
2000	$9.5	$7.7	$1.8
2001	$10.1	$7.1	$3.0
2002	$10.8	$6.8	$4.0

These savings resulted from self insurance of medical plans, lower claims costs, larger employee contributions, elimination of highest cost medical plans, and changes in the design of life insurance plans.

NSTAR Merger Savings Report

TABLE F

2002 Synergies Summary	Merger Filing				Actual				Variance	
Benefits Administration	2001 Level before synrg.	2002 Level before synrg.	Filing 2001 synrg.	Filing 2002 synrg.	2001	2002	Actual 2001 synrg.	Actual 2002 synrg.	2001 Actual vs Merger Filing	2002 Actual vs Merger Filing
Col.A	Col.B	Col.C	Col.D	Col.E	Col.F	Col.G	Col.H	Col.I	Col.J	Col.K
Total	$39.5	$42.0	$1.8	$1.8	$22.9	$21.8	$9.5	$12.8	$7.7	$11.1
O&M (75%)	29.6	31.5	1.4	1.3	17.2	16.3	7.1	9.6	5.8	8.3
Capital (25%)	9.9	10.5	0.5	0.4	5.7	5.4	2.4	3.2	1.9	2.8
Life Insurance - Group Ins.	$1.6	$1.7			$2.2	$2.0				
Life Insurance - Accidental Death Ins.	0.2	0.3								
Life Insurance - Survivor Income Ins.	0.7	0.7								
Total Life Insurance Plans	$2.5	$2.7			$2.2	$2.0	$0.3	$0.7	$0.3	$0.7
Master Medical	$10.5	$11.1			$1.5	$2.3				
HealthFlex Blue	1.6	1.7								
HMO Blue (BC&BS of MA)	0.8	0.9			2.0	1.6				
Blue Care Elect (BC&BS of MA)	8.9	9.4			9.2	7.9				
Blue Cross Blue Shield of Mass.	1.6	1.7								
Tufts Community Health Plan	0.9	0.9			0.5	0.6				
Harvard/Pilgrim Health Care	4.1	4.4			2.0	1.4				
Prescription Drug	3.2	3.4			2.4	3.0				
Medex	0.0	0.1								
Dental										
Active Employees- Delta Dental	3.3	3.5			2.5	2.5				
Active Employees-Dental Blue	0.6	0.7								
Vision	0.5	0.6			0.3	0.3				
Total Health Plans	$36.0	$38.3			$20.4	$19.6	$15.6	$18.7	$15.6	$18.7
Long term disability	$1.0	$1.1			$0.3	$0.3				
Business Travel Accident	0.0	0.0								
Voucher Program	0.0	0.0								
Total Other Plans	$1.1	$1.1			$0.3	$0.3	$0.7	$0.9	$0.7	$0.9
Total Benefits Costs	$39.5	$42.0			$22.9	$21.8	$16.6	$20.3	$16.6	$20.3

G. Savings Area: Insurance

MERGER FILING Rationale for savings: *the combined company will be able to extend its coverage with its carriers over a larger asset and loss experience base, which will reduce its overall cost. Combination of the insurance programs will also provide an opportunity to reassess needed coverage levels and related deductibles based on the loss experience and risk profile of the combined company. . See, Exhibit TJF-5C, at 00201-202.*

MERGER FILING Basis for Calculation: *Property insurance cost savings were computed based on 10% of combined policy costs: 25% was cut from both excess liability and Directors & Officers liability. 100% of the smaller company's fiduciary and crime costs are saved. Excess and bond workers compensation savings are derived from 100% of the smaller company's costs. All of Crimson's (COM/Energy's) Employment Practice and Professional Liability insurance costs are cut with the assumption that they will be covered in Excess Liability. See, Exhibit TJF-5C, at 00194.*

Quantification of Savings: To calculate savings for this Report, the Company compared actual costs in 2001 and 2002 to the forecast expense levels in the MERGER FILING. Therefore, merger savings equal the difference between the forecast expense levels and the actual expense levels.

Actual Results: The Company achieved significant reductions in this area as a result of the merger and changes in the types of policies purchased by the Company. In addition, in the years since the merger, the Company has experienced significant cost increases in insurance premiums because of the terrorist incidents, the collapse of major companies such as Enron, WorldCom and TYCO, and declining returns on investments in the insurance industry. These factors have most directly affected markets for Property, Liability, Workers Compensation and Directors and Officers insurance.

NSTAR Merger Savings Report

TABLE G
2002 Synergies Summary

	Merger Filing				Actual				Variance	
Insurance	2001 Level before synrg.	2002 Level before synrg.	2001 synrg.	2002 synrg.	2001	2002	2001 synrg.	2002 synrg.	2001 Actual vs Merger Filing	2002 Actual vs Merger Filing
Col.A	Col.B	Col.C	Col.D	Col.E	Col.F	Col.G	Col.H	Col.I	Col.J	Col.K
Property	$1.2	$1.3	$0.1	$0.1	$1.7	$2.8	($0.4)	($1.5)	($0.5)	($1.6)
Excess Liability	2.7	2.8	0.7	0.7	0.8	1.6	1.9	1.2	1.2	0.5
General Liability	0.5	0.5	0.2	0.2	0.5	0.2	(0.0)	0.3	(0.2)	0.1
Directors & Officers	1.4	1.4	0.3	0.3	0.4	0.5	1.0	0.9	0.6	0.5
Workers Comp	1.0	1.0	0.1	0.1	0.2	0.2	0.8	0.7	0.6	0.6
Total	$6.7	$6.9	$1.5	$1.5	$3.6	$5.3	$3.1	$1.6	$1.7	$0.1

Ha. Savings Area: Information Systems - Capital

MERGER FILING Rationale for savings: *Capital savings will result from the avoidance and elimination of duplicate or unnecessary system development expenditures and the extension of a common IT infrastructure and architecture across the combined company. Additionally the combined entity will avoid system development costs going forward and realize the benefits of developing applications on a common platform rather than each company expending capital separately. See, Exhibit TJF-5C, at 00205.*

MERGER FILING Basis for Calculation: *Parallel efforts for specific systems by both companies can be avoided. Projected capital expenditures associated with the development of duplicative systems and future applications development have been converted to revenue requirements assuming a 6 year depreciable life converting to a 27.4% annual fixed charge rate. Assumed future expenditures on CIS, financials, work management and trouble management systems beyond 2000 are assumed avoidable for one company with migration to the common architecture and platform. See, Exhibit TJF-5C, at 00205.*

Quantification of Savings: To calculate savings for this Report, the Company compared actual costs in 2001 and 2002 to the forecast expense levels in the MERGER FILING. Therefore, merger savings equal the difference between the forecast expense levels and the actual expense levels.

Actual Results: Significant capital savings were achieved by consolidating systems, as follows:

- **Customer Support**: The Company consolidated all customer information on CIS system, eliminating CIRS and Inerlynx. This avoided the upgrade/replacement for the eliminated systems achieving the forecasted MERGER FILING savings of $15 million.
- **Supply Chain**: NSTAR retired GRACE and now utilizes a common INDUS platform.
- **Human Resources**: NSTAR converted to a modern software program, Peoplesoft, with continued use of BETAs for the time entry system. GEAC, Tesseract and OASIS were retired.
- **Financial Management**: NSTAR converted to Oracle and GRACE was discontinued. This consolidation eliminated the upgrade to the GRACE financials achieving the forecasted MERGER FILING savings of $5 million.
- **Work Management**: The conversion is ongoing – a single common platform is being or will be utilized, saving the replacement/upgrade cost of $2.5 million forecast in the MERGER FILING.
- **Energy Management**: NSTAR integrated the SCADA controls.
- **Shareholder System**: Activity outsourced and system retired.

TABLE Ha

2002 Synergies Summary

Information Systems Capital	Merger Filing				Actual				Variance	
	2001 Level before synrg.	2002 Level before synrg.	2001 synrg.	2002 synrg.	2001	2002	2001 synrg.	2002 synrg.	2001 Actual vs Merger Filing	2002 Actual vs Merger Filing
Col.A	Col.B	Col.C	Col.D	Col.E	Col.F	Col.G	Col.H	Col.I	Col.J	Col.K
Work Stations - Pg H9, H23	$2.0	$2.0	$0.2	$0.2	$1.0	$0.6	$0.3	$0.3	$0.1	$0.1
Projects (Development) - Pg HC, H15			14.6	10.8			14.6	10.8	0.0	0.0
Total Capital	$2.0	$2.0	$14.8	$11.0	$1.0	$0.6	$14.9	$11.1	$0.1	$0.1

Hb. Savings Area: Information Systems – O&M/PCs

MERGER FILING Rationale for savings: *Cost savings will be realized from the avoidance of leasing PCs due to the reduced number of positions requiring workstations. Savings will also occur due to the elimination of software and hardware leases, and associated maintenance, resulting from the migration to a common operating platform. See, Exhibit TJF-5C, at 00206.*

MERGER FILING Basis for Calculation: *PC savings were estimated from the corporate and administrative labor position reductions multiplied by the savings per personal computer (hardware and software). Data center and application savings were estimated by increasing Clipper's(BEC Energy's) current costs by 25% to accommodate Crimson's (COM/Energy's) operations, then reducing or eliminating Crimson's(COM/Energy's) non-labor operating expenses. See, Exhibit TJF-5C, at 00206.*

Quantification of Savings: To calculate savings for this Report, the Company compared actual costs in 2001 and 2002 to the forecast expense levels in the MERGER FILING. Therefore, merger savings equal the difference between the forecast expense levels and the actual expense levels.

Actual Results are as follows:

- **Data center** savings were achieved through the elimination of a duplicate data center and the use of the IBM mainframe that allows the Company to pay for only the amount of mainframe usage that it needs. This saved $3.5 million in 2002 compared to the MERGER FILING forecast savings of $2.3 million.
- **Workstation** savings were achieved by the reduction in the number of workstations, (>400), and a change in the life cycle replacement cycle, (an average of 2-3 years to 3-4 years). Workstation costs have significantly declined over the last few years and have also contributed to the savings but are not the result of the Merger. Offsetting these savings is a significant increase in the cost of software licenses for desktop software programs, (Microsoft Office products). Overall savings in 2002 exceeded the MERGER FILING forecast by $0.1 million.
- **Applications:** Savings from the applications arise from the reduction in the number of systems as outlined on the previous page.
- **Telecommunications**: Costs were reduced due to the consolidation of COM/Energy facilities with the internal NSTAR phone system. Prior communications between the Cape/Plymouth, Southboro and Cambridge areas were long distance. There were significant increases in pager prices offset by a reduction in the number of pagers. Phone cost increased due to the increase in the number of cellular phones to field personnel in lieu of a new common radio system that may be scheduled for consolidation in the 2004 timeframe.

NSTAR Merger Savings Report

TABLE Hb
2002 Synergies Summary

	Merger Filing				Actual				Variance	
Information Systems - O&M/PCs	2001 Level before synrg.	2002 Level before synrg.	2001 synrg.	2002 synrg.	2001	2002	2001 synrg.	2002 synrg.	2001 Actual vs Merger Filing	2002 Actual vs Merger Filing
Col.A	Col.B	Col.C	Col.D	Col.E	Col.F	Col.G	Col.H	Col.I	Col.J	Col.K
Category & Page Reference	Note TJF assumed most savings to phase in over three years				This assumes all in year one					
O&M										
Data Center - PG H6, H22	$8.6	$8.6	$2.2	$2.3	$6.9	$5.2	$1.8	$3.5	($0.4)	$1.2
Work Stations - Pg H9, H23	0.2	0.2	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Applications (Maint.) Pg HD, H5, H24	4.1	4.2	0.2	0.2	0.9	1.1	3.2	3.1	3.0	2.9
Telecommunications - Pg H26	5.6	5.6	0.2	0.2	3.9	4.1	1.7	1.5	1.6	1.2
Total O & M	$18.5	$18.6	$2.6	$2.8	$11.7	$10.5	$6.8	$8.2	$4.2	$5.4

NSTAR Merger Savings Report

I. Savings Area: Professional Services

MERGER FILING Rationale for savings: *The combined company will consolidate and reduce professional services activities through economies of scope and elimination of non-recurring duplicate services and increased utilization of a broader skill base. Audit cost savings are similar with additional audit services (e.g. bond insurance letters, pension plan audits, stock issuance) reduced as a result of duplication. Similar legal expenditures (regulatory and corporate) can be reduced due to redundancy and duplication. Professional fees can be reduced due too increased purchasing power and internal expertise of the combined entity. See, Exhibit TJF-5C, at 00249.*

MERGER FILING Basis for Calculation: *Savings for audit fees are based upon estimated 30% reduction in the audit fee expense for the smaller company. Savings for business management are based on a 75% reduction of the smaller company costs. Legal services were reduced by 20% of the total Merger company expense on the basis that duplicative activities can be eliminated, more work can be performed in-house, and external professional fees can be reduced due too increased purchasing power and internal expertise of the combined entity. See, Exhibit TJF-5C, at 00249.*

Quantification of Savings: To calculate savings for this Report, the Company compared actual costs in 2001 and 2002 to the forecast expense levels in the MERGER FILING. Therefore, merger savings equal the difference between the forecast expense levels and the actual expense levels.

Actual Results: Audit expenses increased slightly in comparison to the forecast due to the increased audit requirements and financial controls under federal law because of recent accounting scandals. Business management consultants showed savings of $(0.3) million compared to targeted savings of $0.8 million and legal costs showed savings of $2.0 million compared to a target of $1.7 million.

TABLE I
2002 Synergies Summary

	Merger Filing				Actual				Variance	
Professional Services	2001 Level before synrg.	2002 Level before synrg.	2001 synrg.	2002 synrg.	2001	2002	2001 synrg.	2002 synrg.	2001 Actual vs Merger Filing	2002 Actual vs Merger Filing
Col.A	Col.B	Col.C	Col.D	Col.E	Col.F	Col.G	Col.H	Col.I	Col.J	Col.K
Audit	$0.9	$0.9	$0.1	$0.1	$1.0	$1.1	($0.1)	($0.1)	($0.3)	($0.3)
Business Mgt	5.0	5.3	0.8	0.8	4.7	5.6	0.3	(0.3)	(0.5)	(1.1)
Legal	8.0	8.4	1.6	1.7	5.9	6.4	2.1	2.0	0.5	0.3
Total	$14.0	$14.6	$2.5	$2.6	$11.7	$13.0	$2.2	$1.6	($0.3)	($1.1)

J. Savings Area: Facilities

MERGER FILING Rationale for savings: *The combined company will only need one corporate office. The new company will also consolidate other selected facilities: Service Centers, Garages, Data Centers, Meter Shops and Warehousing. Consolidation of corporate and administrative labor and subsequent personnel reductions will result in reduced office space requirements. Savings will be realized from reduced space requirements at the new facility. Additional opportunities exist to relocate certain non-core corporate functions to underutilized, lower cost facilities in the system and further reduce space requirements at the headquarters building. See, Exhibit TJF-5C, at 00264-67.*

MERGER FILING Basis for Calculation: *Geographically proximate field facilities will be consolidated where feasible. Savings will be realized from the elimination of the operating cost of these facilities and through selling or subletting vacant properties (Framingham, Dedham, Blackstone, Third Street). Corporate space savings are based on corporate labor reductions, weighted average space per employee (250 sqft) and assumed rent price for the new corporate facility ($30.0 per sqft). Both companies currently plan to move corporate facilities to new locations by 01/01/01 regardless of Merger plans. The Merger would allow relocation to a single site. Further space savings at this site result from relocating noncore corporate functions to underutilized, lower cost facilities currently in the system. See, Exhibit TJF-5C, at 00264-67.*

Quantification of Savings: To calculate savings for this Report, the Company compared actual costs in 2001 and 2002 to the forecast expense levels in the MERGER FILING. Therefore, merger savings equal the difference between the forecast expense levels and the actual expense levels.

Actual Results: O&M savings of $4.2 million in 2002 slightly exceeded the MERGER FILING forecast level. The bulk of the savings were forecast to be available as a result of the reduction of costs at the Prudential Center offices. The savings have been less than forecast due to a decrease in the market prices for subletting the floors and relocating the 16th floor from the Prudential Center to the new Summit building in late 2002-03. The Blackstone savings are included in the 2002 result because the sale agreement was signed in late 2002. In terms of the sale of properties, the savings ($17.5 million) greatly exceeded the forecast level ($1.0 million), due in great part to the Blackstone property selling for much more than forecast.

NSTAR Merger Savings Report

TABLE J
2002 Synergies Summary

Facilities	Merger Filing				Actual				Variance	
	2001 Level before synrg.	2002 Level before synrg.	2001 synrg.	2002 synrg.	2001	2002	2001 synrg.	2002 synrg.	2001 Actual vs Merger Filing	2002 Actual vs Merger Filing
	Col.B	Col.C	Col.D	Col.E	Col.F	Col.G	Col.H	Col.I	Col.J	Col.K
Prudential Tower	$4.3	$4.4	$3.0	$3.1	$4.1	$2.1	$0.2	$2.2	($2.9)	($0.8)
Prudential Complex - Customer Service Center	0.0	0.0					0.0	0.0	0.0	0.0
Prudential Tower, Basement - Storage	0.0	0.0					0.0	0.0	0.0	0.0
Dartmouth Street					0.9	0.8	(0.9)	(0.8)	(0.9)	(0.8)
University Ave.					0.8	0.2	(0.8)	(0.2)	(0.8)	(0.2)
Summit					2.2	3.1	(2.2)	(3.1)	(2.2)	(3.1)
West Street	0.1	0.1					0.1	0.1	0.1	0.1
Arlington Meter Reading	0.0	0.0					0.0	0.0	0.0	0.0
West Roxbury Meter Reading	0.0	0.0					0.0	0.0	0.0	0.0
Hyde Park Revenue Recovery	0.0	0.0					0.0	0.0	0.0	0.0
Fields Corner Customer Service	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0
Mystic Mall Customer Service	0.0	0.0			0.0		0.0	0.0	0.0	0.0
Plymouth - Nuclear Training	0.2	0.2					0.2	0.2	0.2	0.2
Framingham Service Center	0.4	0.4	0.4	0.4	0.1	0.2	0.2	0.2	(0.2)	(0.3)
Hyde Park Service Center	0.2	0.2			0.1		0.1	0.2	0.1	0.2
Maynard Service Center										
Somerville Service Center	0.4	0.4			0.4	0.3	(0.0)	0.1	(0.0)	0.1
Walpole Service Center	0.3	0.3			0.2	0.2	0.2	0.1	0.2	0.1
Woburn Service Center	0.0	0.0					0.0	0.0	0.0	0.0
Waltham Service Center	0.3	0.3			0.4	0.3	(0.1)	0.0	(0.1)	0.0
Boston Service Center - Garage	2.4	2.5			1.2	1.7	1.2	0.7	1.2	0.7
Boston Svc Center - Bldg B										
Boston Svc Center - Bldg A										
Boston Svc Center - Energy Management Center										
Watertown Materials Management Center	2.5	2.6			1.3		1.2	2.6	1.2	2.6
Wareham Central Office	0.8	0.9			0.7	0.3	0.1	0.6	0.1	0.6
Wareham Garage/Facilities Shop	0.2	0.2			0.2	0.2	0.0	0.0	0.0	0.0
Wareham - Carver Road										
Cambridge - Blackstone Street	0.2	0.2	0.2	0.2	0.5	0.3	(0.3)	(0.1)	(0.5)	(0.3)
New Bedford	0.7	0.7					0.7	0.7	0.7	0.7
Plymouth - Summer Street	0.4	0.4			0.3	0.3	0.1	0.1	0.1	0.1
Yarmouth - Willow Street	0.5	0.5			0.5	0.5	0.0	(0.0)	0.0	(0.0)
Orleans	0.0	0.0					0.0	0.0	0.0	0.0
Vineyard Haven/Oak Bluffs	0.1	0.1			0.1	0.0	0.0	0.1	0.0	0.1
Cambridge - Main Street					0.3	0.1	(0.3)	(0.1)	(0.3)	(0.1)
Southboro	0.6	0.6			1.2	0.7	(0.6)	(0.1)	(0.6)	(0.1)
Cambridge	0.4	0.4	0.4	0.4	0.3	0.1	0.0	0.3	(0.3)	(0.1)
Dedham/Hydepark	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	(0.0)	(0.0)
New Bedford	0.7	0.7			0.8	0.7	(0.1)	(0.0)	(0.1)	(0.0)
Plymouth - Samoset Street	0.0	0.0					0.0	0.0	0.0	0.0
Worcester	0.2	0.2			0.2	0.2	0.0	0.0	0.0	0.0
Total	$16.1	$16.5	$4.1	$4.2	$17.0	$12.3	($0.9)	$4.2	($5.0)	$0.0
Capital Savings										
Dedham Garage			$0.3						($0.3)	
Church Street - Vineyard Haven								0.7		0.7
Samoset Street - Plymouth							1.0		1.0	
Nason Street - Maynard (1999)							0.3		0.3	
Bay Ridge Road - Orleans							0.6		0.6	
Bussey St - Dedham										
Blackstone			0.3					14.6	(0.3)	14.6
Third Street Cambridge			0.4						(0.4)	
Total Capital Savings			$1.0				$2.0	$15.3	$0.9	$15.3

K. Savings Area: Shareholder Services

MERGER FILING Rationale for savings: *Cost savings will result through the elimination of duplicative shareholder related activities such as conducting the annual shareholder meeting, proxy services and payment of stock exchange fees. The combination will reduce incremental costs per additional shareholder due to economies of scale. Savings due to shareholder overlap are included. See, Exhibit TJF-5C, at 00321.*

MERGER FILING Basis for Calculation: *Duplicative costs are reduced by the percentage savings realizable through consolidation of fixed cost services. Annual report costs were reduced by 100% of the smaller cost. Proxy services costs were reduced by 100% of the smaller cost. & 5% of the smaller company's annual meeting costs were saved. 75% of the smaller NYSE fees were saved. 25% of all other costs of the smaller company were saved. Stock exchange cost was reduced by 10% of the smaller company cost. See, Exhibit TJF-5C, at 00321.*

Quantification of Savings: To calculate savings for this Report, the Company compared actual costs in 2001 and 2002 to the forecast expense levels in the MERGER FILING. Therefore, merger savings equal the difference between the forecast expense levels and the actual expense levels.

Actual Results: Actual savings exceeded the MERGER FILING forecast by $0.5 million. Actual savings have occurred in both labor and non-labor categories associated with Shareholder Services. On the non-labor side, some savings has occurred due to the combined size of NSTAR (such as the NYSE Stock Listing Fee). However, other costs savings have occurred due to productivity improvements, new contracts negotiated since the Merger (example the Stock Transfer Agent Services Contract), changes in how the area operates (example quarterly reports to shareholders have been eliminated and replaced with one mid-year report).

NSTAR Merger Savings Report

TABLE K
2002 Synergies Summary

	Merger Filing				Actual				Variance	
Shareholder Services	2001 Level before synrg.	2002 Level before synrg.	2001 synrg.	2002 synrg.	2001	2002	2001 synrg.	2002 synrg.	2001 Actual vs Merger Filing	2002 Actual vs Merger Filing
Col.A	Col.B	Col.C	Col.D	Col.E	Col.F	Col.G	Col.H	Col.I	Col.J	Col.K
Stock Transfer	$0.7	$0.7	$0.0	$0.0	$0.4	$0.4	$0.3	$0.3	$0.3	$0.3
Annual Meeting - facility	0.1	0.1	0.0	0.0	0.2	0.1	(0.1)	(0.1)	(0.1)	(0.1)
Annual Meeting - Proxy	0.1	0.1	0.0	0.0			0.1	0.1	0.1	0.1
Annual Report	0.2	0.3	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1
Quarterly Report	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0
Stock Exchange fees	0.1	0.1	0.0	0.0			0.1	0.1	0.1	0.1
Total	$1.2	$1.3	$0.2	$0.2	$0.6	$0.6	$0.6	$0.7	$0.5	$0.5

L. Savings Area: Vehicles

MERGER FILING Rationale for savings: *The combined company will reduce the total number of corporate A&G employees. Due to this reduction, the new company will use fewer passenger cars. Savings will be realized through reduced total operating costs for passenger cars. See, Exhibit TJF-5C, at 00330.*

MERGER FILING Basis for Calculation: *Savings are based on weighted average passenger car cost per corporate employee $338 and corporate labor reduction (252). See, Exhibit TJF-5C, at 00330.*

Quantification of Savings: To calculate savings for this Report, the Company compared actual costs in 2001 and 2002 to the forecast expense levels in the MERGER FILING. Therefore, merger savings equal the difference between the forecast expense levels and the actual expense levels.

Actual Results: The MERGER FILING forecast vehicle savings of 19 (i.e., from 91 vehicles to 72). The actual savings were 39 vehicles. The additional savings were offset, in part, by an increase in the average cost per unit. The higher cost per vehicle appears to be an understatement of the average cost in 1997 rather than an increase in actual cost. The basis for the 1997 costs was not available but it did not appear to include costs for the vehicles share of fleet mechanic costs, insurances and other miscellaneous vehicle costs.

NSTAR Merger Savings Report

TABLE L
2002 Synergies Summary

	Merger Filing				Actual				Variance	
Vehicles	2001 Level before synrg.	2002 Level before synrg.	2001 synrg.	2002 synrg.	2001	2002	2001 synrg.	2002 synrg.	2001 Actual vs Merger Filing	2002 Actual vs Merger Filing
Col.A	Col.B	Col.C	Col.D	Col.B	Col.F	Col.G	Col.H	Col.I	Col.J	Col.K
Total Cars & Trucks $	$0.5	$0.5	$0.1	$0.1	$0.3	$0.3	$0.2	$0.2	$0.1	$0.1
Trucks					Number of VEHICLES					
Asset Management	8	8	2	2	4	4	4	4	2	2
Call Center					1	1	(1)	(1)	(1)	(1)
Economic Development	6	6	1	1			6	6	5	5
Employee Development	1	1					1	1	1	1
Executive Vehicles (not included by TJF for BEC(	18	18	4	4	4	3	14	15	10	11
Government Affairs	3	3	1	1			3	3	2	2
Human Resources					2	2	(2)	(2)	(2)	(2)
NIS Client Support	1	1			2	2	(1)	(1)	(1)	(1)
Corporate Pool Cars	7	7	1	1			7	7	6	6
Safety & Health	5	5	1	1	6	6	(1)	(1)	(2)	(2)
Security	8	8	2	2			8	8	6	6
Volume Service - Sales	9	9	2	2			9	9	7	7
Total Trucks	66	66	14	14	19	18	47	48	33	34
Cars										
Asset Management	2	2			4	4	(2)	(2)	(2)	(2)
Economic Development	1	1					1	1	1	1
Environmental Affairs	1	1			2	2	(1)	(1)	(1)	(1)
Employee Development	1	1					1	1	1	1
Executive Vehicles	1	1			3	5	(2)	(4)	(2)	(4)
Mail Room					1	1	(1)	(1)	(1)	(1)
NIS Client Support	4	4	1	1	5	5	(1)	(1)	(2)	(2)
NIS Network Support					1	1	(1)	(1)	(1)	(1)
Coroporate Pool Cars	3	3	1	1			3	3	2	2
Sales Support	3	3	1	1			3	3	2	2
Volume Service - Sales	9	9	2	2	3	3	6	6	4	4
Total Cars	25	25	5	5	19	21	6	4	1	(1)
Total Cars & Trucks	91	91	19	19	38	39	53	52	34	33
Total Cost $M					$0.328	$0.337				
Average cost per vehicle	$0.005	$0.006			$0.009	$0.009	($0.003)	($0.003)	($0.003)	($0.003)

M. Savings Area: Directors' Fees

MERGER FILING Rationale for savings: *Directors' fees savings not present.*

MERGER FILING Basis for Calculation: *None.*

Actual Results: Overall savings for Directors' Fees exceeded the MERGER FILING forecast by $0.6 million in 2002. Although no savings were forecast in the MERGER FILING, there were significant savings due to the reduction in the number of directors from 24 to 12. Based on the reduction in the number of directors, the savings are $0.6 million in 2002. The average cost per director has risen during this period due, in part, to the added responsibility and risk following the Enron situation and other financial market disclosures.

NSTAR Merger Savings Report

TABLE M
2002 Synergies Summary

	Merger Filing				Actual				Variance	
Directors Fees	2001 Level before synrg.	2002 Level before synrg.	2001 synrg.	2002 synrg.	2001	2002	2001 synrg.	2002 synrg.	2001 Actual vs Merger Filing	2002 Actual vs Merger Filing
Col.A	Col.B	Col.C	Col.D	Col.E	Col.F	Col.G	Col.H	Col.I	Col.J	Col.K
Payments	$0.7	$0.7			$0.6	$0.6	$0.3	$0.6	$0.3	$0.6
Total	$0.7	$0.7			$0.6	$0.6	$0.3	$0.6	$0.3	$0.6
Directors #	24.0	24.0			16.0	12.3	8.0	11.7	8.0	11.7
Average Cost/Director	$0.028	$0.029			$0.039	$0.050	$0.039	$0.050	$0.039	$0.050

Note: Savings are based on the reduction in the number of directors

N. Savings Area: Association Dues

MERGER FILING Rationale for savings: *Savings were calculated from both the EEI membership dues model and other dues. EEI's dues model includes decreased rates after the first 500,000 customers and $500 million in electric revenue, decreasing the cost for the combines new company with greater revenue and a larger customer base as compared with two stand-alone companies. See, Exhibit TJF-5C, at 00338.*

MERGER FILING Basis for Calculation: *The new company will have over 367 thousand customers and $500 million dollars of electric revenue that now qualify for the lower rate in the EEI dues calculation model. Of the 1,029,345 million new company combined customers, 500 thousand are subject to the higher rate versus 867 thousand in the combined companies. Of the $2,465 million in electric revenue, $500 million rather than $1 billion is now subject to the higher rate. 10% of the association dues were reduced from the combined company for assumed overlap. See, Exhibit TJF-5C, at 00338.*

Quantification of Savings: To calculate savings for this Report, the Company compared actual costs in 2001 and 2002 to the forecast expense levels in the MERGER FILING. Therefore, merger savings equal the difference between the forecast expense levels and the actual expense levels.

Actual Results: Overall savings for Association Dues exceeded the MERGER FILING forecast by $0.2 million in 2002, primarily because the reduction in EEI dues was greater than forecast. The MERGER FILING summary included Corey Associates in error as this was a public-relations expense and it also excluded several other dues, most of which were associated with the gas business. Therefore, other than EEI dues, there was not significant overlap between the two companies. Additional savings arose mainly from the increases in dues being lower than forecast.

NSTAR Merger Savings Report

TABLE N
2002 Synergies Summary

	Merger Filing				Actual				Variance	
Association Dues	2001 Level before synrg.	2002 Level before synrg.	2001 synrg.	2002 synrg.	2001	2002	2001 synrg.	2002 synrg.	2001 Actual vs Merger Filing	2002 Actual vs Merger Filing
Col.A	Col.B	Col.C	Col.D	Col.E	Col.F	Col.G	Col.H	Col.I	Col.J	Col.K
Edison Electric Institute	$0.8	$0.8	$0.2	$0.2	$0.5	$0.5	$0.2	$0.2	$0.0	$0.0
Greater Boston Chamber of Commerce	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(0.0)	0.0
AIM	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Corey Associates (incl in public relations)			0.0	0.0					(0.0)	(0.0)
Boston Municipal Research Bureau	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(0.0)	(0.0)
Massachusetts Business Roundtable	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Massachusetts Insight	0.0	0.0	0.0	0.0	0.0	0.0	(0.0)	(0.0)	(0.0)	(0.0)
Mass Taxpayers Foundation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE Council	0.0	0.0	0.0	0.0	0.0	0.0	(0.0)	(0.0)	(0.0)	(0.0)
Jobs for Mass	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(0.0)	0.0
Greater Boston C&V Bureau	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Env Business Council	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0
Flanagan	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal	$1.0	$1.0	$0.2	$0.2	$0.7	$0.7	$0.3	$0.3	$0.0	$0.0
Items not included in TJF analysis										
American Gas Association	0.2	0.2			0.1	0.2	0.1	0.1	0.1	0.1
New England Gas Association	0.2	0.2			0.2	0.2	0.0	0.0	0.0	0.0
Cambridge Cahmber of Commerce	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0
Massachusetts High Tech Council	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0
National Association of Industrial & Office Pı	0.0	0.0			0.0	0.0	(0.0)	(0.0)	(0.0)	(0.0)
Massachusetts Alliance for Economic Develoı	0.1	0.1			0.1	0.1	0.0	0.0	0.0	0.0
Worcester Regional Chamber of Commerce	0.0	0.0				0.0	0.0	0.0	0.0	0.0
Worcester Mun Research Bureau	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0
Total	$1.5	$1.5	$0.2	$0.2	$1.1	$1.1	$0.4	$0.4	$0.2	$0.2

O. Savings Area: R&D

MERGER FILING Rationale for savings: *Not applicable.*

MERGER FILING Basis for Calculation: *Not present.*

Actual Results: The Companies had no R&D function and therefore no merger-related synergies

NSTAR Merger Savings Report

TABLE O
2002 Synergies Summary

	Merger Filing				Actual				Variance	
R&D	2001 Level before synrg.	2002 Level before synrg.	2001 synrg.	2002 synrg.	2001	2002	2001 synrg.	2002 synrg.	2001 Actual vs Merger Filing	2002 Actual vs Merger Filing
Col.A	Col.B	Col.C	Col.D	Col.E	Col.F	Col.G	Col.H	Col.I	Col.J	Col.K
R&D	$0.0	$0.0							$0.0	$0.0
Total	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0

P. Savings Area: Credit Facilities

MERGER FILING Rationale for savings: *Neither of the companies fully utilizes their respective credit lines. The combined company will be in a better position to schedule its cash flow needs and will be able to reduce the level of combined credit lines. Savings will be realized through avoided commitment fees on the underway credit lines. See, Exhibit TJF-5C, at 00353.*

MERGER FILING Basis for Calculation: *The reduction in the combined credit lines will be $60 million. The commitment fees for this amount, based on current credit rating is $331,000. See, Exhibit TJF-5C, at 00353.*

Quantification of Savings: The calculation of savings varied from the method used in the majority of the Report where total actual costs are compared to total forecast costs. This is because the overall lines of credit increased significantly, resulting in an increase of total actual commitment fees as compared to the MERGER FILING forecast. However, without the rate decrease commitment fee, costs would have increased by an even larger amount. The total commitment fees increased because the cash requirement increased the required level of the credit lines. The cash flow requirement was driven by the increase in deferrals of Transmission, Transition, Standard Offer and Default Service.

Actual Results: Merger savings were calculated based on the reduction in the commitment fees. The NSTAR commitment fee dropped from 0.14% to 0.125% and the commitment fees for Boston Edison and Commonwealth also declined.

NSTAR Merger Savings Report

TABLE P
2002 Synergies Summary

Credit Facilities	Merger Filing				Actual				Variance	
	2001 Level before synrg.	2002 Level before synrg.	2001 synrg.	2002 synrg.	2001	2002	2001 synrg.	2002 synrg.	2001 Actual vs Merger Filing	2002 Actual vs Merger Filing
Col.A	Col.B	Col.C	Col.D	Col.E	Col.F	Col.G	Col.H	Col.I	Col.J	Col.K
Commitment Fee	$0.6	$0.6	$0.2	$0.2	$1.2	$1.2	$0.2	$0.3	$0.1	$0.1
Total	$0.6	$0.6	$0.2	$0.2	$1.2	$1.2	$0.2	$0.3	$0.1	$0.1

1. Size of Lines

NSTAR			$450	$440	$450	$440
BECo revolver/lines	$200	$200	$350	$350	$350	$350
CES Regul unused portion only	$145	$145	$178	$174	$178	$174
Commitment fee percentages						
NSTAR (assume same as BECo)	0.14%	0.14%	0.125%	0.123%	0.01%	0.02%
BECo	0.14%	0.14%	0.099%	0.087%	0.04%	0.05%
CES Regulated	0.21%	0.21%	0.180%	0.180%	0.03%	0.03%
Commitment Fee Savings						
NSTAR	$0.000	$0.000	$0.570	$0.548	$0.058	$0.081
BECO	0.276	0.283	0.352	0.308	0.134	0.189
CES	0.300	0.308	0.325	0.317	0.047	0.056
Total	$0.576	$0.590	$1.247	$1.173	$0.239	$0.325

NSTAR Merger Savings Report

Q. Savings Area: Purchasing Economies – Materials & Supply Procurement

MERGER FILING Rationale for savings: *Savings will be realized in increased standardization, purchasing power, and vendor consolidation. See, Exhibit TJF-5C, at 00361.*

MERGER FILING Basis for Calculation: *Annual purchases were reduced by 6.7% of combined expenditures. Savings were slightly higher for stock/standard materials (7%) due to differences in the level of standardization possible across these categories. Savings for engineered materials were slightly lower (5%) due to the level of specialization. This savings results from vendor consolidation and increased purchasing power due to higher volume orders for common materials. 70% of procurement savings were capitalized based on a weighted average capitalization rate for the two companies. See, Exhibit TJF-5C, at 00361.*

Actual Results:

Commodity Category	Supplier	2001 Savings over AUP *	2002 Savings over AUP	Total Savings by Commodity over AUP
Billing Materials / Envelopes / Checks	Relizon		$98,806	$98,806
Copier Services - Interim Agreement	Ikon	$78,000		$78,000
Gas Service Parts	Connolly Distribution		$2,489	$2,489
Milenium PO/IC/AP Software Maint.	Dun & Bradstreet	$22,663	$22,663	$45,326
Office Supplies	Staples	$20,005	$15,360	$35,365
Plastic Pipe Gas Distribution	Performance Pipe		$18,542	$18,542
Poleline hardware, lighting & hand tools	WESCO	$142,000	$42,000	$184,000
Procurement Card - Incentive Rebate	Bank One	$17,388	$15,323	$32,711
Recycling & Disposal	Browning Ferris Ind., Inc.		$193,672	$193,672
Recycling & Disposal	Transformer Decommissioning	$2,390	$34,655	$37,045
Scrap metals & cable	Bristol Metals		$150,000	$150,000
Transformers OH Distribution	Kuhlman Electric		$365,532	$365,532
Transformers Padmount Distribution	Howard Industries		$104,843	$104,843
Wire & Cable	Rome Cable / Arthur Huney Co	$386,465	$373,910	$760,376
Savings Over Average Unit Price (AUP)		$668,912	$1,437,796	$2,106,708
Negotiated Savings - Contracts & PO's *		$678,837	2,317,520	$2,996,357
Total Annual Savings		**$1,347,749**	**$3,755,316**	**$5,103,065**

Although purchasing statistics show that average unit prices have decreased, the total actual overall cost has increased due to an increase in the number of units purchased. The increase in the number of units purchased (and the resulting increased in overall cost) is a function of the Company's system reliability efforts. Capital additions to electrical distribution and general plant increased from $100 million in 1998 to $225 million in 2002. Therefore, although the Company believes that substantial savings have been achieved on a per-unit basis because of increased purchasing power, the Company has not factored these savings into the calculation of savings in this Report. It should also be noted that the increased costs in this area because of increased capital investment reduce overall savings calculated in this Report.

NSTAR Merger Savings Report

Table Q
2002 Synergies Summary

	Merger Filing				Actual				Variance	
Procurement	2001 Level before synrg.	2002 Level before synrg.	2001 synrg.	2002 synrg.	2001	2002	2001 synrg.	2002 synrg.	2001 Actual vs Merger Filing	2002 Actual vs Merger Filing
Col.A	Col.B	Col.C	Col.D	Col.E	Col.F	Col.G	Col.H	Col.I	Col.J	Col.K
Engineered	$6.8	$7.0	$0.3	$0.3	$9.1	$8.3	($2.3)	($1.3)	($2.6)	($1.6)
Stock	36.4	37.3	2.5	2.6	48.5	44.2	(12.1)	(6.9)	(14.7)	(9.5)
Consumables	2.3	2.3	0.2	0.2	3.0	2.8	(0.8)	(0.4)	(0.9)	(0.6)
Total	$45.5	$46.6	$3.0	$3.1	$60.6	$55.2	($15.2)	($8.6)	($18.2)	($11.7)
O&M 30%	13.6	14.0	0.9	0.9	18.2	16.6	(4.5)	(2.6)	(5.5)	(3.5)
Capitalized 70%	31.8	32.6	2.1	2.2	42.4	38.6	(10.6)	(6.0)	(12.7)	(8.2)

R. Savings Area: Purchasing Economies - Inventory

MERGER FILING Rationale for Savings: *A combined entity would realize a one-time inventory reduction due to inventory duplication. See, Exhibit TJF-5C, at 00372.*

MERGER FILING Basis for Calculation: *Transmission and Distribution inventories were combined and then reduced by 2% for low-turn items (spare parts) and 10% for high turn items. A weighted average, fixed charge cost of 10.5% was applied to this amount. This savings results from avoiding the carrying cost of the one time reduction. See, Exhibit TJF-5C, at 00372.*

Quantification of Savings: To calculate savings for this Report, the Company compared actual inventory levels as presented in the Company's FERC Form 1 and 2 to the levels forecast in the MERGER FILING.

Actual Results: The reduction in inventories was significant due to the standardization of inventories and the consolidation of facilities. Consolidation of facilities is discussed in Section J.

NSTAR Merger Savings Report

TABLE R
2002 Synergies Summary

	Merger Filing				Actual				Variance	
Inventory	2001 Level before synrg.	2002 Level before synrg.	2001 synrg.	2002 synrg.	2001	2002	2001 synrg.	2002 synrg.	2001 Actual vs Merger Filing	2002 Actual vs Merger Filing
Col.A	Col.B	Col.C	Col.D	Col.E	Col.F	Col.G	Col.H	Col.I	Col.J	Col.K
Electric Inventory	$27.5	$28.2	$1.4	$1.4	$20.8	$19.9	$6.7	$8.3	$5.3	$6.9
Cable & Wire	3.4	3.5								
Distribution Transformers	2.9	3.0								
Electric Operations	8.2	8.4								
Network Transformers	1.9	2.0								
Meters	1.4	1.4								
Misc Tools & Operating Materials	5.9	6.1								
Spare Parts	3.7	3.8								
Total Inventory	$27.5	$28.2	$1.4	$0.0						
Beco (Ferc Form 1 page 227)					15.5	13.3				
Cambridge(Ferc Form 1 page 227)					0.3	0.3				
Commonwealth(Ferc Form 1 page 227)					5.0	6.3				

S. Savings Area: Contract Services

MERGER FILING Rationale for savings: *The combined company will consolidate and reduce contract services activities through economies of scope and elimination of non-recurring duplicate services, such as tree trimming and construction. See, Exhibit TJF-5C, at 00379.*

MERGER FILING Basis for Calculation: *Contract Services were calculated by reducing the smaller company's costs by 10% to reflecting economies of scale arising from the ability to negotiate a lower unit cost with contractor or replacing existing contracts. This opportunity is available due to the geographical density and overlapping population of contractors. See, Exhibit TJF-5C, at 00379.*

Quantification of Savings: To calculate savings for this Report, the Company compared actual costs in 2001 and 2002 to the forecast expense levels in the MERGER FILING. On an overall basis, the Company experienced an increased in costs in this area because of increased capital investment. In the Report, this increase in costs reduces overall savings and no savings attributable to the per-unit cost savings made possible as a result of the merger are included in the analysis presented in this Report.

Actual Results:

The Company's analysis of purchasing statistics show that average unit prices have decreased as a result of the merger and the increased purchasing power that comes from the combination of the Boston Edison and COM/CAM service territories. However, the total actual overall cost has increased because of the increase in the number of units purchased to meet system reliability requirements. Specifically, capital additions to electrical distribution and general plant increased from $100 million in 1998 to $225 million in 2002. Therefore, although the Company believes that significant savings have been achieved in this area on a per-unit basis, the Company has not incorporated those savings into the calculations set forth in the Report.

The Company's review showed that contract negotiations have resulted in merger-related purchasing economies as follows:

		2001	2002
Negotiated Savings - Contracts & Purchase Orders		$678,837	$2,317,520

Because the quantification of savings is based on actual costs in 2001 and 2002, the overall reduction in costs in this category is less than forecast in the MERGER FILING because of increased purchases.

NSTAR Merger Savings Report

TABLE S
2002 Synergies Summary

Contract Services	Merger Filing				Actual				Variance	
	2001 Level before synrg.	2002 Level before synrg.	2001 synrg.	2002 synrg.	2001	2002	2001 synrg.	2002 synrg.	2001 Actual vs Merger Filing	2002 Actual vs Merger Filing
Col.A	Col.B	Col.C	Col.D	Col.E	Col.F	Col.G	Col.H	Col.I	Col.J	Col.K
O&M Allocation										
Total Expenditure	$58.2	$60.9	$0.8	$0.9	$63.6	$61.7	($5.5)	($0.9)	($6.3)	($1.7)
Total O&M	$20.4	$21.3	$0.3	$0.3	$22.3	$21.6	($1.9)	($0.3)	($2.2)	($0.6)
Total Capital	$37.8	$39.6	$0.5	$0.6	$41.4	$40.1	($3.6)	($0.6)	($4.1)	($1.1)

T. Savings Area: Energy Sourcing

MERGER FILING Rationale for savings: *The combined company will have a lower coincident peak than the sum of the two stand-alone companies. The effect of system diversity allows for a reduction in overall demand charges throughout each year. See, Exhibit TFJ-5C, at 00388.*

MERGER FILING Basis for Calculation: *Hourly load date for the two companies was examined to identify non-coincident and coincident maximum demand. The resulting peak demand reduction (due to diversity) was multiplied by a market demand charge to determine the resultant savings. See, Exhibit TFJ-5C, at 00388.*

Actual Results: Load diversity from the different load and peaking profiles between the Boston Edison and Cambridge/Commonwealth systems provided reductions of 24 megawatts ("MW"), 161 MW and 112 MW for the years 2000, 2001 and 2002 respectively. The monthly value of the capacity is based on a proposal by a qualified vendor dated August 29, 2001 for the period January 2002 through December 2002 values the benefit at $0.1 million, $1.0 million and $0.5 million for the three years. This value is reduced by the percentage of the supply provided by competitive suppliers.

In addition to the savings forecast by Mr. Flaherty, NSTAR identified savings from the additional purchasing power of the combined system. NSTAR was able to obtain additional savings in the Default Service and Standard Offer negotiations in 2002 for service in 2003. The discount obtained was $1.35/MWh for both services for awarding both to one supplier. This resulted in customer savings of $5.3 million for Default Service and $13.1 million for Standard Offer.

NSTAR Merger Savings Report

TABLE T

2002 Synergies Summary

	Merger Filing				Actual				Variance	
Energy Sourcing	2001 Level before synrg.	2002 Level before synrg.	2001 synrg.	2002 synrg.	2001	2002	2001 synrg.	2002 synrg.	2001 Actual vs Merger Filing	2002 Actual vs Merger Filing
Col.A	Col.B	Col.C	Col.D	Col.E	Col.F	Col.G	Col.H	Col.I	Col.J	Col.K
Coincident peak savings			$1.0	$0.9			$0.9	$0.5	($0.0)	($0.4)
Purchasing Savings	1,278.3	1,338.4			1,805.5	1,777.6	18.3	18.3	18.3	18.3
Total	$1,278.3	$1,338.4	$1.0	$0.9	$1,805.5	$1,777.6	$19.2	$18.8	$18.3	$17.9
Workpaper										
Other Power-Total Expenses										
Commonwealth (FF1 Page 321. Line 8)					$344.6	$406.1				
Cambridge(FF1 Page 321. Line 8)					118.9	117.1				
Gas (FF2 page 46 line 14)					251.5	188.1				
BECo(FF1 Page 321. Line 8)					1,090.5	1,066.2				
Total power expense					$1,805.5	$1,777.6				

Peak load reduction MW	161MW	112MW
Purchasing price reduction $1.35/MWh	$18.30	$18.30

U. Savings Area: Costs to Achieve

MERGER FILING Rationale for costs: *Merger savings, in some instances, require a certain level of out of pocket expenditures in order to be achieved. Costs to achieve are an inherent component of any merger transaction and are necessary to complete a transaction successfully and/or produce the level of intended benefits. See, Exhibit TJF-5C, at 00392.*

MERGER FILING Basis for Calculation: *Costs to achieve, estimated at $111 million, are cash expenditures that are directly related to pursuing or executing the transaction and have the effect of reducing the level of distributable benefits. These costs reflect out-of-pocket cash payments and usually are one-time payouts incurred as a result of the merger. The costs to be incurred were estimated in conjunction with the consolidation requirements and cost savings identified to be achieved. Costs to achieve were categorized as follows: separation, systems consolidation, facilities integration, directors and officers tail coverage liability, internal and external communications, transition costs, transaction costs, relocation costs, telecommunications costs and regulatory process costs. See, Exhibit TJF-5C, at 00060-65, 00392.*

- *Separation and relocation costs were anticipated based on the estimated reduction in the work force.*
- *Systems consolidation and telecommunication costs were estimated to integrate the information technology and services functions of the company.*
- *Regulatory process costs were costs incurred for preparation and pursuit of regulatory filings to the Securities and Exchange Commission, Federal Energy Regulatory Commission, the Department of Justice and the Rate Plan before the Department of Telecommunications and Energy.*
- *External and internal communication costs reflect costs incurred to disseminate merger information to various stakeholders of the individual organizations and the combined company.*
- *Transaction costs represent amounts paid to investment bankers for assistance in transaction structuring and negotiation as well as certain legal assistance.*
- *Transition costs include the use of outside professional firms to assist in the integration of the combined company and other expenses.*
- *Facilities integration costs reflect estimated costs to reconfigure workspace.*
- *Directors and offices tail coverage liability covers incremental additions to premiums paid to protect directors and officers.*

Actual Results: Actual costs to achieve the merger totaled $154 million as compared to the MERGER FILING estimate of $135 million. The primary factor for the difference in costs to achieve was greater than forecast number of employees who elected to participate in the Company's voluntary severance program.

a. INTEGRATION COSTS

Separation programs: The separation costs for non-executive employees were greater than forecast. The forecast estimate was based on 357 non-executive employees leaving the Company at the time of the merger. Of the 357 forecast separations, it was estimated that 12 of those employees would leave on their own not collecting severance, for a net total of 345 forecast separations. The Company also estimated that 166 people expected to leave through normal attrition prior to the merger taking place would not stay on to take advantage of the severance program. The average years of service was estimated at 17 years. The weighted average salary was approximately $60,250 for those employees being provided severance. Additional state and federal taxes of 9 percent were added. Lastly, the Company estimated that separating employees would be provided 9 months of benefits at 42.4 percent of base salary. See, Exhibit TJF-5C, at 00392-407.

In fact, 638 individuals elected to take a voluntary separation package and were provided severance payments. Although this resulted in the Company achieving cost savings greater than forecast (in relation to 60 employees), it did not anticipate that those employees that were intending to leave as part of natural attrition would stay on to take advantage of the severance program. The average years of service for these employees was actually 22.5 years with an average salary of approximately $58,800. The severance package offered was generally for 2.5 weeks of pay for each year of service with 9 months of medical insurance at current active employee cost per month. Employees received $43.3 million in cash payments or a combination of cash payments and enhanced pension benefits. Federal and state payroll taxes amounted to $1.4 million. The continuing cost of medical benefits was not measurable because NSTAR is self-insured and employee costs were not easily identifiable. Therefore, no costs for medical benefits were charged as a Cost to Achieve.

Executive separation: The cost of executive separation was estimated based on 5 executives leaving the companies as a result of the merger. The Company estimated that $5.8 million, representing 3 years salary, would be expended as severance for these executives. A total of five senior executives left the Company, of which approximately $1.1 million was charged to Costs to Achieve. In addition, approximately $6 million was booked to goodwill. Individual agreements were made with each executive. These agreements were for three of the senior executives at COM/Energy and were recognized as contingencies at the time of the merger. Under the rules of APB 16, the Company had one year to resolve them, and under GAAP accounting the Company recognized these agreements as adjustments to the purchase price, which therefore, affected goodwill.

NSTAR Merger Savings Report

Separation Assistance Programs: The Company estimated that there would be expenditures of approximately $1,000,000 for outside vendor support for employee separation assistance. The Company devoted additional resources to the separation assistance program to provide the most effective transition for employees primarily through the services of Mercer, Watson Wyatt and Career Planning Management.

Pension Settlement, Pension Curtailment and PBOP Curtailment: The Company also experienced additional costs not included in Mr. Flaherty's original study. As a result of accounting requirements for Pension and Post Retirement Benefit Obligation, certain charges were recognized to account for the significant number of employees leaving the Company.

Retention Costs: The Company managed to retain its key employees through the merger transition period without requiring the use of retention payments, which were forecast to be $30,000 for 100 employees.

Relocation Costs: The Company managed to retain its key employees without paying for relocation, which was forecast to be 20 employees relocating at a cost of $50,000 per employee.

Facilities Reconfiguration: Although the Company incurred expenses for temporary accommodation while consolidating facilities (see "J. Savings Area Facilities" – facilities comments on University avenue and Dartmouth Street), the Company chose to expense those costs thereby limiting the overrun of the forecast for Costs to Achieve. The small amount of money booked to Cost to Achieve is mainly for moving expenses.

Systems Integration Costs: Significant systems consolidation and integration costs were expended as explained in "Ha Savings Area: Information Systems – Capital". Major vendors were IBM ($14 million); INDUS ($7 million); Hunter Cedar ($3 million) and Lucent Technologies ($3 million). In total, however, the costs booked to "Costs to Achieve" are $7 million below the forecast level. Other systems that were contemplated in the forecast were the consolidation of the radio systems (which has not taken place) and the Customer Care operator GUI interface, which will be accomplished through the Galaxy project.

Telecommunications Integration Costs: The cost to bridge the two companies' telecommunications systems was forecast as $100,000 to tie the switches together and $150,000 for the public data networks in the first year, with $50,000 per year in subsequent years for hardware lease costs. These costs were managed and/or absorbed by the Company, with the exception of payments of $140,000 to Verizon; $60,000 to TelCo Research; and other smaller payments totaling $30,000. There are no ongoing costs being booked to Costs to Achieve.

b. **TRANSACTION COSTS**

Bankers Fees: Bank fees were estimated by applying rates developed through contractual fee arrangements to the estimated market value of the transaction, consistent with standard business practice. The fees were accurately estimated.

Legal Fees: The legal fees for the merger were substantially less than projected.

Registration: The MERGER FILING forecast a re-registration of the merged company stock whereas the BEC stock was used for the acquisition of CES. The name was subsequently changed to NSTAR. The only transaction filing costs were $91,000 at the Federal Trade Commission, $14,000 to the Commonwealth of Massachusetts and $31 to the DTE.

Consultants: The costs for consultants were less than projected because of successful communication among the two consultants, Deloitte Touche and Price Waterhouse Coopers, and the merged companies.

c. **OTHER**

Directors and Officers Tail Coverage: The costs for Directors and Officers Tail Insurance Coverage was assumed to be 1.5 times the annual directors and officers liability premiums for the two merging companies. The actual cost was significantly less than projected because of the work of the Company's insurance department. The merger provided significant economies of scale and increased purchasing power. Further details can be found in "G. Insurance".

Internal and External Communications were consistent with the forecast level.

d. **REGULATORY PROCESS COSTS**

Legal Fees: Legal fees for regulatory approvals were significantly below the MERGER FILING forecast of $4 million.

Registration – SEC S4: The costs for registering with the Securities and Exchange Commission were forecast accurately.

Consultants: The costs for consultants relating to regulatory processes were forecast accurately.

e. **TRANSITION COSTS**

Consultants Costs: The costs for consultants engaged in assisting in the implementation of merger-related synergies were as budgeted. Deloitte Touche ($4.5 million of the $7.1 million total cost) led the "process teams" that were set up to identify the synergies and implement the new systems. Additional services were provided by Equiserve for stock transfer agent at $0.7 million; RR Donnelly for printing proxy statements at $0.6 million; DF King for proxy solicitation at $0.6 million; and Covington Burlington for employee benefit matters at $0.3 million.

Other costs were incurred for travel expenses for consultants and meals, which were not forecast and totaled $0.1 million.

TABLE U

Summary of Merger Costs

Cost to achieve analysis	Estimated Costs per MERGER TESTIMONY			Actual Costs			Total Variance
All $'s in Millions	Deductible	Non-Deductible	Total	Deductible	Non-Deductible	Total	to TESTIMONY
Separation Costs							
Separation Programs	10.2	10.2	20.4	45.0		45.0	(24.6)
Executive Separation	2.9	2.9	5.8	1.1		1.1	4.6
Separation Assistance Programs	0.5	0.5	1.0	2.7	0.0	2.7	(1.7)
Pension & PBOP Settlement & Curtailment				32.2		32.2	(32.2)
Retention Costs	3.0		3.0				3.0
Relocation Costs	0.5	0.5	1.0				1.0
Facilities Reconfiguration	0.8	0.8	1.5	0.0		0.0	1.5
Systems Integration Costs	44.7		44.7	37.6		37.6	7.1
Telecommunications Integration Costs	0.7		0.7	0.2		0.2	0.5
Transaction Costs							
Banker's Fees		10.1	10.1	0.2	10.0	10.2	(0.1)
Legal Fees		4.0	4.0	0.7		0.7	3.3
Registration		2.0	2.0	0.1		0.1	1.9
Consultants		1.0	1.0	0.1	0.4	0.4	0.6
Other							
Directors & Officers Tail Coverage	1.9		1.9	0.5		0.5	1.4
Internal and External Communications	2.0		2.0	0.4	1.6	2.0	(0.0)
Regulatory Process Costs							
Legal Fees		4.0	4.0	0.6	1.5	2.1	1.9
Registration - SEC (S4)		0.8	0.8	0.0	0.8	0.8	0.0
Consultants		0.3	0.3	0.2	0.0	0.2	0.0
Transition Costs							
Consultants	7.0		7.0	4.9	2.1	7.1	(0.1)
Other				0.1		0.1	(0.1)
Total - Outside Costs	**74.1**	**37.0**	**111.1**	**126.6**	**16.4**	**143.0**	**(32.0)**
Tax Effected*	**74.1**	**60.8**	**134.9**	**126.6**	**27.1**	**153.6**	**(18.7)**

*Note: a tax effect rate of 1.6454 is applied to non-deductible costs to "gross-up" these costs for ratemaking purposes

NSTAR Merger Savings Report

NSTAR Analysis of Merger Costs **From NSTAR Tax Department**

Vendor	Description	Total Capitalized	BEC	CES
Watson Wyatt	Benefits Consulting	$ 0.0		$ 0.0
Goldman Sachs	Financial Advisors	5.4	5.4	
SG Barr Devlin	Financial Advisors	4.6	0.1	4.5
Clark Goward	Name Change	1.6	1.6	
Reed Consulting	Regulatory Consultants	0.0	0.0	
SEC	Merger Filings	0.8	0.8	
Keegan, Werlin & Pabian	Regulatory Legal Review	0.1	0.0	0.1
LeBeouf Lamb	Merger Legal Review	0.8		0.8
Ropes & Gray	Merger Legal Review	0.6	0.6	0.0
Other Consultants& Misc	Miscellaneous	0.2	0.2	
PricewaterhouseCoopers	Merger Agreement Review	0.1	0.1	
American Bank Note Co.	Prepare Stock Certificates	0.1	0.1	
Federal Trade Commission	Filing Fees	0.1	0.0	0.0
Arthur Andersen	Accounting Review	0.2	0.2	0.0
Deloitte & Touche	Process Team/Synergy Support	0.6	0.4	0.2
DF King	Proxy Solicitation	0.3	0.3	
Equiserve	Proxy Solicitation	0.6	0.6	
RR Donnelly	Proxy Solicitation	0.6	0.6	
		$ 16.4	$ 10.8	$ 5.6

DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

PETITION OF

BOSTON EDISON COMPANY

CAMBRIDGE ELECTRIC LIGHT COMPANY

COMMONWEALTH ELECTRIC COMPANY

AND

COMMONWEALTH GAS COMPANY

FOR APPROVAL OF RATE PLAN

D.T.E. 99-19

DIRECT TESTIMONY OF

THOMAS J. FLAHERTY

EXHIBIT TJF-1

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EXHIBIT TJF-2	Summary of Regulated Utility Experience
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00003

1 **I. INTRODUCTION AND QUALIFICATIONS**

2 **Q. Please state your name and by whom you are employed.**

3 A. My name is Thomas J. Flaherty, and I am the National Partner - Energy Consulting
4 and a partner in the Deloitte & Touche Consulting Group LLC ("Deloitte
5 Consulting"), a Delaware limited liability corporation. My business address is 2200
6 Ross Avenue, Suite 1600, Dallas, Texas 75201.

7 **Q. Would you briefly summarize your academic and professional background?**

8 A. I graduated from the University of Oklahoma with a B.B.A. degree in Accounting and
9 immediately joined Touche Ross, where I have been continuously employed since
10 1973. In December 1989, Touche Ross and Deloitte, Haskins & Sells merged and
11 now conduct business under the firm name of Deloitte & Touche LLP. Since joining
12 Touche Ross, I have specialized in the public utility industry and have performed a
13 variety of assignments.

14 I have assisted managements from a number of electric and/or gas utilities in their
15 identification, evaluation and integration of acquisitions, including: screening
16 analysis; review of corporate restructuring alternatives; assessment of merger-related
17 cost reduction opportunities; development of regulatory strategies; planning and
18 execution of merger integration; and, assignment and allocation of costs and benefits
19 related to mergers and acquisitions. In addition to my involvement in merger and
20 acquisition consulting for Deloitte Consulting, I have participated in numerous other
21 utility consulting engagements in the areas of corporate growth, diversification,

1 restructuring, organizational analysis, business process reengineering, benchmarking,
2 strategic planning, strategic marketing, litigation assistance, economic feasibility
3 studies, regulatory planning and analysis and financial analysis.

4 I also have conducted or directed similar assignments for a variety of industries,
5 including construction, retailing, publishing, health care, real estate and
6 manufacturing, in addition to utilities. Exhibit TJF-2 to this testimony details my
7 experience with regulated utilities.

8 **Q. Please summarize your experience in utility mergers and acquisitions.**

9 A. I have been involved in more than 100 actual, proposed or potential transactions
10 involving electric, electric and gas combination, or gas utilities. I have experience
11 working for both buyers and sellers and have assisted client managements in their
12 assessment of a broad range of transactional issues, including the following:

13 • Target analysis
14 • Asset quality analysis
15 • Customer analysis
16 • Competitor analysis
17 • Synergy assessment
• Financial analysis
• Transaction structuring
• Regulatory strategy
• Testimony
• Integration planning

18 The publicly announced transactions in which I have been significantly involved,
19 other than the one that is the subject of this proceeding are: Kansas Power & Light
20 and Kansas Gas and Electric, IPALCO Enterprises and PSI Resources, Entergy and

1 Gulf States Utilities, Southern Union and Western Resources (Missouri properties),
2 Washington Water Power and Sierra Pacific Resources, Midwest Resources and
3 Iowa-Illinois Gas & Electric, Northern States Power Company and Wisconsin Energy
4 Corporation, PECO Energy Company and PPL Resources, Public Service Company
5 of Colorado and Southwestern Public Service Company, Baltimore Gas & Electric
6 and Potomac Electric Power Company, Delmarva Power and Atlantic Energy, WPL
7 Holdings, IES Industries and Interstate Power, Puget Sound Power & Light and
8 Washington Energy, TU Electric and ENSERCH, Western Resources and Kansas
9 City Power & Light, Western Resources and ONEOK, Inc. (Kansas, Oklahoma gas
10 properties), Houston Industries and NORAM Energy, Ohio Edison and Centerior,
11 ENOVA and Pacific Enterprises, Brooklyn Union Gas and Long Island Lighting,
12 Allegheny Energy and DQE, Inc., LG&E Energy and KU Energy, NIPSCO Industries
13 and Bay State Gas, American Electric Power and Central and SouthWest Corporation,
14 and Sierra Pacific Resources and Nevada Power.

15 **Q. Do you hold any professional certifications?**

16 A. Yes. I am a Certified Management Consultant and a member of the Institute of
17 Management Consultants.

II. PURPOSE OF TESTIMONY

Q. What is the purpose of your testimony?

A. I have been asked to appear for BEC Energy Company ("BEC Energy") and Commonwealth Energy System ("COM/Energy") (collectively, the "Companies") in support of the rate plan filings of Boston Edison Company ("Boston Edison"), Cambridge Electric Light Company ("Cambridge"), Commonwealth Electric Company ("Commonwealth Electric") and Commonwealth Gas Company ("Commonwealth Gas"). Deloitte Consulting assisted the managements of both Companies in their identification and quantification of potential cost savings resulting from the merger.

In this testimony I: (1) describe the categories of cost savings that are estimated by the managements of BEC Energy and COM/Energy to result from the merger of the Companies; (2) provide management's basis for its quantification of estimated cost savings; (3) describe the process by which such identified cost savings categories and estimated cost savings were derived by the Companies, and; (4) compare the level of cost savings identified in this merger with other transactions with which I am familiar.

Q. Have you included any exhibits to your testimony?

A. Yes. Exhibit TJF-2 is a summary of my experience with regulated utilities, Exhibit TJF-3 provides a ten-year summary of potential merger cost savings, and Exhibit

TJF-4 provides a detailed breakdown of potentially incurred costs to achieve the identified merger savings. Exhibit TJF-5 contains supporting workpapers for the savings and costs to achieve set forth in Exhibits TJF-3 and TJF-4.

III. SUMMARY OF TESTIMONY

Q. Please summarize your testimony.

A. The merger of the Companies is anticipated to result in cost savings that will permit rates in the future to be below the level that otherwise would have been necessary on a stand-alone basis for Boston Edison, Cambridge, Commonwealth Electric or Commonwealth Gas. The approximately $667 million of estimated cost savings, before approximately $111 million of out-of-pocket costs to achieve these savings and $24 million of cost-cutting measures planned or initiated prior to the merger (premerger initiatives), is expected by management of BEC Energy and COM/Energy to provide an opportunity to benefit all stakeholders, including customers, shareholders and employees, and result in a stronger, more competitive company.

These savings, by area, are identified further below:

1 Total Cost Savings

2

Savings Category		2000 - 2009 ($ Millions)
Corporate and Operations Support Staffing		$403
Corporate and Administrative Programs		211
Purchasing Economies (Nonfuel)		46
Energy Sourcing		7
	Total Savings	667
Less:	Costs to Achieve	(111)
	Premerger Initiatives	(24)
	Net Savings	$532

The estimated cost savings referenced above reflect only merger-related savings. They reflect the consensus of both Companies and were jointly developed by management of the Companies, with the assistance of Deloitte Consulting. This joint management development of merger-related cost savings provides a sound basis for identification and quantification and results in well-documented, thoughtfully considered savings components. As a result, the process utilized by the Companies was comprehensive and captures all significant sources of merger savings typically available.

The estimated cost savings reflect the potential creation of cost-reduction or cost-avoidance opportunities through the ability to consolidate separate, stand-alone operations into a single entity. This consolidation and integration thus may enable

1 duplicative functions and positions to be eliminated; similar corporate activities to be
2 combined, avoided or reduced in scope; external purchases of commodities and
3 services to be aggregated; and capital expenditures to be avoided.

4 Based on my experience in other mergers and on my direct involvement with the
5 identification, evaluation, and quantification efforts related to estimated cost savings
6 in this and other transactions, the process utilized by the Companies for estimating
7 potential merger cost savings was consistent with the process utilized by other
8 companies in previous merger transactions. As a result, I believe the approximate
9 level of merger savings identified by the Companies is reasonably attainable over a
10 ten-year period beginning shortly after the consummation of the merger, provided that
11 management of the combined company executes its integration plans in a manner
12 consistent with its intent and how other utilities have pursued similar opportunities.
13 The identified merger cost savings are also within the broad range of those developed
14 by other companies in other similar situations.

15 Recent utility mergers and acquisitions in other states have produced substantial
16 benefits to customers in the form of operational synergies and cost savings that reduce
17 rates or slow the rate of growth in rates. Benefits to customers, however, will not
18 materialize without costs being incurred. It is a well-established regulatory principle
19 that, to reflect the shareholders' willingness to fund the costs necessary to realize

1 potential cost savings, the costs to achieve both these savings and the underlying
2 transaction should be fully recovered.

3 **IV. SCOPE OF ANALYSIS**

4 **Q. What process was utilized by the Companies in developing the cost savings**
5 **associated with the proposed merger?**

6 A. The process began by collecting appropriate raw data regarding operations. The
7 sources of this data included both public and private information. This information
8 encompassed geographical and operational data; included numbers of positions, the
9 various departments they worked in, their location, their salaries and benefits; and
10 included other applicable information.

11 Next, the Companies, with the assistance of Deloitte Consulting, identified individual
12 cost categories, including the actual past and expected future expenses for each
13 individual category. Information used to accomplish this process included company
14 contractual information, various departmental reports, forecasts, and budgets, as well
15 as departmental operating plans.

16 General operational philosophies for each company were also identified. As part of
17 this process, potential organizational and operational approaches were discussed and
18 areas for potential savings were identified, with the assistance of Deloitte Consulting.

1 This process resulted in the development of a set of area-by-area operating
2 assumptions.

3 Finally, from all of the information and analyses identified above, savings estimates
4 were developed, reviewed, analyzed, and revised by the managements, with the
5 assistance of Deloitte Consulting, to produce the level of estimated savings reflected
6 in my testimony.

7 **Q. What was the scope of the assistance provided by Deloitte Consulting related to**
8 **the synergy savings associated with this proposed merger?**

9 A. Deloitte Consulting was asked to assist the managements of the Companies in the
10 identification and quantification of both potential savings and additional costs
11 necessary to realize those savings associated with the merger. This assistance was
12 based upon previous experience and included assistance in the identification of
13 necessary data elements and potential cost savings areas, discussion of potential
14 organizational and operational philosophies, discussion of potential assumptions to be
15 utilized by the Companies, assistance in the identification of estimated savings and
16 costs to achieve and comparison of results to other previous transactions.

17 **Q. Was Deloitte Consulting retained to provide any other services in connection**
18 **with the merger?**

19 A. Yes. Deloitte Consulting was also engaged (i) to provide testimony in this
20 proceeding and (ii) to assist the Companies in integrating BEC Energy and

1 COM/Energy into a combined operating entity once the proposed merger is
2 consummated.

3 **Q. What personnel from the management of the Companies was involved in this**
4 **process?**

5 A. A number of both senior management personnel, as well as middle management
6 personnel from both companies, were actively involved in the cost-savings
7 identification and quantification described above.

8 **Q. Is this process typical of other cost-saving estimation processes that you have**
9 **been engaged in?**

10 A. Yes, the overall process undertaken by the Companies to identify cost savings was
11 typical of other engagements that I have been involved in, and captures all significant
12 sources of merger savings typically available.

13 **Q. How were the cost savings quantified in this process?**

14 A. Estimates of cost savings were developed on a nominal cost basis over a ten-year
15 period commencing six months after the consummation of the merger. The attached
16 exhibits reflect projected savings for calendar years 2000 through 2009, based on the
17 assumption that the merger will occur on July 1, 1999. If the merger occurs before or
18 after that date, the timing of the projected savings would be adjusted accordingly.
19 This provides a long-term view of attainable savings. This ten-year period is the

1 same period traditionally utilized by regulatory commissions with respect to review of
2 merger cost savings.

3 **Q. Are the identified cost savings attainable only during this ten-year period?**
4 A. No. The majority of the identified savings components would generate benefits that
5 will continue well beyond this period. For example, potential labor position
6 reductions associated with the merger will be permanently eliminated since they
7 relate to redundant functions. Likewise, potential purchasing leverage benefits will
8 continue indefinitely as the cost of materials and supplies acquisition is reduced. The
9 terminal value of the post-ten-year savings is significant, and usually exceeds the ten-
10 year savings level by a large amount.

11 Although the cost savings estimated for the ten-year period generally would continue
12 into future periods, cost savings are presented in nominal dollars consistent with the
13 ratemaking process and are limited to the first ten years following the merger.

14 **Q. What methods were used to quantify the individual cost savings components?**
15 A. Cost savings were developed using three principal methods of quantification:

16 • Direct analysis - Use of actual costs and changes to these costs based on planned
17 consolidation activities, e.g., position reductions were estimated based on detailed
18 analyses of fully aligned individual functions and positions.

19 • Estimation - Determination, based upon more limited analysis of actual data, of
20 potential merger-related cost reduction considering anticipated changes to markets

1 and operations (e.g., reduction in materials and supplies costs from additional
2 volume buying).

3 • Comparison to other transactions - Utilization of expectations in other proposed
4 utility mergers as a proxy for the Companies' impacts (e.g., shareholder services
5 expense reductions based on expected or realized reductions achieved by other
6 companies).

7 Of the three methods, the majority of the savings were quantified by using direct
8 analysis. These methods of quantification are consistent with those utilized by other
9 utility companies in prior mergers. For example, it is well recognized that materials
10 and supplies costs will be reduced from a merger; however, the actual amount of the
11 reduction will not be known until negotiations with suppliers and vendors are
12 finalized. Using other expected or realized reduction amounts is an appropriate
13 method for quantification pending such negotiation.

14 **Q. Is the savings analysis predicated upon any particular organizational structure?**
15 A. No. However, the cost savings related to the integration of common functions are
16 predicated upon centralization of these functions, where appropriate and practical.
17 This centralization could occur in several ways: within an expanded headquarters
18 organization; within a corporate services entity, or by a combination or centralization
19 of corporate and administrative-type services and decentralization of common
20 technical support services into operating units. Any of these approaches would

1 provide the Companies an opportunity to realize merger cost savings in those affected
2 (and related) areas.

3 In quantifying cost savings, the maximum extent of centralization that appeared
4 practical was assumed, without creating an ineffective, bureaucratic, and costly
5 organization. This approach assumes that common corporate and administrative
6 functions would generally be centralized in a service company, with common
7 technical support or "mission critical" administrative functions either similarly
8 centralized, or located as required within the various operating units. COM/Energy
9 already operates in a service company environment that provides a model for
10 implementation. Given the proximate geographic coverage of the Companies, and the
11 concentration of resources within centralized groups, it is likely that the majority of
12 these support functions, e.g., budgeting, will be located within a single centralized
13 entity.

14 **Q. Can the level of savings estimated by the Companies and reflected in your**
15 **testimony be achieved?**

16 A. The process utilized by the Companies for estimating potential merger cost savings
17 was consistent with that utilized by other companies in previous merger transactions.
18 As a result, the savings levels are reasonably attainable, provided that management of
19 the combined company executes its integration plans in a manner consistent with its
20 intent and how other utilities have pursued similar opportunities.

V. BENEFITS CREATED FROM UTILITY MERGERS

Q. In general, how are savings created from the combination of two utilities?

A. The combination of two utilities enables the succeeding company to realize substantial benefits in the form of economies, efficiencies and operating effectiveness. These synergies relate to a variety of operational functions and potentially will result in benefits that will accrue to customers. These potential savings areas are viewed as directly attributable to the merger and are not attainable in the absence of the merger.

Q. Are there different types of cost savings that can result from the combination of two utilities?

A. Yes. In identifying potential cost savings, only those opportunities that are directly related to the merger were quantified. The distinction between merger and non-merger-related savings is highlighted below:

- Created savings - These are savings that are directly related to the completion of a merger and could not be obtained absent the merger. For example, the reduction of total cost through the avoidance of duplication or overlap and the ability to extend resources over a broader base of activity would naturally occur through the consolidation of similar functions. Without the combination, both companies would continue to expend amounts on related activities, and as a result, would incur stand-alone cost levels higher than in consolidation. The vast majority of all cost savings in this merger would be directly created by the combination.

- Enabled savings - These savings result from the acceleration or "unlocking" of certain events that could give rise to savings and therefore are considered merger

1 savings. For example, technology differences that exist between companies may
2 provide an opportunity to share technology and achieve productivity
3 improvements more rapidly and more cheaply than would have occurred on a
4 stand-alone basis. For example, one company that has adopted an enterprise-wide
5 information system will likely enjoy more seamless operation and management
6 and higher productivity than a company that has individual, customized packaged
7 applications. While the company without the integrated technology environment
8 can obtain such productivity benefit from independent investment, the merger
9 enables an existing technology environment to be more rapidly deployed and
10 costly stand-alone investment and concept feasibility analysis to be avoided.
11 Very little of the estimated savings in this merger might be considered enabled.

12 • Developed savings - Reductions in cost due to management decisions that could
13 have been made on a stand-alone basis are unrelated to the merger. A decision to
14 reengineer an organization will result in reduced costs but likely would have been
15 achieved without the merger. None of the cost savings in this merger is in this
16 category.

17 **Q. What types of savings have been quantified with respect to the BEC Energy and**
18 **COM/Energy merger?**

19 A. The quantification effort focused on merger-related savings only, i.e., those savings
20 that would not be attainable but for the combination of the two companies. The
21 savings described in my testimony almost exclusively fall under the "created savings"
22 category described above. Potential areas of benefit, and subsequently the resulting
23 cost savings, are determined to be merger-related if they are not attainable by any
24 action that management of either company could practically initiate on an

1 independent basis. For example, management of either company could reduce labor
2 costs by eliminating positions as part of a resource and function analysis. These
3 reductions, however, would relate solely to that entity's independent operations.

4 Merger-related savings quantified result only from action taken by management in
5 association with the combination of BEC Energy and COM/Energy: for example, the
6 fact that both companies maintain separate tax activities provides an opportunity to
7 consolidate these functions and avoid replication. This integration of similar
8 functions and activities would not be possible without the merger of BEC Energy and
9 COM/Energy. Thus, the benefits identified are only those believed to be directly
10 attributable to the merger. Additionally, cost savings or cost avoidances that result
11 from the new size and economic scope of the combined entity are merger-related. For
12 example, routine activities that could not be economically outsourced by either
13 company individually may now be candidates for outsourcing, given the new
14 combined entity's greater volumes. Similarly, activities that either of the Companies
15 now outsource might be performed more cost-effectively internally by the combined
16 entity where volumes now justify specialized resources. The greater size of the
17 combined entity should also enable it to be a more cost-effective purchaser of various
18 products and services. Further, to the extent that the combination of two Companies
19 enables the Companies to reduce costs by transferring technology or competencies to
20 each other, these benefits are also merger-related if such actions could not have been

1 effectively implemented by the Companies independently, or if such transfers enable
2 operating costs to be reduced more rapidly or to a lower level than otherwise would
3 have been the case.

4 Each of the examples described above, as well as other additional cost savings or cost
5 avoidances that are directly attributable to the merger, is considered merger-related
6 synergies. Conversely, cost savings or avoidances that would have occurred even in
7 the absence of the merger are not merger-related and should not be included in a
8 calculation of the savings attributable to the merger.

9 **Q. How do savings result from the typical combination of two utilities?**

10 A. Savings developed reflect those areas where the total level of costs can be affected by
11 actions of management that are the direct result of the combination of BEC Energy
12 and COM/Energy. These savings areas are derived from the operational synergies
13 that are created upon integration of two independent operations. These savings areas
14 would typically affect operations in the following ways:

15 • Cost reduction - The total cost of service is reduced as a result of the merger by
16 avoiding duplication of the cost input required to achieve the same level of output.
17 For example, similar operating functions, such as management development,
18 could now be integrated and would require less input to achieve results on a
19 combined basis.

1 • Cost avoidance - The total cost of service is reduced due to the ability to forego
2 certain types of parallel expenditures. For example, redundant expenditures
3 required by both entities (e.g., information systems) could be avoided by selecting
4 one set of development efforts to eliminate duplication.

5 • Revenue enhancement - The creation of additional revenue streams by using
6 existing regulated assets to supplement revenue sources could be a means to
7 increase benefits for shareholders and customers. These revenue streams would
8 be related directly to combining and packaging available resources, such as
9 energy services, in a more attractive manner, i.e., to produce or increase non-
10 regulated sales, than could be achieved independently. No such revenue
11 enhancement opportunities were identified in this transaction.

12 **Q. What categories of quantifiable savings typically result from a utility merger?**

13 A. Quantifiable savings resulting from a merger typically can be categorized as follows:

14 • Corporate and Operations Support Staffing
15 • Corporate and Administrative Programs
16 • Purchasing Economies
17 • Energy Sourcing

18 **Q. Were the "costs to achieve" identified in the merger cost savings analysis?**

19 A. Yes. Certain costs must be incurred to facilitate the realization of the identified cost
20 savings. Costs to achieve are an inherent component of any merger transaction and
21 are necessary to complete a transaction successfully and/or produce the level of
22 intended benefits. These costs to achieve are cash expenditures that are directly

1 related to pursuing or executing the transaction and have the effect of reducing the
2 level of distributable benefits. Were the total cost savings to be distributed without
3 full recognition of these costs to achieve, the utilities would in effect be distributing a
4 greater level of savings than in fact exist. In addition, if these out-of-pocket costs are
5 not recoverable in rates, the Companies would effectively be required to support such
6 expenditures without compensation. This would mean that customers would be
7 compensated without any recognition of the costs to achieve those savings. Thus, to
8 be equitable to all parties, it is only the net level of savings that is available for use by
9 the Companies. In all utility merger transactions of which I am aware, costs to
10 achieve have been considered and recognized in determining the net level of benefits
11 available to customers and shareholders.

12 **VI. COMPARISON TO OTHER TRANSACTIONS**

13 **Q. Are the categories of savings in this merger consistent with those typically**
14 **identified in utility combinations?**

15 A. Yes, they are. There are, however, certain factors unique to this merger that affect the
16 nature and level of synergies available.

17 **Q. Please elaborate on these factors.**

18 A. Several factors typically affect the nature and level of merger synergies expected in
19 utility combinations. These include: relative size (of the companies), relative cost

position, location, capacity position, and organization and management philosophy. Certain of these factors affect the quantified merger synergies in this merger:

- First, there is a limited amount of overlapping service territories between the electric operations of BEC Energy and the gas operations of COM/Energy in the Framingham and Western Boston metropolitan area. Overlapping service territories provide additional savings opportunities, e.g., reduction in facilities and sharing of resources. However, the closely proximate service territories of Boston Edison and Cambridge do allow for some facilities concentration;

- Second, BEC Energy's electric operations are larger than COM/Energy's, which also affects the level of merger savings as scale differences can limit the extent of synergies available through combination. For example, in these instances where BEC Energy has significantly more resources dedicated to a function than would COM/Energy, such as human resources, the impact of resource overlap would be limited by the smaller size of COM/Energy. Two more evenly sized companies may experience relatively greater resource reduction opportunities since resource levels are more equivalent. In this case, one partner devotes relatively fewer resources to certain functions. As a result, resource overlap is lower than for two more equally sized companies;

- Third, both BEC Energy and COM/Energy are divesting their generation assets. This eliminates any savings in the generation and generation support areas, since generation will no longer exist in the new combined company. For most merging utilities, such disaggregation has not taken place;

- Fourth, only COM/Energy has gas operations; Boston Edison is an electric-only company. Since both companies do not have gas operations, there is no overlap

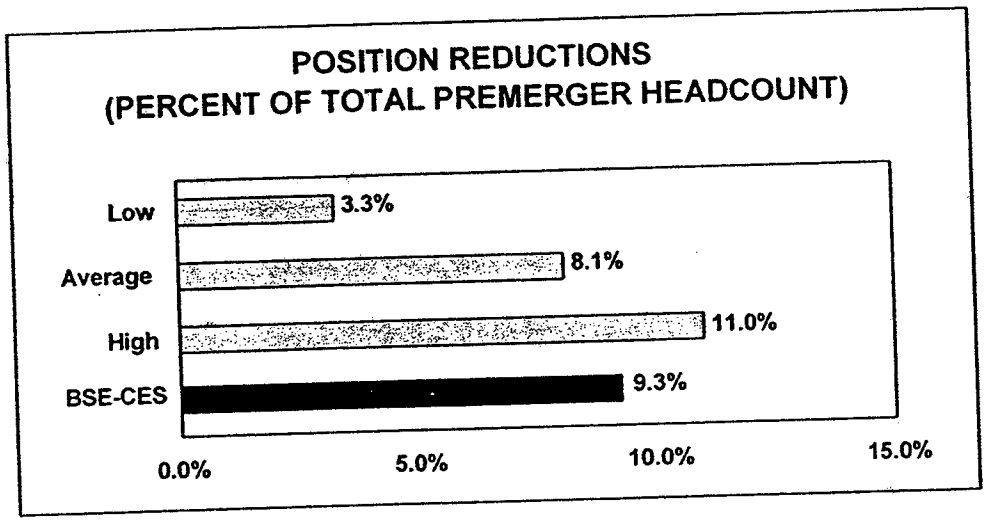
1 or duplication in the gas operations areas and therefore no opportunity for cost
2 reduction as in many previous mergers;

3 • Finally, BEC Energy and COM/Energy headquarters are approximately two miles
4 apart. This distance decreases the complexity of combined operations and can
5 serve to maximize the level of savings available compared to two less closely
6 proximate companies.

7 **Q. How do the BEC Energy-COM/Energy merger cost savings compare to those in**
8 **other transactions?**

9 A. The anticipated synergies from the merger of BEC Energy and COM/Energy are
10 within the range identified by other companies in other recent utility mergers,
11 although they fall at the high end of the range for both position reductions and
12 nonfuel operating and maintenance ("O&M") cost savings. In particular, anticipated
13 position reductions and nonfuel O&M expense reductions were reviewed -- two
14 categories that provide a useful basis for comparative assessment of relative merger-
15 related synergies. As indicated in the table immediately below, the position

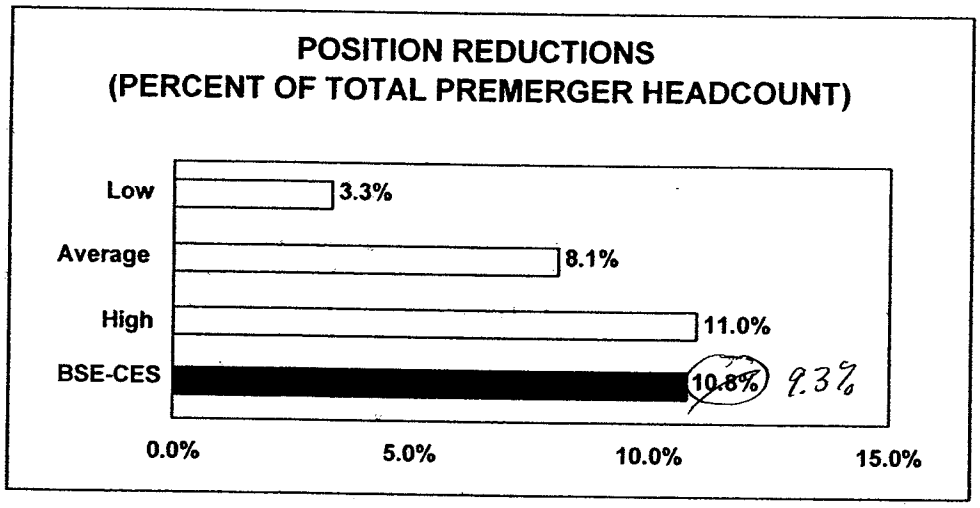
1 reductions that could result from this merger are above the average of 16 of the
2 most recent proposed utility transactions for which relevant data is available.[1]



3 The 9.3% position reduction amount for the merger of BEC Energy and
4 COM/Energy reflects the estimated total number of position reductions (362)
5 compared to the total number of positions at both companies prior to the initiation
6 of the merger (3,902). The 9.3% reduction amount is above the average reduction
7 figure of 8.1%, but is explained by the overlapping operations and the geographic

1 These 16 transactions are: Washington Water Power and Sierra Pacific Resources; Midwest Resources and Iowa-Illinois Gas & Electric; Northern States Power and Wisconsin Energy; Union Electric and CIPSCO; Public Service Company of Colorado and Southwestern Public Service; Baltimore Gas & Electric and Potomac Electric Power; Puget Sound Power & Light and Washington Energy; WPL Holdings, IES Industries and Interstate Power; Western Resources and Kansas City Power & Light; Delmarva Power and Atlantic Energy; Ohio Edison and Centerior Energy; Pacific Enterprises and ENOVA; Brooklyn Union and Long Island Lighting; Sierra Pacific Resources and Nevada Power; American Electric Power and Central and South West; Allegheny Power System and Duquesne Power and Light; and, LG&E Energy and KU Energy. The data I have presented are based upon estimated synergies.

reductions that could result from this merger are above the average of 16 of the most recent proposed utility transactions for which relevant data is available.[1]



The ~~10.8%~~ 9.3 position reduction amount for the merger of BEC Energy and COM/Energy reflects the estimated total number of position reductions (362) compared to the total number of positions at both companies prior to the initiation of the ~~merger (3,938)~~ 3,902. The ~~10.8%~~ 9.3% reduction amount is above the average reduction figure of 8.1%, but is explained by the overlapping operations and the geographic

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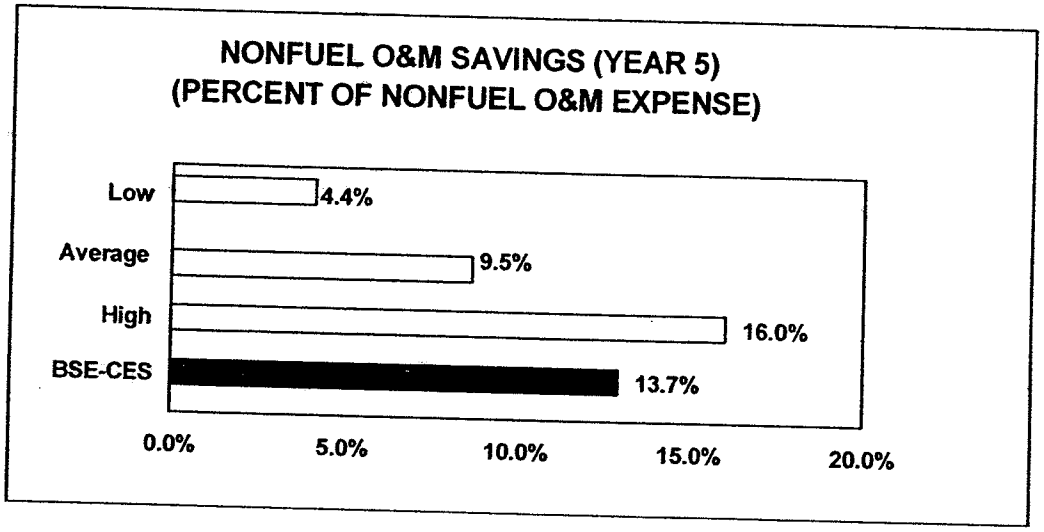
1 These 16 transactions are: Washington Water Power and Sierra Pacific Resources; Midwest Resources and Iowa-Illinois Gas & Electric; Northern States Power and Wisconsin Energy; Union Electric and CIPSCO; Public Service Company of Colorado and Southwestern Public Service; Baltimore Gas & Electric and Potomac Electric Power; Puget Sound Power & Light and Washington Energy; WPL Holdings, IES Industries and Interstate Power; Western Resources and Kansas City Power & Light; Delmarva Power and Atlantic Energy; Ohio Edison and Centerior Energy; Pacific Enterprises and ENOVA; Brooklyn Union and Long Island Lighting; Sierra Pacific Resources and Nevada Power; American Electric Power and Central and South West; Allegheny Power System and Duquesne Power and Light; and, LG&E Energy and KU Energy. The data I have presented are based upon estimated synergies. 17?

1 proximity of the Companies.

2 Similarly, the nonfuel O&M reductions that will result from the merger are also
3 above the average of the same 16 transactions.



4 Again, the geographic proximity between the utility operations is the principal reason
5 for higher O&M synergies between BEC Energy and COM/Energy, and the average
6 synergies from other recently proposed utility or utility holding company mergers.
7 This result is also partially driven by the lack of any generation O&M expenses in the
8 denominator, i.e., no expenses in this relatively unaffected area are present to inflate
9 the denominator. Another factor that may increase the relative BEC Energy-
10 COM/Energy comparison against the previous transaction average is related to the
11 premerger initiatives of the two companies. BEC Energy's and COM/Energy's
12 planned and continuing premerger cost reduction initiatives reduce the denominator

1 and help cause the comparison to exceed the average. Few of the other 16
2 transactions had any, or any significant, premerger initiatives that caused nonfuel
3 O&M levels to be reduced. Based upon the convergent operational characteristics of
4 BEC Energy and COM/Energy, and the broader cost reduction components typically
5 included in either electric to electric or electric to electric/gas combination mergers,
6 the cost savings and cost avoidances from this merger reflect those found within
7 previous industry experience.

8 **VII. DETAILED COST SAVINGS DESCRIPTION**

9 **A. Summary**

10 Q. **You previously testified that approximately $667 million in merger costs savings**
11 **have been quantified by the Companies, prior to considering the costs to achieve.**
12 **Would you identify and define the principal categories of cost savings that**
13 **comprise this amount?**

14 A. Yes. As Exhibit TJF-3 illustrates, there are four primary categories of cost savings
15 that have been quantified. Each of these is described briefly below:

16 • Corporate and Operations Support Staffing - Position reductions related to
17 redundancies associated with corporate, administrative and technical support
18 functions.

19 • Corporate and Administrative programs - Reductions in nonlabor programs and
20 expenses, such as insurance and shareholder services, resulting from economies of
21 scale and cost avoidance.

1 • Purchasing Economies (nonfuel) - Aggregation of materials and supplies volumes
2 and services contracts to increase purchasing leverage and to reduce required
3 reorder volumes and associated carrying costs.

4 • Energy Sourcing - Load diversity between the two companies arising from
5 different load and peaking characteristics allows the companies to purchase power
6 from energy providers at a lower cost due to the increased attractiveness of the
7 combined load profile. Aggregation of purchasing volumes also allows for
8 increased vendor leverage given the larger total load now to be served.

9 **Q. Are there only four categories of cost savings that have been quantified?**
10 A. No. These categories represent only the general classification of cost savings. There
11 are multiple, individual cost savings elements identified by management of the
12 Companies with assistance from Deloitte Consulting that comprise these general
13 categories. These are listed below and further illustrated in Exhibit TJF-3.

14 Corporate and Administrative Programs
15 • Administrative and General Overhead
16 • Public Relations
17 • Association Dues
18 • Benefits
19 • Credit Facilities
20 • Facilities

1 • Insurance

2 • Information Systems

3 • Professional Services

4 • Vehicles

5 • Shareholder Services

6 Purchasing Economies

7 • Procurement

8 • Contract Services

9 • Inventory Reduction

10 **Q. What are the categories of, and approximate costs necessary, to achieve the**
11 **savings?**

12 A. There are several categories of costs that must be incurred to achieve the identified
13 savings that are expected by the Companies. These costs reflect expenditures
14 necessary to effectuate the cost savings identified from the merger through company
15 integration. These categories of costs to achieve, as listed below, are further
16 illustrated in Exhibit TJF-4:

17 • Separation Costs

18 • Employee Retention

19 • Systems Integration

20 • Employee Relocation

21 • Directors' and Officers' Tail Liability Coverage

22 • Regulatory Process Costs

1 • Internal/External Communications

2 • Facilities Integration

3 • Transition Costs

4 • Transaction Costs

5 Estimated costs to achieve total approximately $111 million, which will principally
6 be incurred in 1999 and 2000 (see Exhibit TJF-4), but will extend over the full ten-
7 year period to reflect certain ongoing costs.

8 **Q. Are there any other items that offset merger savings?**

9 A. Yes. Cost savings initiatives that were already planned prior to the merger were
10 subtracted from the gross savings estimates because there is likely to be some overlap
11 between these initiatives and identified cost savings resulting from the merger. These
12 ongoing or future initiatives will contribute to lower total costs to customers and are
13 estimated at $24 million over the ten-year period. The merger thus allows the
14 Companies to achieve additional cost savings opportunities beyond those previously
15 identified.

16 **Q. What is the anticipated level of total cost savings after these costs to achieve are**
17 **reflected?**

18 A. The total estimated cost savings identified from the merger over the first ten years
19 after the merger, after being adjusted for costs to achieve and premerger initiatives,
20 are approximately $532 million.

B. General Assumptions

1. Escalation Rates

Q. What assumptions about the escalation of costs were utilized by the Companies in estimating cost savings?

A. For the most part, cost savings were estimated based on current cost and expense levels. To account for inflation and other economic factors appropriately, an escalation rate was then applied to year one savings levels to determine the level of savings in each of the subsequent years. Development of the estimated cost savings over the ten-year period without application of an escalation factor would result in understatement of the total cost savings available over this period. Failure to apply an appropriate escalation factor ignores year-to-year specific category inflation.

Q. Was the same escalation rate used for all savings categories?

A. No. A differential existed in the anticipated escalation rates for the cost categories contemplated in the analysis (e.g., differences between salaries and other cost categories). For this reason, a single escalation rate could not be used for all cost savings categories. Although 2.5% was used for general inflation, a higher rate (4.7%) was used for salaries to reflect market requirements. This 4.7% level is consistent with the Companies' pre-merger, stand-alone assumptions for salary increases. Further, the 4.7% is consistent with long-term national forecasts of salary escalation and historical national salary escalation. Likewise, a higher escalation rate of 4.7% was used for public relations, contract services, and professional services due

1 to the professional labor content of those costs. Professional salary growth
2 historically approximates the higher wage and salary escalation rate. These escalation
3 rates are comparable to those used by other companies with which I am familiar and
4 to other longer-term estimates for general inflation.

5 **2. Treatment of Capital Savings**

6 **Q. Were there other general assumptions or methodologies employed in the cost**
7 **savings analysis?**

8 A. Yes. In treating capital deferrals and avoidance related to the merger, it would be
9 inappropriate to count the entire amount of the capital expenditure deferred or
10 avoided as cost savings. For example, if it were anticipated that the Companies could
11 avoid installing a $10 million computer system in 2001, this $10 million reduction in
12 expenditures in 2001 was not used for the actual savings. Including the $10 million
13 as savings achieved in 2001 would not represent the avoided revenue requirements
14 associated with that $10 million capital expenditure from either the company or
15 customers' perspectives. Additionally, such a methodology would result in
16 overstating the cost savings in the early years following the merger by taking credit
17 for the entire avoided investment as cost savings in those years. Instead, it is more
18 appropriate to reflect only the revenue requirements savings associated with capital
19 deferral/avoidance as cost savings. The components of revenue requirements include,
20 but are not limited to, financing, depreciation, insurance and property tax. This

1 revenue requirements approach, rather than a cash-flow approach, provides a more
2 appropriate determination of the savings estimated to be generated due to the merger.

3 **Q. What methodology was used to capture these capital deferral/avoidance savings?**
4 A. A fixed charge rate for each year of the first ten years following completion of the
5 merger was applied to each year's capital expenditure reductions. The fixed charge
6 rate methodology, which reflects normal declining balance ratemaking treatment, was
7 used to estimate annual savings levels. Fixed charge rates cover depreciation,
8 insurance, property tax, income taxes and cost of capital and were determined by both
9 BEC Energy and COM/Energy and then were blended to determine both general rates
10 for long-term assets and specific rates for information technology-related
11 expenditures. The levelized fixed charge rate for capital items other than information
12 technology was 20.02%, while the levelized rate for information technology items
13 was 24.04%, reflecting the more rapid (six-year) depreciation period.

14 **C. Cost Savings Summary**

15 **1. Corporate and Operations Support Staffing**

16 **Q. Please discuss in more detail the nature of the cost savings created through the**
17 **integration of the corporate and operations support functions.**

18 A The combined companies expect to integrate existing corporate, administrative and
19 technical support areas. Such integration would generate savings through the

1 elimination of redundant positions within both headquarters and operations support in
2 the following types of functions:

3 • Legal • External Relations
4 • Finance • Accounting
5 • Corporate Planning • Human Resources
6 • Information Systems • Administrative Support
7 • Customer Service • Marketing
8 • Executive Management • Transmission & Distribution
9 • Systems Planning • Technical Support

10 A merger between the Companies provides an opportunity to consolidate these
11 functions and eliminate redundant activities. For example, the consolidation of two
12 accounting departments would typically create significant savings. Potential
13 redundancy within the two departments is identified through an alignment of
14 functions between the Companies to ensure comparability across different
15 organizational structures. Each individual function within the finance area, including
16 budgets and forecasting, financial reporting, general accounting, tax accounting and
17 accounts payable, among others, contains positions performing duplicate tasks. These
18 overlapping positions could be eliminated without an impact on remaining workload
19 volumes.

1 **Q. How was this principle applied to determine the potential position savings that**
2 **would result from a merger of the Companies?**

3 A. The first step in determining corporate and operations support labor savings was to
4 develop a detailed functional alignment of each Company. Both Companies provided
5 organizational and functional breakdowns of their respective companies that
6 identified each position within its respective organization. The stand-alone company
7 functional areas then were aligned so that position levels for similar
8 functions/activities performed by the respective companies could be compared. The
9 analysis maintained consistency between the inter-company functional categories and
10 aligned representative activities between the Companies.

11 Upon completion of the functional alignment, the position levels necessary to perform
12 the required activities under the merged company scenario were identified. In
13 determining the appropriate future position levels of the merged company, the
14 following items were considered:

15 • Impacts of geographic distance and system size on the ongoing approach to
16 consolidation of the Companies;

17 • Duplicative or redundant activities that could subsequently be eliminated;

18 • Differences in existing management, operational and structural philosophies;

1 • Need for and ability to consolidate functions in one location and the impact of
2 using linking technologies between functions at different locations; and

3 • The specific cost drivers, if any, of the functional areas that would affect
4 appropriate position requirements.

5 Reviews of each functional area were performed to ensure that any potential
6 reductions did not exceed the position levels of either company on a stand-alone
7 basis. Thus, even where significant scale differences exist, e.g., BEC Energy
8 dedicates 50 resources to a function and COM/Energy commits only 20, reductions
9 would be limited to the lower position level, i.e., 20 resources.

10 **Q. How are these corporate and operations support functions assumed to be**
11 **structured to realize these positions savings?**

12 A. The achievement of the estimated level of savings assumes that these functions will
13 be centralized to the extent determined most practical, effective and efficient by the
14 Companies. The position savings identified above are predicated on the centralization
15 of many functions into a traditional service company like those presently maintained.
16 Decentralization of certain functions or activities into operating units may also occur
17 on a "mission critical" basis to avoid over-centralization and provision of necessary
18 resources to support business unit accountability.

1 **Q. Please describe the results of the analysis discussed above.**

2 A. As of January 1, 2000, BEC Energy is estimated to have a total of 2,230 positions in
3 utility operations. As of that same date, COM/Energy is estimated to have a total of
4 1,506 positions devoted to utility operations. Those positions, which are field-related,
5 are relatively unaffected for the purposes of the analysis. Examples of primarily
6 unaffected positions include Distribution Department personnel or transmission
7 transformer and substation maintenance crews. Thus, a large portion of the total
8 positions that focus directly on service delivery to customers is not significantly
9 affected by the merger and does not jeopardize safety, service quality or reliability.

10 In the analysis, BEC Energy had 706 positions associated with corporate and
11 administrative functions, while COM/Energy had 463. The combined corporate and
12 administrative positions of the two companies were thus 1,169, or 31% of the
13 combined Companies total positions of 3,736. Approximately 252 corporate and
14 administrative position reductions were identified by the Companies that could result
15 from the consolidation of the Companies. This constitutes 22% of combined
16 corporate and administrative positions, and 7% of the combined Companies' total
17 positions. These reductions represent the anticipated level of functional duplication
18 that would exist between the Companies and could be avoided through the creation of
19 an integrated corporate and administrative organization.

Q. Please describe the results of the analysis discussed above.

A. As of January 1, 2000, BEC Energy is estimated to have a total of 2,230 positions in utility operations. As of that same date, COM/Energy is estimated to have a total of 1,108 positions devoted to utility operations. Those positions, which are field-related, are relatively unaffected for the purposes of the analysis. Examples of primarily unaffected positions include Distribution Department personnel or transmission transformer and substation maintenance crews. Thus, a large portion of the total positions that focus directly on service delivery to customers is not significantly affected by the merger and does not jeopardize safety, service quality or reliability.

In the analysis, BEC Energy had 706 positions associated with corporate and administrative functions, while COM/Energy had 463. The combined corporate and administrative positions of the two companies were thus 1,169, or 35% of the combined Companies total positions of 3,338. Approximately 252 corporate and administrative position reductions were identified by the Companies that could result from the consolidation of the Companies. This constitutes 22% of combined corporate and administrative positions, and 8% of the combined Companies' total positions. These reductions represent the anticipated level of functional duplication that would exist between the Companies and could be avoided through the creation of an integrated corporate and administrative organization.

1 BEC Energy also had 1,524 positions in field and field support functions such as
2 distribution engineering, while COM/Energy had 1,043 positions in these categories.
3 Approximately 110 reductions in positions performing these functions were identified
4 by the Companies, which constitutes 4% of positions in these categories or 3% of
5 total positions.

6 **Q. What are the estimated total position reductions from the combination of the**
7 **Companies?**

8 A. Total position reductions are estimated at 362 or approximately 9.3% of total current
9 combined company positions.

10 **Q. When are these position reductions assumed to occur?**

11 A. The Companies intend to achieve a number of these reductions by the beginning of
12 the first year following completion of the merger. Due to the extensive integration of
13 information systems applications that will be required in association with
14 consolidating operations of the Companies, reductions in many functions will not be
15 fully realized until the second or third years following completion of the merger.

16 **Q. Once the potential position reductions were identified, how were the position**
17 **reduction cost savings calculated?**

18 A. Average salary levels were calculated by function and then applied to the identified
19 position reductions in those respective areas. The average blended salary for the
20 position reductions identified is estimated to be approximately $60,000 in 2000

BEC Energy also had 1,524 positions in field and field support functions such as distribution engineering, while COM/Energy had ~~645~~ 1,043 positions in these categories. Approximately 110 reductions in positions performing these functions were identified by the Companies, which constitutes ~~3~~ 4% of positions in these categories or 3% of total positions.

Q. What are the estimated total position reductions from the combination of the Companies?

A. Total position reductions are estimated at 362 or approximately ~~10.8~~ 9.3% of total current combined company positions.

Q. When are these position reductions assumed to occur?

A. The Companies intend to achieve a number of these reductions by the beginning of the first year following completion of the merger. Due to the extensive integration of information systems applications that will be required in association with consolidating operations of the Companies, reductions in many functions will not be fully realized until the second or third years following completion of the merger.

Q. Once the potential position reductions were identified, how were the position reduction cost savings calculated?

A. Average salary levels were calculated by function and then applied to the identified position reductions in those respective areas. The average blended salary for the position reductions identified is estimated to be approximately $60,000 in 2000

1 dollars based on the salary levels in 1998 for each company weighted by the number
2 of resources in each company and then escalated one year.

3 **Q. Are there cost savings associated with position reductions other than salary**
4 **expense?**

5 A. Yes. Benefit costs are also considered when determining the cost savings associated
6 with position reductions. Benefits include such items as health insurance, life
7 insurance, employee investment plans, pension expense, accruals for retirement health
8 benefits of active positions, incentives and bonuses, payroll taxes and others. A
9 blended benefits loading rate of 42.4% was used to estimate average aggregate
10 benefits cost. The resulting total compensation including benefits averaged $85,000
11 in 2000 dollars.

12 **Q. Was any portion of these corporate, field and field support staffing savings**
13 **allocated to construction?**

14 A. Yes. A certain portion of these expenses are capitalized rather than expensed
15 annually, reflecting their relation to the capital or construction elements of the
16 business. Capitalized amounts thus are recovered over the life of the asset to which
17 these costs are assigned. A blended capitalization rate of 7.8% was used for corporate
18 positions and 30.4% for field and field support positions based on the stand-alone
19 expectations of each company weighted by relative size.

1 Q. **How were cost savings calculated on the construction portion of corporate, field**
2 **and field support staffing reductions?**

3 A. The same method that I described previously for calculating cost savings related to
4 avoiding capital expenditures was used. The annual fixed charge rates that I
5 previously described were applied to the portion of position savings allocated to
6 construction to convert these position savings to revenue requirements. The reduced
7 revenue requirements represent the savings that result from the elimination of
8 redundant construction-related activities.

9 Q. **What were the total savings estimated to result from corporate, field and field**
10 **support staffing consolidation?**

11 A. The total corporate, field and field support position reductions were estimated to be
12 362 positions. The total cost savings from corporate, field and field support staffing
13 for the ten-year period ending December 31, 2009, are estimated at $403 million.

14 Q. **Could these position savings have been achieved without the merger?**

15 A. No. The position reductions described are attributable to the merger. The reduction
16 opportunities arise from overlap and duplication in functional performance, rather
17 than from stand-alone initiatives unrelated to the merger. The savings discussed
18 above are triggered by the opportunity to combine functions and eliminate
19 redundancy, not by assumed improvements in operating efficiencies. Both
20 Companies have ongoing continuous improvement programs in place, which have
21 restrained cost levels and which are expected to continue. Attention was given to

1 avoiding double counting these initiatives by excluding those pre-merger initiatives
2 identified prior to 2000 from the beginning point position analysis. In addition, those
3 continuing position reductions planned past-2000 were estimated and quantified and
4 these annual amounts were then offset against potential savings to avoid capturing
5 potential nonmerger impacts. The subject of premerger initiatives is discussed further
6 elsewhere in this testimony.

7 **2. Corporate and Administrative Programs**

8 Q. **What cost savings can be created through corporate program and expenditure**
9 **consolidation?**

10 A. The integration of corporate and administrative functions reduces certain non-labor
11 costs, primarily through the consolidation of overlapping or duplicative programs and
12 expenses.

13 Two examples, insurance and information systems expenses, will illustrate how these
14 savings are created through a merger:

15 • Insurance - Cost savings typically would be realized in the areas of property
16 insurance and excess general liability insurance, among others. On a stand-alone
17 basis, each company carries insurance (or is self-insured) in these areas
18 independently. A larger combined company will have a reduced risk profile
19 because of its broader asset base. In addition, asset concentration will be less
20 significant, which should translate into lower rates for the combined company.

- Information systems - Organizations must facilitate systems development and support the information processing needs of each company. Companies typically have independent plans to develop a variety of systems in the future, including parallel systems development efforts. A combination would enable the Companies to avoid incurring these duplicate capital expenditures. Additional information systems savings could result from deferred capital projects, such as mainframe upgrades or personal computer purchases. Additionally, savings could be realized from the elimination of other duplicate costs, including disaster recovery, software support, miscellaneous software and hardware, license fees, and computer maintenance.

Q. What are the amounts, by specific area, of the corporate and administrative program savings?

A. Savings were identified and quantified over the ten-year period in the following areas:

	Ten-Year Total ($000)
Administrative & General Overhead	17,424
Public Relations	8,773
Association Dues	2,398
Benefits	20,376
Credit Facilities	1,949
Facilities	42,263
Information Services	76,510
Insurance	16,091
Professional Services	22,568
Vehicles	1,028
Shareholder Services	1,716

1 Each of the aforementioned categories is described below.

2 **a. Administrative and General Overhead**

3 Q. **What types of expenses are included in miscellaneous overhead expense and how**
4 **are they affected by the merger?**

5 A. Miscellaneous overhead expense includes, but is not limited to, periodicals, postage
6 (other than customer billing), stationary, telecommunications, transportation and
7 office supply expenses. These costs are variable with the total number of positions
8 and change as the number of positions increase or decrease. As position reductions
9 are achieved through the merger, miscellaneous overhead expenses also are reduced.

10 Q. **How were estimated cost savings for this area quantified?**

11 A. Miscellaneous overhead expenses were identified and separated between fixed and
12 variable components and divided by the total positions for which they were
13 applicable. The variable administrative and general costs for the Companies are
14 incurred primarily by administrative and general ("A&G") positions, and therefore
15 were reduced by A&G position impacts only. The combined average miscellaneous
16 overhead expense per A&G position was then multiplied by total merger-related
17 A&G corporate position reductions to arrive at a merger savings level for this area.
18 The estimated merger savings identified were $17.4 million for the ten-year period.

1 **Q. Could these miscellaneous overhead expense savings be achieved absent a**
2 **merger?**

3 A. No. These savings are directly related to the position reductions that would result
4 from the merger.

5 **b. Public Relations**

6 **Q. Please describe how public relations expenditures could be affected by the**
7 **merger of the companies.**

8 A. The merger gives rise to cost savings resulting from the elimination of duplicate fixed
9 production (e.g., studio and distribution costs) and other program costs, as well as
10 eliminated media costs in the overlapping territory.

11 **Q. What is the level of savings estimated and how was this amount calculated?**

12 A. The total estimated savings in the area of public relations over the ten-year period
13 were $8.8 million. The savings reflect a reduction in the combined expenditures
14 resulting primarily from the elimination of duplicative fixed production costs, local
15 media buys and agency fees.

16 **Q. Could the savings that have been identified in the public-relations area be**
17 **achieved absent a merger?**

18 A. No. These savings are predicated directly on the assumption that there is a single,
19 combined company jointly identifying, developing and producing required public
20 relations.

1 **c. Association Dues**

2 Q. **Please describe how dues and memberships could be affected by the merger of**
3 **the companies.**

4 A. Both Companies are members of Edison Electric Institute ("EEI"). The combination
5 will allow opportunities to realize an overall lower level of expenditures under the
6 EEI formula compared to the expenditures under the formula on a stand-alone basis.
7 These savings arise due to the declining unit rate applied in the two factors after
8 initial threshold levels are met.

9 Q. **How were savings in dues and memberships quantified?**

10 A. A review of each company's industry and trade memberships was performed. A
11 review for common organizations was conducted with overlapping memberships
12 identified and the smaller expenditure was reduced or any formulaic calculations
13 made to reflect the consolidation of memberships in these organizations. The
14 resulting estimated savings identified were $2.4 million over the ten-year period.

15 Q. **Could the savings in dues and memberships be achieved absent a merger?**

16 A. No. They can be achieved only by consolidating memberships. Otherwise, there will
17 continue to be two sets of memberships under separate formulas.

1 **d. Benefits**

2 Q. **What levels of cost for administration of benefits programs are expected?**

3 A. Estimates of total annual benefits costs for the Companies are approximately $17.3
4 million for BEC Energy and approximately $11.7 million for COM/Energy. These
5 costs include medical, life insurance, pension and the administrative costs associated
6 with those benefits programs. The estimated annual benefits administrative costs for
7 the Companies are $1.1 million for BEC Energy and $0.8 million for COM/Energy.

8 Q. **How can cost savings be achieved in the area of benefits and what are the**
9 **estimated savings?**

10 A. Benefits administration savings may be realized as a result of greater purchasing
11 leverage for the combined entity when negotiating administration fees with third-
12 party administrators. Additionally, purchasing leverage can be exercised in
13 negotiating the dollar cost of benefits provided without reducing the level of benefits
14 provided. The savings generated from the combination of the Companies were based
15 on reducing benefit administration fees and benefit costs to reflect this purchasing
16 leverage. Overall savings are approximately 4% of total costs to reflect this
17 purchasing leverage. Savings in this area are expected to begin in 2001 to provide an
18 adequate benefits plan redesign time frame with total savings of $20.4 million
19 through the ten-year period.

1 **Q. Could these savings be achieved absent a merger?**

2 A. No. These savings are predicated directly on the assumption that there is a combined
3 company under a single benefits package.

4 **e. Credit Facilities**

5 **Q. Please describe how credit facilities could be affected by the merger of the**
6 **companies.**

7 A. The merger should allow the combination of the separate existing credit lines into one
8 larger credit facility at an assumed lower percentage credit line fee when compared to
9 the two existing separate credit facilities. The merger could also provide for the
10 creation of a pool of funds available across both companies. Savings should be
11 realized in negotiating the dollar cost of the combined credit line fees based on the
12 expected facility requirements and the consolidation of commercial banking sources.
13 Additionally, the combined company may be able to reduce its total line-of-credit
14 requirements based on improved cash flows as a result of the synergies achieved in
15 the combination. This reduction also may result in savings as the fees would be
16 charged on a lower combined credit line.

17 **Q. How were the savings in the area of lines-of-credit fees quantified?**

18 A. Lines-of-credit fee reductions were calculated by reducing the total lines of credit of
19 the combined company. The commitment fee percentages for the eliminated lines
20 were multiplied by the total credit lines eliminated to arrive at the annual commitment

1 fee reduction. The total savings for credit-line fees over the ten-year period was $1.9
2 million.

3 **Q. Could these savings be achieved absent a merger?**
4 A. No. These savings are predicated directly on the assumption that there is a single
5 company with a lower credit line requirement than the two individual Companies
6 would have in total.

7 **f. Facilities**

8 **Q. What cost savings can be created through consolidation of corporate facilities?**
9 A. Cost savings in this area are normally made possible by the nature and geographic
10 location of the various corporate and field functions and facilities. Cost savings can
11 be created through the consolidation of proximate business offices, service centers,
12 warehouses and staging areas. Streamlining the work force also permits a reduction
13 of total facilities as positions can be consolidated into fewer locations. Due to the
14 geographic proximity between the operating utilities of BEC Energy and
15 COM/Energy, certain of the support facility reduction opportunities, e.g., meter
16 shops, warehouses, chemistry labs, etc. may also be available in this merger.
17 Reconfiguration of the Southboro, Wareham, and corporate headquarters facilities
18 was also assumed. Additionally, the reduced positions for headquarters-type
19 functions provide an excellent opportunity to reduce total required headquarters
20 square footage and avoid lease expenses. Both Companies are considering the

1 possibility of vacating their current headquarters facilities and relocating a substantial
2 portion of their operations. The combined company will require less new corporate
3 space than the sum of the individual Companies.

4 **Q. What was the magnitude of savings associated with facilities consolidation?**

5 A. Assuming prevailing market rates and average annual lease and facility operating
6 costs for each of the Companies associated with the various corporate facilities,
7 reduced facilities costs for the total estimated square-footage reduction were
8 estimated at $40.4 million over the ten-year period. One-time capital savings for
9 those buildings assumed to be sold were calculated by taking the fair market value, or
10 book value, of the facility after applying a 40% tax rate and then applying the revenue
11 requirements rate yielding a ten-year revenue requirements savings of $1.9 million.
12 Total facilities savings including O&M and revenue requirements were estimated to
13 be $42.3 million for over the ten-year period.

14 **Q. Could these savings be achieved absent a merger?**

15 A. No. The facilities consolidation is possible only as the result of the consolidation of
16 the Companies and of the position reductions described above. If the Companies
17 were to remain as separate corporate entities, or if there were no merger to generate
18 the position reductions, then these savings could not occur.

1 **g. Information Services (IS)**

2 Q. **Please briefly describe the information systems departments of the Companies.**

3 A. Both BEC Energy and COM/Energy perform information services ("IS") to support
4 the information processing needs of each Company, although COM/Energy's services
5 are principally outsourced to International Business Machines ("IBM"). The need for
6 systems development for each company is ongoing with both Companies
7 continuously involved in such efforts. Both Companies have independent plans to
8 develop systems in a variety of areas over the next several years, including parallel
9 systems development efforts. For example, both BEC Energy and COM/Energy
10 expect to undertake and implement new Work Management Systems in the near
11 future. As a result of the merger, one of the two Companies will be able to avoid
12 these expenditures.

13 Q. **How were estimated savings in this area determined, and what is their**
14 **magnitude?**

15 A. The merger should enable BEC Energy and COM/Energy to avoid spending duplicate
16 amounts on separate systems. When the merger is consummated, the combined
17 company plans to consolidate the respective IS requirements, thus obviating the need
18 for parallel, independent systems development efforts. Therefore, the merger can
19 create savings in avoided costs that could not be achieved absent the combination.
20 The merger will enable the combined IS department to utilize systems already in
21 place and avoid redundant new systems development. For example, BEC Energy

1 could continue the implementation of its new financial system (Oracle) in conjunction
2 with COM/Energy, which will result in the replacement of COM/Energy's existing
3 system and avoid additional expenditures for new financial systems at COM/Energy.
4 Additionally, both Companies are currently implementing new work management
5 systems. On a combined basis, one new work-management system can be avoided.
6 Finally, COM/Energy is contemplating a number of system changes necessary to
7 meet anticipated customer requirements. Specifically, COM/Energy is considering;
8 upgrading or replacing its customer information system; upgrading or replacing its
9 energy sourcing system; and implementing trouble management and AM/FM
10 systems. These system expenditures can be avoided by extending Boston Edison's
11 information technology environment across both Companies.

12 Projected capital expenditures associated with the development of duplicative systems
13 and future application development have been converted to revenue requirements
14 assuming a six-year depreciable life, which reflects the rapid obsolescence of
15 technology in today's environment.

16 Operating savings also can occur due to the elimination of software leases and
17 maintenance fees required to provide software support on personal computers. The IS
18 savings estimate also includes savings from the consolidation of the Companies' two
19 independent data centers into a single center, thereby eliminating one of the

1 mainframe systems. Over the ten-year period, IS savings are estimated to
2 total $76.5 million.

3 **Q. Could these savings be achieved absent a merger?**
4 A. No. The elimination of duplicative system development hardware, software and
5 consolidation of data center costs can be achieved only by consolidating the two IS
6 departments into one. As a practical matter, it would be unlikely that two
7 independent utilities would share such services, hardware and software.

8 **h. Insurance**

9 **Q. Please describe the rationale for how savings can be achieved in the area of**
10 **insurance.**
11 A. Utilities generally require insurance coverage in the areas of property, directors' and
12 officers' liability and excess casualty. On a stand-alone basis, each company
13 independently carries insurance in these areas. A combined company may have a
14 reduced risk profile because of its broader and more diverse asset base, which
15 translates into lower rates. Further savings can be attained through the ability to carry
16 higher deductibles given the combined company's increased financial strength.
17 Additionally, the dollar cost per unit of coverage decreases for each additional unit of
18 coverage as the likelihood of any individual claim hitting the coverage limit
19 decreases.

1 **Q. How were the savings in the area of insurance quantified in this transaction?**

2 A. Savings on insurance premiums were calculated for property coverage, directors' and
3 officers' liability coverage and excess casualty insurance liability. These reductions
4 were derived based on discussion with brokers as well as utilizing insurance quoting
5 software. The total estimated savings for insurance over the ten-year period were
6 $16.1 million.

7 **Q. Could the savings that have been identified in the insurance area be achieved**
8 **absent a merger?**

9 A. No. These savings are predicated directly on the assumption that there is a single
10 company using the total purchasing power of the combined entity to achieve lower
11 premium costs due to a different risk profile.

12 **i. Professional Services**

13 **Q. What gives rise to savings in the area of professional services?**

14 A. Professional services functions include such areas as audit, taxation, legal, and
15 general consulting. In many cases, these functions are duplicated at both Companies.
16 An explicit example of this would be in the case of external audits, which would be
17 integrated over both Companies at a lower total cost on a combined basis.

1 Q. **How were savings in the area of professional services quantified, and what was**
2 **their magnitude?**

3 A. The savings calculated were generated from the reduction of the combined audit fees,
4 legal fees and general consulting services. Audit savings were based on reducing the
5 total stand-alone costs of the Companies to a level reflecting a combined,
6 consolidated structure thus eliminating two separate holding company audits, for
7 example. The Companies' legal fees and general consulting services fees also were
8 reduced from current levels to reflect the ability to combine internal and external
9 resources more efficiently and effectively. The total savings resulting from these
10 reductions is $22.6 million for the ten-year period based on the individual 1998
11 expenditures, by category, for each company and anticipated future levels.

12 Q. **Could these savings be achieved absent a merger?**

13 A. No. They can be achieved only by consolidating the use of professional services into
14 one company. Otherwise, there will continue to be two sets of independent auditors,
15 two sets of external legal counsel and overlapping sets of general consultants.

16 **j. Vehicles**

17 Q. **Please describe how vehicles would be affected by the merger.**

18 A. The combined company will reduce the total number of corporate employees. Due to
19 this reduction, the new company will require fewer fleet vehicles. Savings will be

1 realized through reduced total operating costs for passenger cars including reduced
2 personal vehicle usage reimbursement.

3 **Q. How were savings in the area of vehicles quantified?**

4 A. Savings are based on the weighted-average corporate vehicle operating cost per
5 corporate employee times the number of corporate labor reductions. Total estimated
6 savings in this area were $1.0 million over the ten-year period based on the 1997
7 expenditures for each company and the anticipated future vehicle requirements.

8 **Q. Could these savings be achieved absent the merger?**

9 A. No. These savings are directly related to the merger in that they are derived from the
10 elimination of overlap. The opportunity for consolidation would not exist absent the
11 merger.

12 **k. Shareholder Services**

13 **Q. How will the merger of the Companies affect the expenses incurred by the**
14 **corporate secretary and shareholder services departments?**

15 A. In addition to the labor savings identified, cost savings are anticipated to result
16 through the combination of transfer agents, the elimination of duplicative investor
17 relations activities and a reduction in the total cost of processing transactions.

1 Q. **What is the level of savings that is estimated to be achieved, and how was it**
2 **calculated?**

3 A. The total ten-year estimated savings in the area of shareholder services are
4 approximately $1.7 million based on the expenditures of each of the Companies in
5 1997. The savings were based on a reduction in the combined nonlabor shareholder
6 services costs in duplicate activities such as stock transfer services. Further savings
7 result from elimination of the smaller company's costs associated with annual
8 meetings, annual reports, dividend costs, and systems development.

9 Q. **Could these savings be achieved absent a merger?**

10 A. No. These savings are predicated directly on the elimination of costs related to
11 duplicative activities or economies of scale from a larger company function.

12 **3. Purchasing Economies**

13 Q. **Mr. Flaherty, please discuss the cost savings that can be created through**
14 **purchasing economies.**

15 A. Combining companies can achieve savings through the centralization of purchasing
16 and inventory functions related to the construction, operation and maintenance of
17 transmission and distribution plant, service centers, warehouses and headquarters.
18 The greater purchasing power and the relative quantity of both goods and services
19 that can be obtained as a result of the combination of companies provide additional
20 cost savings. With respect to the purchase of goods (i.e., materials and supplies),
21 savings can be realized in the procurement of commodity items, consumable

1 equipment (e.g., conductors, wire and cable), and other equipment for electric
2 utilities. Savings also may be realized from avoiding an initial reorder cycle from
3 certain inventory item sharing. In addition, standardization of system components
4 such as cable, meters, transformers, and conductors for electric utilities can be
5 achieved through a common design process, providing additional savings
6 opportunities.

7 With respect to the procurement of services, particularly contract services such as tree
8 trimming and construction assistance, expenditures can be consolidated through a
9 combination and typically contracted from fewer sources. Cost savings are created by
10 achieving a lower per-unit cost for the service provided due to a broader contract or
11 the repackaging of work into more attractive options to the contractor. This volume
12 purchasing of service is the primary method through which service procurement
13 savings are realized.

14 **a. Procurement**

15 Q. **What are the merger cost savings available from combined procurement of**
16 **materials and supplies?**

17 A. Procurement savings should result from larger purchasing volumes and the
18 availability of greater purchasing power. Annual purchases for 1998 for BEC Energy
19 were estimated at approximately $30.2 million, while for COM/Energy they were
20 approximately $12.0 million. Savings were estimated for each of the principal

1 materials categories, e.g., consumables, and represent an estimated 5-7% reduction in
2 total materials costs from extending the purchasing power across the broad range of
3 commodity categories. This amount was determined based on the experience of other
4 companies, review of certain component per unit costs, management's knowledge of
5 vendors and potential approaches to material standardization and vendor
6 concentration. The combined company may experience a larger impact on
7 COM/Energy unit prices from the larger BEC Energy procurement volume.
8 Although both Companies already procure certain volumes of materials, BEC Energy
9 volumes exceed those of COM/Energy and it is likely that either regional distributors
10 may be utilized or more direct purchasing will occur from manufacturers. This
11 purchasing leverage enhancement reflects permanent economies of scale through
12 lower unit costs. Total savings from procurement were estimated at $34.9 million
13 over the ten-year period.

14 **Q. Should any of the materials and supplies savings be treated as capital savings?**
15 A. Yes. Approximately 70% of the materials and supplies savings has been allocated to
16 capital accounts based on the combined company's estimated capitalization rate for all
17 materials and supplies. Once again, the applicable yearly fixed charge rate was
18 applied to convert the capital cost reductions into revenue-requirement savings.

1 **b. Inventory**

2 Q. **How are inventory savings resulting from the merger calculated?**

3 A. Similarity in the systems - electrical distribution and transmission - will offer the
4 potential for inventory reduction from standardization and limited sharing of parts and
5 components. For example, each company maintains common spare parts for its
6 transmission and distribution facilities that can be shared. These spares will provide
7 backup and reduce a reorder cycle when replacement is required. The combination
8 will allow for some consolidation of existing inventory levels to maintain the
9 appropriate level of spare parts that eliminates redundancy and duplication. The
10 average 1998 inventory levels for nonfuel, non-generating material and supplies were
11 identified at $17.9 million for BEC Energy and $7.8 million for COM/Energy. These
12 levels were estimated to be reduced by approximately 6% of the combined
13 transmission and distribution related inventory. These reductions reflect a one-time
14 benefit and are based on the experience of previous companies and management's
15 expectations for standardization and material substitutability. The annual fixed-
16 charge rate described previously was then applied to the one-time permanent
17 inventory reduction to calculate the total savings from inventory reductions. The total
18 estimated inventory savings were $1.4 million for the ten-year period. Generation
19 inventory was excluded from this analysis.

1 The level of the one-time reduction reflects the experience of other companies in
2 similar undertakings. Unique items, such as certain engineered equipment will be
3 less standardized and shareable. However, normal commodities and consumables,
4 such as cable, and other engineered items such as transformers are more standardized
5 and common to both systems. The sharing of these items effectively reduces the need
6 for inventory replenishment and extends the reorder cycle.

7 **c. Contract Services**

8 Q. **What is the nature of savings from contract services as a result of the merger**
9 **and how were they quantified?**

10 A. Similar to consolidating materials and supplies purchasing volumes, the combined
11 company will be able to gain economies of scale from the aggregation of related work
12 activities and increased purchasing leverage with service providers. Examples of
13 these services include tree trimming, certain construction, etc.

14 The savings estimate also is dependent upon future negotiations with contractors and
15 is similar to those estimated in prior transactions and represents purchasing leverage
16 savings across the broad range of these services. BEC Energy's total contract
17 services for 1998 were $38.5 million, while for COM/Energy they were $7.2 million.
18 The combined company thus should be able to achieve additional economies of scale
19 and scope from negotiating with competing vendors.

1 Some contract services savings should be considered capital savings. A capitalization
2 rate of 65% based on the estimated rate for the Companies was used to allocate
3 contract services expenditures to capital accounts. These savings amounts were then
4 converted to revenue requirements savings using the applicable fixed charge rate for
5 each year. The total estimated savings from contract services over the ten-year period
6 was $10.0 million based on 1998 dollar volumes escalated to 2000.

7 Q. **Please compare the methodology used to quantify the various categories of**
8 **procurement and inventory savings with the methodology used to quantify other**
9 **estimated savings.**

10 A. Procurement and inventory savings, which for the most part require a prediction of
11 how well the combined company will be able to use its increased size to negotiate
12 better unit prices, are more difficult to quantify precisely than savings associated with
13 the elimination of redundant expenses. It is somewhat easier today to analyze and
14 determine which costs would be redundant in a consolidated organization.
15 Predictions of future behavior cannot be determined so precisely.

16 Q. **Does that mean that the estimated inventory and procurement savings are less**
17 **likely to occur?**

18 A. No. Review of the results of prior transactions shows that the expected purchasing
19 leverage does emerge and that the savings level estimates made in such transactions
20 prior to consummation can be achieved.

Q. **Could these savings be achieved absent a merger?**

A. No. These savings are predicated directly on the assumption that there is a merged company that has greater purchasing leverage.

4. Energy Sourcing

Q. **Mr. Flaherty, please discuss the cost savings that can be created through energy sourcing.**

A. As mentioned earlier in this section, the combined company will have the opportunity to reduce future expenditures for capacity and energy by coordinating and optimizing planning and purchasing for future energy requirements. The combination of the two Companies will create system diversity due to differences in the timing of peak demands between the systems. The load diversity of the combined system will allow for the elimination of a portion of purchased capacity now planned by the two stand-alone Companies. The elimination of these forecast purchases will reduce the overall capacity costs incurred by the combined Companies.

Specifically, load diversity from different load and peaking profiles between the Boston Edison and Cambridge/Commonwealth Electric systems will provide, for example, an estimated 0.5% reduction (approximately 13-18 MW) in combined versus stand-alone July and August 2000 peaks that can allow planned capacity purchases to be avoided. Savings are based on: (1) estimating the load reductions for all monthly peaks; and (2) projecting the avoided costs of purchasing capacity

1 otherwise needed to support those load-reduction amounts. The available benefits
2 from avoided capacity costs are estimated at $7.1 million over the 2000-2009 period.
3 An additional, and potentially more significant, opportunity to reduce purchased
4 energy and capacity costs arises from the increased volume the combined company
5 will purchase relative to either company on a stand-alone basis. The determination of
6 savings arising from vendor leverage requires a prediction of how well the combined
7 company will be able to use its increased size to negotiate better unit prices.

8 **Q. Could these savings be achieved absent a merger?**

9 A. No. These savings are predicated directly on the assumption that there is a merged
10 company that has load diversity that does not exist on a stand-alone basis.

11 **VIII. COSTS TO ACHIEVE**

12 **Q. Please describe the approach used to estimate the costs that will be incurred to**
13 **bring about the integration of the two companies.**

14 A. Costs are incurred in all merger transactions from the process of combining the two
15 entities and attaining the identified cost savings. These costs reflect out-of-pocket
16 cash payments and usually are one-time payouts incurred as a result of the merger.

17 **Q. Please explain the process by which the costs to achieve were estimated by the**
18 **companies.**

19 A. Management discussed the consolidation requirements and the estimated integration
20 costs associated with the merger. The functional analysis described above that was

1 used to determine duplicative functional areas where employee reductions would
2 likely occur was used also to estimate the number of positions that would need to be
3 relocated to achieve the merger cost savings. The costs that will be incurred in
4 systems integration, internal and external communications and other miscellaneous
5 expenses also were identified. The methodology used by the Companies to develop
6 the costs to achieve estimates was comprehensive, and similar to that used by other
7 companies in estimating such costs.

8 **Q. What expenses are estimated to be incurred to merge the companies?**

9 A. Costs to achieve are estimated at $111 million over ten years, with the costs to be
10 incurred in large part over the two years beginning in 2000. These cost estimates are
11 consistent with estimates made by companies in other similar prior transactions and
12 reflect differences in scale and scope and the unique circumstances of this merger.

13 **Q. What are the primary components of the costs to achieve the estimated savings?**

14 A. The primary components used to estimate costs to achieve were separation costs
15 (estimated to cost $27.1 million), relocation costs ($1.0 million), retention costs
16 ($3.0 million), systems integration ($44.7 million), internal/external communications
17 costs ($2.0 million), regulatory process costs ($5.1 million), transition costs ($7.0
18 million), directors' and officers' tail liability coverage ($1.9 million), facilities
19 reconfiguration costs ($1.5 million), telecommunications costs ($0.7 million) and
20 transaction costs ($17.1 million).

1 **Q. Please describe the means the Companies anticipate using to achieve the**
2 **estimated position reductions.**

3 A. A major component of the merger cost savings is the reduction in work force which is
4 primarily due to the elimination of duplicative functions and tasks. These reductions
5 are expected by the Companies to be achieved through a variety of means including
6 attrition, controlled hiring, work force redeployment and work realignment, and
7 through some targeted separation as well. For these targeted separations, out-of-
8 pocket costs will be incurred to achieve the total position reductions.

9 **Q. How were the level of costs to achieve for work force reductions calculated?**

10 A. The estimate used for the severance package calculation was two weeks of base pay
11 per year of service, plus nine months of health benefits from the date of separation.
12 This package reflects general parameters utilized in other previous transactions. The
13 Companies anticipated that the eliminated positions will be offered severance
14 packages in conjunction with the work-force reductions. These programs are to be
15 more fully defined during the transition process based on additional considerations of
16 the management and human resources philosophy of the combined company and
17 more specific analysis on the timing and location of reduced positions. An additional
18 amount of $3.0 million for employee retention has also been identified to secure
19 valuable positions, such as in the information technology area, during the transition
20 period.

1 Q. **Explain how relocation costs were calculated.**

2 A. To provide for efficient consolidation, certain functional areas will be centralized and
3 thus require employee relocation to a new site. Based on the functional analysis, it
4 was determined that a number of positions possibly would need to be relocated.
5 Relocation expenses were estimated at a total of $1.0 million. The cost of the actual
6 package to be offered to eligible positions has not yet been determined. The
7 components of a relocation program could include moving expenses, house hunting
8 costs, cost of living differentials, and closing costs. These cost estimates are
9 consistent with estimates made by companies in prior similar transactions.

10 Q. **Explain how systems consolidation and telecommunications networking costs**
11 **were calculated.**

12 A. Significant effort will be expended by the Companies in integrating the information
13 technology and services functions of the Companies. These efforts will relate to
14 reducing redundancy, integrating systems, and linking databases. Further, voice, data
15 and video networks will need to be integrated through expanded telecommunications
16 capabilities. Integration costs for these areas were estimated at $45.4 million total,
17 composed of $44.7 million and $0.7 million, respectively, for systems and
18 telecommunications. These cost estimates cover contract programming, hardware
19 changeout and conversion, increased T-1/T-3 capacity, and outside assistance and
20 reflect scale, complexity, and platform differences. These expenses associated with
21 systems and communications integration are expected to principally be incurred in

1 2000 and 2001, but will carry through the full period to reflect additional hardware
2 lease costs.

3 Q. **Can you describe the regulatory process costs to achieve related to the merger?**
4 A. To complete the merger successfully, certain costs will be incurred for preparation
5 and pursuit of regulatory filings, such as those related to the Securities and Exchange
6 Commission, Federal Energy Regulatory Commission, and Department of Justice
7 filings and the Rate Plan case before the Department of Telecommunications and
8 Energy. These costs will include professional services for legal, tax, accounting and
9 consulting assistance. Regulatory process costs are estimated at $5.1 million.

10 Q. **Please describe the estimated internal and external communications costs to**
11 **achieve savings.**
12 A. Communication expenses will arise from the need to disseminate merger information
13 to the various stakeholders of the individual organizations and combined company.
14 Informational brochures will be sent to customers, employees, shareholders, rating
15 agencies, and state and federal commissions to explain the specifics of the merger.
16 These expenditures are estimated to cost $2.0 million.

17 Q. **Please explain the transaction cost component included within the total costs to**
18 **achieve.**
19 A. Transaction costs include amounts paid to professional services firms for assistance
20 with certain aspects of the merger. These costs specifically relate to fees paid to

1 investment bankers for assistance in transaction structuring and negotiation and the
2 provision of a fairness opinion, as well as, certain legal assistance. Total transaction
3 fees are estimated at $17.1 million for the above categories and are paid in the first
4 year of the transaction.

5 Q. **Are there additional costs to achieve the savings that will be incurred?**
6 A. Yes. Other costs that were estimated to be attributed to the merger are transition costs
7 ($7.0 million), facilities reconfiguration ($1.5 million) and director and officer
8 ("D&O") tail coverage ($1.9 million). Additional D&O tail liability coverage pays
9 for incremental additions to premiums paid to protect directors and officers. Other
10 transition costs would include the use of outside professional firms to assist in the
11 integration of the combined company and other expenses, such as, travel for the
12 transition team and facilities refurbishment and leasehold improvements.

13 Q. **What is the amount of premerger initiatives included as part of the net merger**
14 **savings quantification?**
15 A. The stand-alone forecasts for Boston Edison for the period 2000-2007 indicate that
16 the overall impact of these cost reduction efforts is to reduce operations and
17 maintenance expense and capital related amounts by approximately $154 million
18 cumulatively over this period on a "real" basis. That is, the currently forecasted total
19 combined operation and maintenance expense and related capital amounts in 2009

1 will be $227 million lower over the ten-year period than the level that would be
2 expected with normal inflation applied to the 1999 level.

3 These cost-reduction initiatives have been planned to create greater efficiencies for
4 Boston Edison. These cost reduction efforts are being accomplished through process
5 improvement, reengineering, outsourcing, work elimination and contractor
6 management. Since the Boston Edison premerger initiatives will precede and carry
7 through the period over which merger related savings are expected to occur, it is
8 likely that there would be some overlap between the quantified merger cost savings
9 and these internal efforts. Therefore, the quantified merger cost savings were
10 adjusted downward to reflect these stand-alone impacts ($23.8 million for Boston
11 Edison over the ten-year period) to future costs and to avoid double-counting any of
12 these savings.

13 **Q. Does this conclude your testimony?**

14 A. Yes, it does.

15

SUMMARY OF REGULATED UTILITY EXPERIENCE

Alaska Public Utilities Commission
- Anchorage Sewer Utility

Arizona Corporation Commission
- U S WEST Communications - Docket No. E-1051-88-146

Beaumont, Texas
- Entex, Inc.
- Gulf States Utilities Company

California Public Utilities Commission
- The Washington Water Power Company and Sierra Pacific Power Company - Application No. 94-08-043
- Pacific Enterprises and ENOVA Corporation - Application No. A-96-10-038

Clark County
- Washington Public Power Supply

District of Columbia, Public Service Commissions
- Baltimore Gas and Electric Company and Potomac Electric Power Company - Formal Case No. 951

Colorado Public Utilities Commission
- Public Service Company of Colorado and Southwestern Public Service Company - Docket No. 95A-513EG

Delaware Public Service Commission
- Atlantic City Electric Company and Delmarva Power & Light Company - Docket No. 97-65

Federal Energy Regulatory Commission
- Baltimore Gas and Electric Company and Potomac Electric Power Company - Docket No. EC96-10-000
- IES Utilities Inc., Interstate Power Company, Wisconsin Power & Light Company, South Beloit Water, Gas & Electric Company, Heartland Energy Services and Industrial Energy Applications, Inc. - Docket No. EC96-13-000
- Trans-Alaska Pipeline System - Docket No. OR78-1
- Middle South Energy, Inc. - Docket No. ER-82-483-000
- Middle South Energy, Inc. - Docket No. ER-82-616-000

- Kansas Power and Light Company and Kansas Gas and Electric Company - Docket No. EC91-2-000
- Southwestern Public Service Company and Public Service Company of Colorado - Docket No. EC96-2-000
- The Washington Water Power Company and Sierra Pacific Power Company - Docket No. EC94-23-000
- Northern States Power Company and Wisconsin Energy Corporation - Docket Nos. EC95-16-000 and ER95-1357-000
- Midwest Power Systems Inc. and Iowa-Illinois Gas and Electric Company
- Ohio Edison Company, Pennsylvania Power Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company
- Atlantic City Electric Company and Delmarva Power & Light Company
- Union Electric and Central Illinois Public Service Company

Federal Power Commission
- Organization and Operations Review

Garland, Texas
- General Telephone Company of the Southwest
- Lone Star Gas Company

Georgia Public Service Commission
- Georgia Power Company - Docket No. 3673-U

Houston, Texas
- Houston Lighting & Power Company

Idaho Public Utilities Commission
- The Washington Water Power Company and Sierra Pacific Power Company - Case Nos. WWP-E-94-7 and WWP-G-94-4

Illinois Commerce Commission
- Illinois Power - Docket No. 84-0055
- Iowa-Illinois Gas and Electric Company and Mid-American Company Energy - Docket No. 94-0439
- Central Illinois Public Service Company, CIPSCO Incorporated and Union Electric Company - Docket No. 95-0551

Iowa Utilities Board
- Midwest Resources Inc., Midwest Power Systems Inc. and Iowa-Illinois Gas and Electric Company - Docket No. SPU-94-14
- IES Industries Inc., Interstate Power Company, WPL Holdings, Inc.

Iowa Electric Light and Power
- Organization and Operations Review

Kansas Corporation Commission
- Southwestern Bell Telephone Company - Docket Nos. 117,220-U and 123,773-U
- Kansas Gas & Electric - Docket No. 120,924-U
- Kansas Power and Light Company and Kansas Gas and Electric Company - Docket No. 174,155-U
- Western Resources and Kansas City Power and Light - Docket No. 190,362-U
- Western Resources, Inc. and Kansas City Power and Light - Docket No. 97-WSRE-676-MER

Kentucky Public Service Commission
- Louisville Gas & Electric Company - Case Nos. 5982, 6220, 7799, 8284, 8616 and 8924
- South Central Bell Telephone Company - Case Nos. 6848, 7774 and 8150
- Kentucky-American Water Company - Case No. 8571

Louisiana Public Service Commission
- American Electric Power Company, Inc., Southwestern Electric Power Company and Central and South West Corporation – Docket No. U-23327

Maryland, Public Service Commission of
- Baltimore Gas and Electric Company and Potomac Electric Power Company

Michigan Public Service Commission
- Wisconsin Electric Power Company and Northern States Power Company - Case No. U-10913

Minnesota Public Service Commission
- Continental Telephone Company - Docket No. PR-121-1
- Northern States Power Company - Docket No. E002/GR-89-865
- Northern States Power Company and Wisconsin Energy Corporation - Docket No. E,G002/PA-95-500

Mississippi Public Service Commission
- Mississippi Power & Light Company - Docket No. U-4285

Missouri Public Service Commission
- Union Electric Company - Case Nos. ER-84-168 and EO-85-17
- Union Electric Company and Central Illinois Public Service Company - Case No. EM-96-149
- Kansas City Power & Light Company - Case Nos. ER-85-128 and EO-85-185
- Kansas Power and Light Company and Kansas Gas and Electric Company - Case No. EM-91-213
- Southwestern Bell Telephone - Case No. TC-93-224
- Western Resources and Kansas City Power and Light

Nevada Public Service Commission
- Bell Telephone Company of Nevada - Docket No. 425
- Central Telephone Company - Docket No. 91-7026
- The Washington Water Power Company and Sierra Pacific Power Company - Docket No. 94-8024

New Jersey Board of Public Utilities
- Atlantic City Electric Company and Delmarva Power & Light Company - Docket No. EM-97-020103

New Mexico Public Service Commission
- Public Service Company of New Mexico
- Southwestern Public Service Company and Public Service Company of Colorado - Case No. 2678

New Mexico State Corporation Commission
- Continental Telephone of the West - Docket No. 942
- General Telephone Company of the Southwest - Docket Nos. 937 and 990
- Mountain States Telephone and Telegraph Company - Docket Nos. 943, 1052 and 1142
- U S WEST Communications - Docket No. 92-227-TC

New Orleans, Louisiana
- New Orleans Public Service Company

New York, State of, Public Service Commission
- Long Island Lighting Company and Brooklyn Union Gas Company - Case 95-G-0761

Ohio Public Utilities Commission
- Ohio Bell Telephone Company - Case No. 79-1184-TP-AIR
- Cleveland Electric Illuminating Company

Oklahoma Corporation Commission
- Organization and Operations Review
- Southwestern Bell Telephone Company - Cause No. 26755
- Public Service Company of Oklahoma - Cause Nos. 27068 and 27639
- Southwestern Bell Telephone Company - Cause No. 000662
- American Electric Power Company, Inc., Public Service Company of Oklahoma and Central and South West Corporation – Cause No. PUD-980000444

Oregon, Public Utility Commission of
- Pacific Power and Light Company - Revenue Requirements Study
- Portland General Electric Company - Revenue Requirements Study
- The Washington Water Power Company and Sierra Pacific Power Company - Docket No. UM-696

Riverside, City of
- San Onofre Nuclear Generating Station

Sherman, Texas
- General Telephone Company of the Southwest

Tennessee Public Service Commission
- United Inter-Mountain Telephone Company - Docket Nos. U-6640, U-6988 and U-7117

Texas Attorney General
- Southwestern Bell Telephone Company

Texas, Public Utility Commission of
- Texas Power & Light Company - Docket Nos. 178 and 3006
- Southwestern Bell Telephone Company - Docket Nos. 2672, 3340, 4545 and 8585
- Houston Lighting & Power Company - Docket Nos. 2448, 5779 and 6668
- Lower Colorado River Authority - Docket No. 2503
- Gulf States Utilities Company - Docket No. 2677
- General Telephone Company of the Southwest - Docket Nos. 3094, 3690 and 5610
- Central Telephone Company - Docket No. 9981
- Southwestern Public Service Company and Public Service Company of Colorado - Docket No. 14980

Utah Public Service Commission
- Utah Power and Light Company - Docket No. 76-035-06

Vermont Public Service Board
- New England Telephone and Telegraph Company - Docket Nos. 3806 and 4546

Waco, Texas
- Texas Power & Light Company

Washington Utilities and Transportation Commission
- The Washington Water Power Company and Sierra Pacific Power Company - Docket No. UE-94-1053 and UE-94-1054
- Puget Sound Power and Light Company and Washington Natural Gas Company

Washington Metropolitan Area Transit Authority
- D.C. Transit

Wisconsin Public Service Commission
- Northern States Power Company and Wisconsin Energy Corporation
- WPL Holdings, IES Industries Inc., Interstate Power Company, Inc. - Docket No. 6680-UM-100

Wyoming Public Service Commission
- Cheyenne Light, Fuel and Power Company (Southwestern Public Service Company and Public Service Company of Colorado) - Docket Nos. 20003-EA-95-40 and 30005-GA-95-39
- Mountain States Telephone and Telegraph Company - Docket No. 9343, Subs. 5 and 9
- Organization and Operations Review
- Pacific Power and Light Company - Docket No. 9454, Sub. 11

10 Year Total Potential Savings Detail (O&M/Fixed Charge)

Potential Areas ($ in 000s)		Reductions	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total
Labor													
	Corporate	296	$20,107	$25,136	$27,900	$29,631	$31,443	$33,341	$35,327	$37,406	$39,582	$41,861	$321,734
	Field	66	4,875	5,500	6,153	6,838	7,555	8,305	9,090	9,913	10,773	11,674	80,676
	Total	362	24,982	30,635	34,054	36,469	38,998	41,645	44,417	47,318	50,356	53,536	402,410
Corporate & Administrative Programs:													
	Administrative & General Overhead		$1,216	$1,481	$1,631	$1,688	$1,746	$1,806	$1,868	$1,930	$1,995	$2,061	$17,424
	Public Relations		$708	$741	$776	$812	$850	$890	$932	$975	$1,021	$1,069	$8,773
	Benefits		0	1,442	1,610	1,795	1,999	2,215	2,446	2,691	2,951	3,228	$20,376
	Insurance		1,436	1,472	1,509	1,547	1,585	1,625	1,666	1,707	1,750	1,794	$16,091
	Information Services (O&M)		1,319	1,931	2,574	2,638	2,704	2,771	2,841	2,912	2,985	3,059	$25,733
	Information Services (Capital)		125	252	2,819	7,417	8,098	8,239	8,259	8,280	5,864	1,423	$50,777
	Professional Services		1,820	1,906	1,995	2,089	2,187	2,289	2,397	2,509	2,627	2,750	$22,568
	Facilities		0	4,266	4,367	4,471	4,578	4,687	4,799	4,913	5,031	5,151	$42,263
	Shareholder Services		153	157	161	165	169	173	178	182	187	191	$1,716
	Vehicles		92	94	96	99	101	104	106	109	112	115	$1,028
	Association Dues		214	219	225	230	236	242	248	254	261	267	$2,398
	Credit Facilities		174	178	183	187	192	197	202	207	212	217	$1,949
	Total		$7,258	$14,141	$17,946	$23,138	$24,446	$25,239	$25,940	$26,670	$24,995	$21,325	$211,097
Purchasing Economies:													
	Procurement		$1,312	$1,765	$2,230	$2,706	$3,195	$3,695	$4,208	$4,734	$5,273	$5,825	$34,943
	Inventory		60	151	151	151	151	151	151	151	151	151	$1,418
	Contract Services		378	499	626	759	898	1,043	1,195	1,355	1,521	1,696	$9,970
	Total		$1,751	$2,416	$3,007	$3,616	$4,243	$4,889	$5,554	$6,239	$6,945	$7,672	$46,331
Energy Savings:													
	Energy Sourcing		$733	$950	$931	$851	$767	$675	$510	$528	$549	$570	$7,064
	Total		$733	$950	$931	$851	$767	$675	$510	$528	$549	$570	$7,064
	Savings Subtotal		$34,723	$48,142	$55,938	$64,075	$68,454	$72,449	$76,420	$80,755	$82,844	$83,102	$666,901
Total Savings			$34,723	$48,142	$55,938	$64,075	$68,454	$72,449	$76,420	$80,755	$82,844	$83,102	$666,901
Cost to Achieve	Costs to Achieve		68,920	10,822	8,541	3,978	3,994	4,010	3,204	2,800	2,386	2,404	$111,058
Pre-Merger Initiatives	Pre-Merger Initiatives		478	1,476	1,647	1,883	2,207	2,546	2,814	3,163	3,583	4,028	23,826
Net Savings	Net Savings		($34,675)	$35,844	$45,749	$58,214	$62,253	$65,893	$70,402	$74,792	$76,875	$76,670	$532,018

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Costs to Achieve
(Dollars in thousands)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
Separation Costs												
Separation Programs	$16,806	$2,460	$1,091	$0	$0	$0	$0	$0	$0	$0	$0	$20,357
Executive Separation (1)	$5,761	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$5,761
Separation Assistance (2)	$1,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,000
Total Separation Costs - Merger	$23,567	$2,460	$1,091	$0	$0	$0	$0	$0	$0	$0	$0	$27,118
Retention Costs	$3,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$3,000
Relocation Costs	$1,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,000
Facilities Reconfiguration	$1,500	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,500
System Integration Costs (4)	$8,565	$6,312	$7,400	$3,928	$3,944	$3,960	$3,154	$2,750	$2,336	$2,354	$0	$44,702
Telecommunication Costs (5)	$250	$50	$50	$50	$50	$50	$50	$50	$50	$50	$0	$700
Transaction Costs	$17,079	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$17,079
Other												
Directors and Officers' Liability Tail Coverage (3)	$1,883	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,883
Regulatory Process Costs	$5,076	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$5,076
Internal/External Communications (3)	$2,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,000
Transition Costs (2)	$5,000	$2,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$7,000
Total Other Costs	$13,959	$2,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$15,959
TOTAL COSTS TO ACHIEVE	$68,920	$10,822	$8,541	$3,978	$3,994	$4,010	$3,204	$2,800	$2,386	$2,404	$0	$111,058

(1) Assumes five executive separations with three years compensation for separation
(2) Based on previous transactions
(3) Estimated
(4) Includes O&M and revenue requirements costs
(5) Telecommunication costs include $100,000 to tie the switches together and $150,000 for public data networks for the first year, and $50,000 each following year.

10 Year Total Potential Savings Detail (O&M/Fixed Charge)

Potential Areas ($ in 000s)		Reductions	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total	
Labor														
	Corporate	296	$20,107	$25,136	$27,900	$29,631	$31,443	$33,341	$35,327	$37,406	$39,582	$41,861	$321,734 C1	48.2%
	Field	66	4,875	5,500	6,153	6,838	7,555	8,305	9,090	9,913	10,773	11,674	80,676 C2	12.1%
	Total	362	24,982	30,635	34,054	36,469	38,998	41,645	44,417	47,318	50,356	53,536	402,410 A1	60.3%
Corporate & Administrative Programs:														
	Administrative & General Overhead		$1,216	$1,481	$1,631	$1,688	$1,746	$1,806	$1,868	$1,930	$1,995	$2,061	$17,424 D2	2.6%
	Public Relations		$708	$741	$776	$812	$850	$890	$932	$975	$1,021	$1,069	$8,773 E2	1.3%
	Benefits		0	1,442	1,610	1,795	1,999	2,215	2,446	2,691	2,951	3,228	$20,376 F2	3.1%
	Insurance		1,436	1,472	1,509	1,547	1,585	1,625	1,666	1,707	1,750	1,794	$16,091 G2	2.4%
	Information Services (O&M)		1,319	1,931	2,574	2,638	2,704	2,771	2,841	2,912	2,985	3,059	$25,733 HD	3.9%
	Information Services (Capital)		125	252	2,819	7,417	8,098	8,239	8,259	8,280	5,864	1,423	$50,777 HC	7.6%
	Professional Services		1,820	1,906	1,995	2,089	2,187	2,289	2,397	2,509	2,627	2,750	$22,568 I2	3.4%
	Facilities		0	4,266	4,367	4,471	4,578	4,687	4,799	4,913	5,031	5,151	$42,263 J2	6.3%
	Shareholder Services		153	157	161	165	169	173	178	182	187	191	$1,716 K2	0.3%
	Vehicles		92	94	96	99	101	104	106	109	112	115	$1,028 L2	0.2%
	Association Dues		214	219	225	230	236	242	248	254	261	267	$2,398 M2	0.4%
	Credit Facilities		174	178	183	187	192	197	202	207	212	217	$1,949 P2	0.3%
	Total		$7,258	$14,141	$17,946	$23,138	$24,446	$25,239	$25,940	$26,670	$24,995	$21,325	$211,097 A1	31.7%
Purchasing Economies:														
	Procurement		$1,312	$1,765	$2,230	$2,706	$3,195	$3,695	$4,208	$4,734	$5,273	$5,825	$34,943 Q2	5.2%
	Inventory		60	151	151	151	151	151	151	151	151	151	$1,418 R2	0.2%
	Contract Services		378	499	626	759	898	1,043	1,195	1,355	1,521	1,696	$9,970 S2	1.5%
	Total		$1,751	$2,416	$3,007	$3,616	$4,243	$4,889	$5,554	$6,239	$6,945	$7,672	$46,331 A1	6.9%
Energy Savings:														
	Energy Sourcing		$733	$950	$931	$851	$767	$675	$510	$528	$549	$570	$7,064 T2	1.1%
	Total		$733	$950	$931	$851	$767	$675	$510	$528	$549	$570	$7,064 A1	1.1%
	Savings Subtotal		$34,723	$48,142	$55,938	$64,075	$68,454	$72,449	$76,420	$80,755	$82,844	$83,102	$666,901	100.0%
Total Savings			$34,723	$48,142	$55,938	$64,075	$68,454	$72,449	$76,420	$80,755	$82,844	$83,102	$666,901	100.0%
Cost to Achieve	Costs to Achieve		68,920	10,822	8,541	3,978	3,994	4,010	3,204	2,800	2,386	2,404	$111,058 A1	16.7%
Pre-Merger Initiatives	Pre-Merger Initiatives		478	1,476	1,647	1,883	2,207	2,546	2,814	3,163	3,583	4,028	23,826 A1	3.6%
Net Savings	Net Savings		($34,675)	$35,844	$45,749	$58,214	$62,253	$65,893	$70,402	$74,792	$76,875	$76,670	$532,018 A1	79.8%

Total Savings Summary

Areas ($ in 000s)	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total
Labor	$24,982	$30,635	$34,054	$36,469	$38,998	$41,645	$44,417	$47,318	$50,356	$53,536	$402,410 A2
Corporate & Administrative Programs:	7,258	14,141	17,946	23,138	24,446	25,239	25,940	26,670	24,995	21,325	$211,097 A2
Purchasing Economies	1,751	2,416	3,007	3,616	4,243	4,889	5,554	6,239	6,945	7,672	$46,331 A2
Energy Sourcing	$733	$950	$931	$851	$767	$675	$510	$528	$549	$570	$7,064 A2
Total Savings	$34,723	$48,142	$55,938	$64,075	$68,454	$72,449	$76,420	$80,755	$82,844	$83,102	$666,901 A2
Costs to Achieve	68,920	10,822	8,541	3,978	3,994	4,010	3,204	2,800	2,386	2,404	$111,058 A2
Pre-Merger Initiatives	$478	$1,476	$1,647	$1,883	$2,207	$2,546	$2,814	$3,163	$3,583	$4,028	$23,826 A2
Net Savings	($34,675)	$35,844	$45,749	$58,214	$62,253	$65,893	$70,402	$74,792	$76,875	$76,670	$532,018 A2

10 Year Total O&M Savings

Areas ($ In 000s)		Reductions	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total	
Labor														
	Corporate	296	$19,768	$24,377	$26,683	$27,934	$29,244	$30,615	$32,051	$33,553	$35,126	$36,773	$296,126	C1
	Field	66	4,479	4,689	4,909	5,139	5,380	5,632	5,896	6,173	6,462	6,765	55,524	C2
	Total	362	$24,246	$29,066	$31,592	$33,073	$34,624	$36,247	$37,947	$39,726	$41,589	$43,538	$351,650	
Corporate & Administrative Programs:														
	Administrative & General Overhead		$1,204	$1,453	$1,586	$1,626	$1,666	$1,708	$1,751	$1,794	$1,839	$1,885	$16,512	D2
	Public Relations		$708	$741	$776	$812	$850	$890	$932	$975	$1,021	$1,069	$8,773	E2
	Benefits		0	1,351	1,423	1,507	1,602	1,704	1,812	1,927	2,050	2,180	15,555	F2
	Insurance		1,436	1,472	1,509	1,547	1,585	1,625	1,666	1,707	1,750	1,794	16,091	G2
	Information Services (O&M)		1,319	1,931	2,574	2,638	2,704	2,771	2,841	2,912	2,985	3,059	25,733	H2
	Information Services (Capital)		0	0	0	0	0	0	0	0	0	0	0	
	Professional Services		1,820	1,906	1,995	2,089	2,187	2,289	2,397	2,509	2,627	2,750	22,568	I2
	Facilities		0	4,055	4,156	4,260	4,367	4,476	4,588	4,703	4,820	4,941	40,366	J2
	Shareholder Services		153	157	161	165	169	173	178	182	187	191	1,716	K2
	Vehicles		92	94	96	99	101	104	106	109	112	115	1,028	L2
	Association Dues		214	219	225	230	236	242	248	254	261	267	2,398	M2
	Lines of Credit		174	178	183	187	192	197	202	207	212	217	1,949	P2
	Total		$7,120	$13,559	$14,683	$15,159	$15,660	$16,180	$16,719	$17,280	$17,862	$18,467	$152,690	
Purchasing Economies														
	Procurement		$891	$914	$937	$960	$984	$1,009	$1,034	$1,060	$1,086	$1,113	$9,987	Q2
	Inventory		0	0	0	0	0	0	0	0	0	0	$0	
	Contract Services		275	288	301	316	330	346	362	379	397	415	3,410	S2
	Total		$1,166	$1,202	$1,238	$1,276	$1,314	$1,354	$1,396	$1,439	$1,483	$1,529	$13,397	
Energy Savings:														
	Energy Sourcing		$733	$950	$931	$851	$767	$675	$510	$528	$549	$570	$7,064	T2
	Total		$733	$950	$931	$851	$767	$675	$510	$528	$549	$570	$7,064	
Total Savings			$33,266	$44,777	$48,445	$50,360	$52,365	$54,457	$56,572	$58,972	$61,482	$64,104	$524,800	
Cost to Achieve			68,920	10,822	8,541	3,978	3,994	4,010	3,204	2,800	2,386	2,404	111,058	
Pre-Merger Initiatives			$478	$1,476	$1,647	$1,883	$2,207	$2,546	$2,814	$3,163	$3,583	$4,028	$23,826	N3
Net Savings			($36,132)	$32,479	$38,257	$44,499	$46,165	$47,901	$50,553	$53,009	$55,513	$57,673	$389,916	

10 Year Revenue Requirements Savings

Areas ($ In 000s)		Reductions	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total	
Labor														
	Corporate	296	$340	$758	$1,217	$1,697	$2,199	$2,725	$3,276	$3,852	$4,456	$5,088	$25,608	C1
	Field	66	396	811	1,245	1,699	2,175	2,673	3,194	3,740	4,311	4,909	25,153	C2
	Total	362	$736	$1,569	$2,462	$3,396	$4,374	$5,398	$6,470	$7,592	$8,767	$9,997	$50,761	
Corporate & Administrative Programs:														
	Administrative & General Overhead		$13	$28	$45	$62	$80	$98	$117	$136	$156	$176	$912	D2
	Public Relations		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
	Benefits		0	91	187	289	397	511	633	763	902	1,048	4,821	F2
	Insurance		0	0	0	0	0	0	0	0	0	0	0	
	Information Services (O&M)		0	0	0	0	0	0	0	0	0	0	0	
	Information Services (Capital)		125	252	2,819	7,417	8,098	8,239	8,259	8,280	5,864	1,423	50,777	H-C
	Professional Services		0	0	0	0	0	0	0	0	0	0	0	
	Facilities		0	211	211	211	211	211	211	211	211	211	1,897	J2
	Shareholder Services		0	0	0	0	0	0	0	0	0	0	0	
	Vehicles		0	0	0	0	0	0	0	0	0	0	0	
	Association Dues		0	0	0	0	0	0	0	0	0	0	0	
	Lines of Credit		0	0	0	0	0	0	0	0	0	0	0	
	Total		$137	$582	$3,262	$7,979	$8,786	$9,060	$9,221	$9,390	$7,132	$2,858	$58,407	
Purchasing Economies:														
	Procurement		$421	$852	$1,294	$1,746	$2,211	$2,686	$3,174	$3,674	$4,187	$4,712	$24,956	Q2
	Inventory		60	151	151	151	151	151	151	151	151	151	1,418	R2
	Contract Services		103	211	325	443	567	697	833	975	1,124	1,280	6,560	S2
	Total		$584	$1,214	$1,769	$2,340	$2,929	$3,534	$4,158	$4,800	$5,462	$6,143	$32,934	
Total Savings			$1,457	$3,365	$7,493	$13,715	$16,089	$17,992	$19,849	$21,783	$21,361	$18,998	$142,102	
Cost to Achieve			0	0	0	0	0	0	0	0	0	0	0	
Pre-Merger Initiatives			0	0	0	0	0	0	0	0	0	0	0	
Net Savings			$1,457	$3,365	$7,493	$13,715	$16,089	$17,992	$19,849	$21,783	$21,361	$18,998	$142,102	

10 Year Capital Summary

Areas ($ in 000s)		Reductions	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total	
Labor														
	Corporate	296	$1,680	$2,071	$2,267	$2,374	$2,485	$2,601	$2,723	$2,851	$2,985	$3,125	$25,162	C1
	Field	66	1,959	2,050	2,147	2,247	2,353	2,463	2,578	2,699	2,826	2,958	$24,280	C2
	Total	362	$3,638	$4,122	$4,414	$4,621	$4,837	$5,064	$5,302	$5,550	$5,810	$6,083	$49,442	
Corporate & Administrative Programs:														
	Administrative & General Overhead		$63	$76	$83	$86	$88	$90	$92	$94	$97	$99	$869	D2
	Public Relations		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
	Benefits		0	450	474	502	534	568	604	642	683	727	5,185	F2
	Insurance		0	0	0	0	0	0	0	0	0	0	0	
	Information Services (O&M)		0	0	0	0	0	0	0	0	0	0	0	
	Information Services (Capital)		4,458	14,800	11,031	2,821	572	586	601	616	631	647	36,764	H-C
	Professional Services		0	0	0	0	0	0	0	0	0	0	0	
	Facilities		0	1,042	0	0	0	0	0	0	0	0	1,042	J2
	Shareholder Services		0	0	0	0	0	0	0	0	0	0	0	
	Vehicles		0	0	0	0	0	0	0	0	0	0	0	
	Association Dues		0	0	0	0	0	0	0	0	0	0	0	
	Lines of Credit		0	0	0	0	0	0	0	0	0	0	0	
	Total		$4,521	$16,369	$11,588	$3,409	$1,194	$1,244	$1,297	$1,353	$1,411	$1,473	$43,860	
Purchasing Economies:														
	Procurement		$2,080	$2,132	$2,185	$2,240	$2,296	$2,353	$2,412	$2,472	$2,534	$2,598	$23,302	Q2
	Inventory		575	862	0	0	0	0	0	0	0	0	1,436	R2
	Contract Services		511	535	560	586	614	642	672	704	737	772	6,333	S2
	Total		$3,165	$3,529	$2,745	$2,826	$2,909	$2,996	$3,085	$3,176	$3,271	$3,369	$31,072	
Total Savings			$11,325	$24,020	$18,747	$10,855	$8,941	$9,304	$9,683	$10,080	$10,493	$10,925	$124,374	
Cost to Achieve			0	0	0	0	0	0	0	0	0	0	0	
Pre-Merger Initiatives			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
Net Savings			$11,325	$24,020	$18,747	$10,855	$8,941	$9,304	$9,683	$10,080	$10,493	$10,925	$124,374	

Financial Assumptions (continued)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Escalation Rates (All years)											
Labor (Blended Salary and Benefits)											
Corporate Employees	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%
Field Employees	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%
General											
Administrative and General Overhead	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Advertising	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%
Insurance	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Facilities	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Shareholder Services	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Association Dues	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Regulatory Expenses	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Benefits	6.35%	6.35%	6.35%	6.35%	6.35%	6.35%	6.35%	6.35%	6.35%	6.35%	6.35%
MIS (Operating Costs)	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
MIS (Development Projects)	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Professional Services	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%
Research & Development	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Lines of Credit	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Procurement	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Inventory	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Contract Services	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%	4.69%
Cost to Achieve	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Pre-Merger Initiatives	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2 50%	2.50%
Vehicles	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%

000386

B1

Financial Assumptions

	Newco	Clipper	Crimson	Weight
Salary				
Corporate				
Generation				
Field				
Capitalization Rates				
Labor				
Corporate Employees	7.8% Clo1			
Generation Employees				
Field Employees	30.4% Clo1			
General				
Administrative and General Overhead	5%			
Advertising	0%			
Insurance	0%			
Facilities	0%			
Shareholder Services	0%			
Director's Fees	0%			
Association Dues	0%			
Regulatory Expenses	0%			
Benefits	25%			
Coal Supply	0%			
Gas Supply	0%			
MIS (Operating Costs)	0%			
MIS (Development Projects)	100%			
Professional Services	0.00%			
Research & Development	0.00%			
Telecommunications	0.00%			
Lines of Credit	0%			
Procurement	70.00%	77.00%	65.00%	
Inventory	100.00%	100.00%	100.00%	
Contract Services	65.00%	65.00%	65.00%	
Financing	0%			
Cost to Achieve	0.00%			
Pre-Merger Initiatives	0.00%			

	Newco	Clipper	Crimson	Weight
Escalation Rates (First year)				
Labor				
Corporate Employees	4.69%	4.69%	4.69%	
Generation Employees	4.69%	4.69%	4.69%	
Field Employees	4.69%	4.69%	4.69%	
General				
Administrative and General Overhead	2.50%	2.50%	2.50%	
Advertising	4.69%	4.69%	4.69%	
Insurance	2.50%	2.50%	2.50%	
Facilities	2.50%	2.50%	2.50%	
Shareholder Services	2.50%	2.50%	2.50%	
Director's Fees	2.50%	2.50%	2.50%	
Association Dues	2.50%	2.50%	2.50%	
Regulatory Expenses	2.50%	2.50%	2.50%	
Benefits	6.35%	6.35%	6.35%	
Coal Supply	2.50%	2.50%	2.50%	
Gas Supply	2.50%	2.50%	2.50%	
MIS (Operating Costs)	2.50%	2.50%	2.50%	
MIS (Development Projects)	2.50%	2.50%	2.50%	
Professional Services	4.69%	4.69%	4.69%	
Research & Development	2.50%	2.50%	2.50%	
Telecommunications	2.50%	2.50%	2.50%	
Lines of Credit	2.50%	2.50%	2.50%	
Procurement	2.50%	2.50%	2.50%	
Inventory	2.50%	2.50%	2.50%	
Contract Services	4.69%	4.69%	4.69%	
Financing	2.50%	2.50%	2.50%	
Cost to Achieve	2.50%	2.50%	2.50%	
Pre-Merger Initiatives	2.50%	2.50%	2.50%	
Vehicles	2.50%	2.50%	2.50%	

Revenue Requirement Rates	
General	
Clipper	20.22%
Crimson	20.22%
Average	20.22%
Labor	
Corporate Employees	20.22%
Generation Employees	20.22%
Field Employees	20.22%
Benefits	20.22%
Contract Services	20.22%
Procurement	20.22%
Inventory	20.22%
Pre-Merger Initiatives	20.22%

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
MIS (Development Projects)*	24.04%										
Clipper	24.04%	24.04%	24.04%	24.04%	24.04%	24.04%	0.0%	0.0%	0.0%	0.0%	0.0%
Crimson	24.04%	24.04%	24.04%	24.04%	24.04%	24.04%	0.0%	0.0%	0.0%	0.0%	0.0%
Average	24.04%	24.04%	24.04%	24.04%	24.04%	24.04%	0.00%	0.00%	0.00%	0.00%	0.00%

All Others	20.22%
Partial Year Savings	100%
Carrying Cost	10.50%
Clipper	10.50%
Crimson	10.50%

*Clipper only - Crimson verified suitable for combined Harbor

B2

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CONFIDENTIAL

SECTION C

Pages 88-158
CONFIDENTIAL

SYNERGIES SUMMARY

Savings Area: Administrative & General Overhead

Clipper Position:

Clipper's total administrative and general overhead costs (internal data) for 1997 were over $15.3 million. Average variable cost per employee is $4,935

Crimson Position:

Crimson's total administrative and general overhead costs (internal data) for 1997 were about $7.6 million. Average variable cost per employee is $5,050

Ten Year Savings ($000):

❑ Capital	$ 869
❑ O&M - Expense	$16,512
O&M - Revenue Requirements	$ 912
❑ O&M - Total	$17,424

Rationale for Savings:

Administrative and general overhead costs include office supplies, telephone expenses, employee business expenses, and other miscellaneous costs. Examples of variable administrative and general overhead costs include office supplies, telephone expenses, and business expenses. Administrative and general overhead will decrease as corporate personnel are reduced.

Basis for Calculation:

Variable costs were estimated based on discussions with both sides. Detailed expenses charged to account 921 were provided and fixed costs were eliminated, the remaining costs were variable. The weighted average cost per employee was applied to the number of personnel reductions to estimate savings.

Key Assumptions:

- ❑ All costs are appropriately captured.
- ❑ Variability of cost is accrued based on conversation with company executives, and data provided.

Administrative & General Overhead

2000 Savings ($000)	$1,267 D3										
2001 Savings ($000)	$231 D3										
2002 Savings ($000)	$102 D3										
Percentage of Savings Capitalized	5.0%										
Revenue Requirements Rate	20.2%										
Inflation Rate	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	
Partial Year Savings	100%										

Annual Savings

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total
Annual Savings Amount	$1,267	$1,530	$1,669	$1,711	$1,754	$1,798	$1,843	$1,889	$1,936	$1,984	$17,381
O&M Savings	$1,204	$1,453	$1,586	$1,626	$1,666	$1,708	$1,751	$1,794	$1,839	$1,885	$16,512 A3
Capital Savings	$63	$76	$83	$86	$88	$90	$92	$94	$97	$99	$869 A5
		$63	$76	$83	$86	$88	$90	$92	$94	$97	
			$63	$76	$83	$86	$88	$90	$92	$94	
				$63	$76	$83	$86	$88	$90	$92	
					$63	$76	$83	$86	$88	$90	
						$63	$76	$83	$86	$88	
							$63	$76	$83	$86	
								$63	$76	$83	
									$63	$76	
										$63	
Cumulative Capital Savings	$63	$140	$223	$309	$397	$486	$579	$673	$770	$869	
Revenue Requirements Savings	$13	$28	$45	$62	$80	$98	$117	$136	$156	$176	$912 A4
Total O&M and Revenue Requirements Savings	A2 $1,216	$1,481	$1,631	$1,688	$1,746	$1,806	$1,868	$1,930	$1,995	$2,061	$17,424 A2

D2

A&G Overhead Summary

escalation 2.5%

			Employees
Total A&G Overhead	**1997**		
Clipper	15,334,332	D4	
Crimson	7,565,544	D5	

Total A&G Variable Overhead		1997		Employees		A&G per Employee		Weighted Average Cost Per Employee	4,985
Clipper	$	4,826,284	D4	D4	978	$	4,935		
Crimson	$	3,782,772	D5	D5	749	$	5,050		
Total Variable A&G	$	8,609,056			1,727	$	4,985		
				Total A&G per employee		$	4,985		
				2000 Employee reductions			236		
				1997 Savings		$	1,176,455		
				2000 Savings		$	1,266,913	years to escalate	3
				2000 Non-gen savings		**$**	**1,266,913**		

Total A&G per employee	$	4,985		
2001 Employee reductions	$	42		
1997 Savings	$	209,369		
2001 Savings	**$**	**231,104**	years to escalate	4

Source: Internal data

Assumptions: Variable costs are equal to 50% of total A&G costs

Total A&G per employee	$	4,985		
2002 Employee reductions	$	18		
1997 Savings	$	89,730		
2002 Savings	**$**	**101,521**	years to escalate	5

D3

1997 A&G Expenses

		variable		Fixed		Total	
					Variable Factor	50%	
Telephone	$	1,701,672	$	1,701,672	$	3,403,343	D6
Utilities	$	-	$	5,681,764	$	5,681,764	D7
Facilities	$	-	$	-		0	
Employee Expenses	$	845,503	$	845,503	$	1,691,006	D9
Postage	$	1,347,454	$	1,347,454	$	2,694,908	D10
Office Supplies	$	931,656	$	931,656	$	1,863,311	D11
Total	**$**	**4,826,284**	**$**	**10,508,048**	**$**	**15,334,332**	
A&G Gross-Up for Capitalization	**$**	**4,826,284**	**$**	**10,508,048**	**$**	**15,334,332**	

Source: Internal data

Employee Numbers	
Total	2,274
A&G	978

001192

1997 A&G Expenses

A&G		$		
Crimson Electric Light	D12	1,941,385	Note 1	
Crimson Gas	D13	6,475,003	Note 2	
Crimson Electric	D14	8,839,814	Note 3	
Total		17,256,202		

Employee Numbers	
Total	1,628
A&G	749

Adjusted A&G	
Crimson Electric Light	1,677,296
Crimson Gas	5,038,001
Crimson Electric	7,535,671
Total	14,250,968

Difference between A&G and adjusted A&G		
Crimson Electric Light	D15	264,089
Crimson Gas	D16	1,437,002
Crimson Electric	D15	1,304,143
		3,005,234

Non Labor Adjustment factor 32% D15

Non Labor A&G	
Crimson Electric Light	536,735
Crimson Gas	1,612,160
Crimson Electric	2,411,415

Total Non Labor A&G	
Crimson Electric Light	800,824
Crimson Gas	3,049,162
Crimson Electric	3,715,558
Total	7,565,544

Variable factor 50%

Total Variable A&G $ 3,782,772
(Includes Gas Allocation)

Gross-up For Capitalization $ 7,565,544
Source: Internal data

Assumtions: FERC account 921 was reduced by total Crimson/Energy Service Company's transfers into that account.
Based on total labor versus non labor expenses billed out, 32% constitutes non labor costs.
Apply 32% to the Crimson/Energy Service Company transfers and add to the difference.
Include Gas for A&G calculation

Note 1 - $57,920 in costs not included:

PC Software	293	D12
Vax Software Maintenance	31,398	
Computer Supplies	1,170	
Employee-owned auto expe	7,435	
Outside Computer service	4,718	
Snow Removal	12,906	
	$ 57,920	

Note 2 - $1,090,270 in costs not included

Consult & Contract	19492	D13
Computer Supplies	55216	
Software Serv. Agree	117999	
Medical Expense	10625	
Emp Auto	5133	
Utilities	397840	
Software exp - PC/LAN	2209	
Software Expense	5066	
Serv/Grds	338437	
Snow	78929	
Security	32122	
Cafeteria	27202	
	$ 1,090,270	

Note 3 - $325,709 in costs not included

Engineering	8,179	D14
Vax Software	1,893	
PC Software	21,551	
Vax Software	115,411	
PC Software M	2,574	
Computer Sup	18,494	
Employee own	24,523	
Outside Comp	40,273	
Snow	35,845	
Snow	41,114	
Snow	15,852	
	$ 325,709	

D5

Clipper

1997 Telephone (Summary)

01-Jun-98

ACCOUNT	P12
50613	131107.5
52413	746621.36
54913	26009.45
56013	18543.4
56213	7269.7
56313	10132.87
58013	105794.37
58113	229355.66
58213	75334.4
58313	205341.42
58413	313640.04
58613	16620.52
58813	272984.25
90213	46730.91
90385	1030.88
90513	168767.81
91013	48801.35
91613	532369.9
92113	463090.19
92166	-164763.48
96313	64804.14
96413	83757.13

Grand Total: 3403343.77

00164 06

Clipper

1997 Utilities (Summary)

01-Jun-98

PROPRIETARY & CONFIDENTIAL

ACCOUNT P12	
93104	3796482.55
93120	1834335.24
93121	50946.39

Grand Total: 5681764.18

D7

Clipper

1997 Facilities (Summary)

01-Jun-98

PROPRIETARY & CONFIDENTIAL

ACCOUNT	P12
50556	109111.26
50615	201855.35
56015	779.72
56215	2005
56315	73.18
58015	76912.51
58115	43972.19
58215	23697.89
58315	17785.45
58415	62083.71
58815	105036.54
58865	135274.34
58866	10839.16
58867	16974.21
59873	537477.3
59874	136161.44
92058	60997.39
92115	5238.8
93104	281219.36
96315	77262.42
96415	10423.19

Grand Total: 1915180.41

Not used in A+G analysis

00166

D8

Clipper

1997 Employee Expenses (Summary)

01-Jun-98

PROPRIETARY & CONFIDENTIAL

ACCOUNT	P12
50613	211170.92
52413	83568.97
54913	13923.94
56013	7404.3
56113	2064.5
56213	861.01
56313	5188.81
58013	37717.42
58113	17528.48
58213	48674.28
58313	118036.43
58413	181229.84
58613	1474.94
58813	141462.08
90213	210945.91
90333	9058.12
90334	192.84
90513	32258.09
91013	33968.83
91613	181826.86
92113	177744.32
96313	71306.91
96413	79802.52
96415	23596.01

Grand Total: 1691006.33

00167

09

Clipper

1997 Postage (Summary)

PROPRIETARY & CONFIDENTIAL

01-Jun-98

ACCOUNT	P12
50613	-24500.15
56213	15.75
58813	902.7
90213	54642.54
90513	2237892.98
91013	22501.06
91641	2116.92
92001	370408.77
92113	29813.08
96413	1114.54

Grand Total: 2694908.19

00168

DIC

Clipper

1997 Office Supplies (Summary)

PROPRIETARY & CONFIDENTIAL

01-Jun-98

ACCOUNT	P12
50613	232730.53
52413	224402.31
54913	383.03
56013	20705.8
58013	38625.25
58113	24981.7
58213	116319.92
58413	191731.08
58813	75910.76
90213	64005.81
90333	7510.16
90334	2037.88
90384	0
90386	0
90513	33427.05
91013	33862.92
91613	59684.07
92113	439126.71
96313	162492.96
96413	135373.91

Grand Total: 1863311.85

00169

Add'l backup detail 5.29

ANALYSIS OF ACCOUNT 921
OFFICE SUPPLIES & EXPENSE
1995 - 1998

PROPRIETARY & CONFIDENTIAL

CAMBRIDGE ELECTRIC

Area/function	Description	1998 Estimate	1997	1996	1995
63-1120	Bank Balance & Def. fees	$17,000	$6,872	$23,335	$25,602
23-1142	Vax Software	0	439	415	545
23-1143	PC Software	X 2,000	293	0	3,265
23-1152	Vax Software Maintenance	X 34,000	31,398	9,445	22,003
23-1153	PC Software Maintenance	X 3,000	0	0	2,928
23-1163	Computer Supplies	X 3,000	1,170	3,822	5,927
20-1215	Small Tools and Equipment	6,000	9,060	8,066	8,002
20-1571	System Planning	0	53	101	79
various-1754	Employee dues	1,000	1,852	3,998	4,228
various-1755	Employee subscription	1,000	2,210	2,414	1,939
various-1811	Employee owned auto exp	X 8,000	7,435	8,143	1,770
various-1815	Office supplies and expense	7,000	3,071	5,274	7,252
20-1819	Serv. Bldg/Ground - General	52,000	48,821	50,812	49,944
various-1820	Outside computer service	X 9,000	4,718	26,938	11,820
various-1824	Employee meal expense	0	206	29	266
62-1841	Wareham Central Ops	234,000	301,880	316,122	355,331
20-1848	Snow removal and sand	X 9,000	12,906	32,524	18,830
Various	Com Energy	2,228,000	1,735,216	2,281,002	2,163,611
921	Dup charge cr office sup & exp	(229,000)	(188,295)	(216,411)	(185,750)
	Total	$2,386,000	$1,999,305	$2,556,028	$2,497,592
			− 57,920		
			1,941,385		

* remove X items (or verify <50%)

ANALYSIS OF ACCOUNT 92$
OFFICE SUPPLIES & EXPENSE
1995 - 1998

PROPRIETARY & CONFIDENTIAL

COMMONWEALTH GAS

Area/function	Description	1998 Estimate	1997	1996	1995
various-2088	Client sup Trn Material	$0	$0	$0	$99
various-2089	Client Sup O/S Serv	0	0	0	31,221
various-2090	Consult & Contr Service	37,000	19,492	41,149	153,636
04-2091	Computer Supplies	37,000	55,216	57,825	54,576
various-2093	Software Serv. Agreement	118,000	117,999	102,360	121,831
63-2120	Bank Bal & Defic Fee	118,000	101,113	61,604	91,722
04-2193	Sfwr Serv Agr - PC/LAN	9,000	0	9,144	27,150
63-2200	Misc. Relocation Exp	8,000	1,810	8,718	0
18-2586	Environmental Expense	36,000	38,150	23,719	19,093
30-2678	Medical Expense	20,000	10,625	20,648	31,242
various-2755	Subscription & employee dues	11,000	15,096	20,421	20,106
various-2803	Business meals expense	2,000	9,222	10,949	10,739
18-2808	Uniform & Apparel expense	5,000	4,925	524	46
various-2809	Employee expense	25,000	41,625	55,901	67,740
various-2810	Other labor & expense	7,000	100,751	48,218	20,196
various-2811	Emp auto exp. - per diem	0	672	1,547	1,554
various-2812	Emp auto exp. - mileage	6,000	5,133	3,355	6,877
63-2813	Photocopying expense	29,000	19,458	26,553	39,885
various-2815	Office supply & Exp	14,000	18,233	18,522	24,777
18-2827	Heat/light - NB Bldg	45,000	39,837	41,420	46,446
[illegible]-2828	Heat/light - Plymouth	9,000	8,299	15,050	9,453
[illegible]829	Heat/light - Southboro	223,000	244,124	187,616	179,759
[illegible]2830	Heat/light - Sales off	2,000	3,664	4,541	4,854
18-2831	Heat/light - Camb	59,000	49,671	44,451	53,619
18-2832	Heat/light - Dedham	16,000	17,696	10,634	12,491
18-2833	Heat/light - Worc	35,000	34,349	40,688	37,143
04-2835	Software exp - PC/LAN	9,000	2,209	6,579	13,049
various-2836	Software Expense	6,000	5,066	4,594	8,604
18-2840	Serv Bld/Grds - Southboro	101,000	124,361	100,591	125,944
18-2841	Serv Bld/Grds - Worcester	[illegible]	73,[illegible]	[illegible]	88,177
18-2842	Serv Bld/Grds - Camb & Ded	94,000	111,686	55,184	83,093
18-2843	Serv Bld/Grds - New Bedford	20,000	23,197	8,796	13,862
18-2844	Serv Bld/Grds - Plymouth	6,000	5,338	4,664	5,864
18-2845	Snow Removal - Southboro	21,000	29,363	40,415	23,762
18-2846	Snow Removal - Worcester	10,000	10,324	16,588	14,034
18-2847	Snow Removal - Camb & Ded	23,000	30,661	48,876	40,353
18-2848	Snow Removal - New Bedford	6,000	2,351	7,425	5,100
18-2849	Snow Removal - Plymouth	5,000	6,210	11,875	3,661
18-2850	Billing Cr Oper - CEL	(15,000)	(16,158)	(13,267)	(13,317)
69-various	Com Energy	7,066,000	6,128,271	6,620,174	6,445,202
18-2976	Small Tools & Equipment	6,000	10,243	3,239	6,442
18-2978	Security - Gas Operation	28,000	32,122	5,937,449	33,657
18-2979	Cafeteria Supplies & Expense	23,000	27,202	165,931	25,766
93-5118	Accrued Payroll	(7,000)	1,669	(1,014)	801
	Total	$8,341,000	$7,565,273	$13,918,483	$7,988,207

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ANALYSIS OF ACCOUNT 921
OFFICE SUPPLIES & EXPENSE
1995 - 1998

PROPRIETARY & CONFIDENTIAL

COMMONWEALTH ELECTRIC

Area/function	Description	1998 Estimate	1997	1996	1995
21-1070	Engineering	X $4,000	$8,179	$5,949	$4,205
63-1120	Bank Balance & Def. fees	29,000	$16,574	$46,705	$53,561
23-1142	Vax Software	X 2,000	1,893	1,350	1,770
23-1143	PC Software	X 6,000	21,551	28,780	71,248
23-1152	Vax Software Maintenance	X 143,000	115,411	130,551	70,519
23-1153	PC Software Maintenance	X 9,000	2,574	733	12,744
23-1163	Computer Supplies	X 21,000	18,494	76,699	103,439
63-1211	Employee moving expense	1,000	0	2,737	18,431
20-1215	Small Tools and Equipment	11,000	12,587	15,117	14,050
02-1410	Office supply and expense	6,000	9,164	1,703	400
21-1566	Buildings & Grounds	93,000	69,790	82,939	90,876
21-1567	Human Resources	4,000	2,246	632	698
20-1571	System Planning	1,000	1,956	2,057	1,732
21-1572	Executive	4,000	4,631	2,170	2,848
various-1754	Employee dues	5,000	5,615	11,026	8,976
various-1755	Employee subscription	5,000	7,763	11,269	11,990
18-1810	Other labor and expense	0	894	1,222	831
various-1811	Employee owned auto exp	X 20,000	24,523	24,737	9,846
various-1815	Office supplies and expense	34,000	34,577	35,497	53,050
various-1819	Serv. Bldg/Ground - General	563,000	618,417	427,596	366,480
various-1820	Outside computer service	X 23,000	40,273	59,161	72,466
various-1824	Employee meal expense	0	88	126	278
28-1829	Environmental compliance	39,000	(20,086)	59,682	74,048
various-1830	Util exp. - Adm & Gen- Whm	200,000	216,218	229,118	221,601
various-1848	Snow removal and sand	X 32,000	35,846	98,222	11,209
various-1849	Snow removal and sand	X 23,000	41,114	93,013	14,295
various-1850	Snow removal and sand	X 12,000	15,852	57,865	5,997
69-Various	Com Energy	9,711,000	7,861,380	8,992,946	8,469,996
63-1921	Dup charge cr office sup & exp	0	0	0	0
	Total	$11,001,000	$9,165,523	$10,495,601	$9,767,586

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PROPRIETARY & CONFIDENTIAL

5.24 Prepared by Kevin Hamett [x 4393]

Detailed breakdown of FERC account 921, Office Supplies and Expense, by major cost component (i.e. postage, facilities, employee expenses, telephone, etc.) For 1995-1997 and planned for 1998.

The FERC account 921 for Commonwealth Electric Company and Cambridge Electric Light Company included both labor and non-labor costs for COM/Energy Services Comany. In order to adjust the FERC account 921 to include labor only, first the FERC account 921 was reduced by total COM/Energy Service Company's transfers into that account. Based on total COM/Energy Service Company labor versus non labor expenses billed out to all other companies within the COM/Energy system, it was determined that an estimated 32% constitutes non labor costs. Applying this 32% to the COM/Energy Service Company transfers and adding to this difference yields an estimated adjusted FERC 921 amounts shown below.

	Dec 1997	Dec 1996	Dec 1995
FERC 921	9,165,523	10,495,601	9,767,586
less: COM/Energy transfers to acct	7,861,380	8,992,946	8,469,996
Difference	1,304,143	1,502,655	1,297,590
Plus an estimated 32% of COM/Energy transfers (see discussion below)	2,515,641	2,877,743	2,710,399
Adjusted FERC 921	3,819,784	4,380,398	4,007,989

Applying the same method to Cambridge Electric Light Company results in the following:

	Dec 1997	Dec 1996	Dec. 1995
FERC 921	1,999,305	2,556,028	2,497,592
less: COM/Energy transfers to acct	1,735,216	2,281,002	2,163,611
Difference	264,089	275,026	333,981
Plus an estimated 32% of COM/Energy transfers (see discussion below)	555,268	729,921	692,356
Adjusted FERC 921	819,358	1,004,947	1,026,337

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5.24 cont'd

The following is the breakdown for Commonwealth Gas Company utilizing the same approach as for Commonwealth Electric Company and Cambridge Electric Light Company.

	Dec 1997	Dec 1996	Dec 1995
FERC 921	7,565,273	13,918,483	7,988,207
less: COM/Energy transfers to acct	6,128,271	6,620,174	6,445,202
Difference	1,437,002	7,298,309	1,543,005
Plus an estimated 32% of COM/Energy transfers (see discussion below)	1,961,047	2,118,456	2,062,465
Adjusted FERC 921	3,398049	9,416,765	3,605,470

The detail behind these numbers are also attached.

DB

SYNERGIES SUMMARY

Savings Area: Public Relations

Clipper's Position:

Clipper's total non-labor public relations expense for 1997 was estimated to be $1,246,076 including over $1.167 million for advertising, $65,000 in donations, and $14,075 in public relations.

Crimson's Position:

Crimson's total non-labor public relations expense for 1997 was estimated to be $1,569,000 including $225,000 in donations, $1.24 million in advertising, $75,000 in public relations, and $25,000 in communications.

Ten Year Savings ($000):

❑ Capital	$ 0
❑ O&M - Expense	$ 8,773
O&M - Revenue Requirements	$ 0
❑ O&M - Total	$ 8,773

Rationale for Savings:

The combination of public relations programs eliminates the need for duplicative advertisement design and production and will reduce agency fees. Some overlapping coverage from various media will also occur.

Basis for Calculation:

Public relations services savings for fixed production and agency costs were estimated to be 25% of the smaller company fees. Public relations savings were estimated at 100% of the smaller company fees.

Key Assumptions:

- ❑ Savings for public relations labor expenditures have been accounted for in the Labor section of the synergies analysis.
- ❑ Level of public relations to stay at historical levels
- ❑ Crimson analysis includes only fixed costs for gas.
- ❑ Clipper analysis does not include nuclear costs.

Public Relations

2000 Savings ($000)	$ 70										
2000 Capital Savings ($000)	$0										
Percentage of Savings Capitalized	0.0%										
Revenue Requirements Rate	20.2%										
Inflation Rate	4.7%	4.7%	4.7%	4.7%	4.7%	4.7%	4.7%	4.7%	4.7%	4.7%	
Partial Year Savings	100%										

Annual Savings

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total
Annual Savings Amount	$708	$741	$776	$812	$850	$890	$932	$975	$1,021	$1,069	$8,773
O&M Savings	$708	$741	$776	$812	$850	$890	$932	$975	$1,021	$1,069	$8,773 A3
Capital Savings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		$0	$0	$0	$0	$0	$0	$0	$0	$0	
			$0	$0	$0	$0	$0	$0	$0	$0	
				$0	$0	$0	$0	$0	$0	$0	
					$0	$0	$0	$0	$0	$0	
						$0	$0	$0	$0	$0	
							$0	$0	$0	$0	
								$0	$0	$0	
									$0	$0	
										$0	
Cumulative Capital Savings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
Revenue Requirements Savings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total O&M and Revenue Requirements Savings	$708	$741	$776	$812	$850	$890	$932	$975	$1,021	$1,069	$8,773 A2

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Public Relations

Categories	Clipper*	Crimson	Combined	Savings %	Savings
Donations	$ 65,000	$ 225,000	$ 290,000	0%	$ -
Advertising	$ 1,167,001	$ 1,244,000	$ 2,411,001	25% of Total	$ 602,750
Public Relations	$ 14,075	$ 75,000	$ 89,075	100% of smaller	$ 14,075
Communications	$ -	$ 25,000	$ 25,000		
Total	$ 1,246,076	$ 1,569,000	$ 2,815,076	**Total Savings**	$ 616,825

Total 1997 Savings	$ 616,825
Years of escalation	3
Escalation Rate	4.7%
Year 2000 Savings	$ 707,716

*Does not include Nuclear advertising costs

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Crimson and Public Relations Expenses

Function #	Description		COM/Energy & Cambridge	COM/GAS	
2238	Customer Education	$	E8 685,000		
1268	Marketing Communications	$	E8 25,000		
1269	Informational/ Safety Advertising	$	E8 75,000		
1702	Special Services - Customer Surveys	$	E8 50,000		
1765	Misc. Advertising	$	E8 9,000		
1768	Public Relations	$	E8 75,000		
1770	Donations	$	E8 225,000		
2251	Advertising - Rental Equipment			$ E4 135,000	
2261	Advertising - Promotional/Services				
2271	Advertising - New Equipment			$ E4 290,000	
	Total	**$**	**1,144,000**	**$ 425,000**	**$ 1,569,000**

Assumptions:
* All numbers are 1999 estimates which are reflective of the recent years according to the Director of Communications.
* Gas numbers include fixed costs only (equipment).

E4

Clipper Public Relations

Category	1998	1997	1996
External Labor	$ -	$ 16,815 E6	$ 49,752
Agency Costs*	$ 800,000	$ 1,150,186 E6	$ 954,197
Community Contributions			
Nuclear Info	$ 30,000	$ 27,000 E6	$ 22,261
Community Relations	$ 60,000	$ 65,000 E6	$ 45,581
Total Contributions	$ 90,000	$ 92,000	$ 67,842
Other Advertising/PR			
Nuclear	$ 4,000	$ 2,275 E6	$ 6,500
Community Relations	$ 20,000	$ 14,075 E6	$ 28,551
Total Other	$ 24,000	$ 16,350	$ 35,051
Total	**$ 914,000**	**$ 1,275,351**	**$ 1,057,090**

* Includes ad production and media/print placement without breakouts.

− 27,000
− 2,275
$ 1,246,076

E5

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Table 7.0 tising Expenses & Public Relations

INSTRUCTIONS:
Please provide the data requested below as specifically and completely as possible. If data requested is not applicable, please provide a complete explanation of why not.
Also, please inform us of notable exceptions to or anticipated changes in the data being provided during the forecasted study period.

Person Providing Data: Dena Lehman

not included

Category:		Vendor:	1996 Cost:	1997 Cost:	Est. 1998 Cost:	Avg. Variable %:	Notes / Comments:
Labor BECO	Internal	BECO	$73,000	$75,657	$62,000		
	External	Paul Connolly	$49,752	$16,815	-0-		Paul Connolly hired fulltime June '97
Media Placement							television, radio, etc.
Print Placement		*Clarke & Company	$954,197	$1,159,186	$800,000*		newspapers, magazines, etc
Ad Production Expenses	Internal	*Clarke Howard					ad design, print setup, filming, etc.
	External						
Community Contributions		These are all done in house - BECO gives out the contribution	$22,261	$27,000	$30,000		schools, civic organizations, charities, etc.
Nuclear Info. Community Relations			$46,581	$65,000	$60,000		
Other Advertising / PR Expense	Internal	Nuclear Info Comm. Ads	$6,500	$2,275	$4,000		We place these ourselves
	External	Community Relations Comm. Ads	$78,551	$14,075	$20,000		

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*Clarke Howard/Clarke & Company is our agency of record. They do all placements - radio/print fee includes labor expenses & placements. The 1997 + 1998 amount spent includes dollars charged for placement, production & PR that wasn't included in the monthly fee. In many instances other cost areas paid for these charges.

BECO

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Prepared by Kevin Harnett (x4393)

5.21 Original Detailed breakdown of advertising costs, e.g. labor, media, print, facilities, etc. for 1995 to 1997 and planned for 1998 through the latest date available. Describe types of services performed in-house vs. Outsourced.

Follow-up: Is amount all non-labor? If not, we need the breakdown between labor and non-labor. Additionally, we need to know what types of service are performed in-house vs. Outsourced and cost information for those services.

Detailed historical costs are not available. However, the 1999 budget is available and attached. From discussions with the Direct of Public Communications, the 1999 budget is typical of previous years. Also, there are virtually no external costs.

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1999 Electric Operating Budget Area 1		
Function #	Description	1999 Electric Budget
1022	Travel	12000
1042	Illness	5000
1043	Holiday	44000
1101	Executive Salaries	18000
1199	Secretarial	6000
1239	Public Communications	149000
1267	Employee Communications	35000
1268	Marketing Communications	E10 25000 E4
1269	Informational/Safety Advertising	E12 75000 E4
1702	Special Services-Customer Surveys	E12 50000 E4
1754	Employee Dues	1000
1756	Employee Subscriptions	3000
1765	Misc. Advertising	E13 9000 E4
1766	Customer Communmications	E1 685000 E4
1768	Public Relations	E1 75000 E4
1770	Donations	E11 225000 E4
1802	Supervision & Clerical	168000
1811	Auto Expense	8000
1815	Office Supplies	9000
	Totals	1802000

Combined Commonwealth & Cambridge Electric.

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PROPRIETARY & CONFIDENTIAL

Function #	Description	
		1999
1022	Travel	Electric

Travel 12,000

		12000

Function #	Description	
		1999
1042	Illness	Electric

Illness 5,000

		5000

Function #	Description	
		1999
1043	Holiday/Vacation	Electric

Holiday/Vacation 44,000

		44000

Function #	Description	
		1999
1101	Executive Salaries	Electric

Executive Salaries 18,000

		18000

PROPRIETARY & FIDENTIAL

Function #	Description	
		1999
1199	Secretarial	Electric

Secretarial Salaries 6,000

		6000

Function #	Description	
		1999
1239	Public Communications	Electric

Public Communications Salaries 149,000

		149000

Function #	Description	
		1999
1267	Employee Communications	Electric

Printing/Mailing (Pipes & Wires, etc.)	15,000
Video Expense	10,000
Misc. (T-shirts, etc.)	5,000
Web Development	5,000

		35000

Function #	Description	
		1999
1268	Marketing Communications	Electric

Development & Printing of Business Solutions 25000 E8

		25000

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PROPRIETARY & CONFIDENTIAL

Function #	Description	
		1999
1766	Misc. Advertising	Electric

Complimentary inserts, program books, etc. 9,000

		9000

Function #	Description	
		1999
1768	Customer Communications	Electric

Educational Materials, Changes that effect customers, DTE mandated inserts, restructuring material, customer newsletter, video production, service excellence and general printing 685,000 E8

		685000

Function #	Description	
		1999
1768	Public Relations	Electric

Beach Clean-up, Green Tree Spree, Good Neighbor Energy Fund, Community Outreach and Partners in Education Programs 75,000 E5

		75000

Function #	Description	
		1999
1770	Donations	Electric

Donations 225,000 E8

		225000

PROPRIETARY & CONFIDENTIAL

Function #	Description	
		1999
1269	Informational/Safety Advertising	Electric

Electrical Safety, Hurricane Preparedness, Sponsor a Highway, Etc. 75,000 E8

		75000

Function #	Description	
		1999
1702	Special Services-Customer Survey	Electric

Customer Satisfaction Survey 50000 E8

		50000

Function #	Description	
		1999
1764	Employee Dues	Electric

Employee Dues 1000

		1000

Function #	Description	
		1999
1765	Employee Subscriptions	Electric

Employee Subscriptions - Newspapers & Journals 3,000

		3000

PRIETARY &
IDENTIAL

Function #	Description	
		1999
1802	Supervision & Clerical	Electric

General Salaries 168,000

		168000

Function #	Description	
		1999
1811	Employee Auto Expense	Electric

Employee Owned Auto Expense 8,000

		8000

Function #	Description	
		1999
1815	Office Supplies	Electric

Misc. Office Supplies, Internet Software, Cellular telephone expenses 9,000 E8

		9000

PRIETARY &
CONFIDENTIAL

1041	Job Injury		0
1042	Illness		5000
1043	Holiday		35000
1044	Other Paid Absence		0
2226	Customer Surveys		50000
2227	Employee Communications		35000
2235	Customer Education		395000
2251	Advertising-Rental Equipment	E16	135000
2261	Advertising-Promotional/Service		125000
2271	Advertising-New Equipment	E17	290000
2652	Administration & Salaries		229000
2755	Subscriptions & Employee Dues		20000
2756	Dues/Co. Memberships		450000
2768	Public Relations		60000
2770	Donations		140000
2803	Business Meals		0
2809	Employee Expense		2000
2810	Other Labor & Expense		8000
2812	Auto Expense		12000
2815	Office Supplies		8000
	Total		1998000

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Com/GAS

Function #	Description	1999 COM/Gas	1999 CEL	1999 Comm. El.	Total Amount Budgeted
1041	Job Injury				
	Job Injury	0	0	0	0
		0	0	0	0

PRIETARY &
CONFIDENTIAL

Function #	Description	1999 COM/Gas	1999 CEL	1999 Comm. El.	Total Amount Budgeted
1042	Illness				
	Illness	5,000	0	0	5,000
		5000	0	0	5000

Function #	Description	1999 COM/Gas	1999 CEL	1999 Comm. El.	Total Amount Budgeted
1043	Holiday/Vacation				
	Holiday/Vacation	35000	0	0	35000
		35000	0	0	35000

Function #	Description	1999 COM/Gas	1999 CEL	1999 Comm. El.	Total Amount Budgeted
1044	Other Paid Absence				
	Other Paid Absence-System Bonus	0	0	0	0
		0	0	0	0

Function #	Description	1999 COM/Gas	1999 CEL	1999 Comm. El.	Total Amount Budgeted
2228	Customer Surveys				
	Surveys	50000			50000
		50000	0	0	50000

Function #	Description				Total

2227	Employee Communications	1999 COM/Gas	1999 CEL	1999 Comm. El.	Amount Budgeted
	Printing/Mailing (Pipes & Wires) & M	15000	0	0	15000
	Video Expense	10000	0	0	10000
	Misc - T-Shirts etc.	5000	0	0	5000
	Web Development	5000	0	0	5000
		35000	0	0	35000

PROPRIETARY & CONFIDENTIAL

Function #	Description	1999 COM/Gas	1999 CEL	1999 Comm. El.	Total Amount Budgeted
2238	Customer Education				
	School/Safety Programs	30000			30000
	Misc. (Other)	10000			10000
	Video Expense	30000			30000
	Printing (Pipeline News, inserts)	150000			150000
	Kids Fair	10000			10000
	Rate Restructuring	100000			100000
	DPU-Welfare Mailings for Reduced	15000			15000
	DOT-Safety Mailings	40000			40000
	Photography	10000			10000
		395000	0	0	395000

Function #	Description	1999 COM/Gas	1999 CEL	1999 Comm. El.	Total Amount Budgeted
2251	Advertising-Leased Appliances				
	Leased Appliance Advertising	135000			135000
		135000	0	0	135000

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Function #	Description	1999 COM/Gas	1999 CEL	1999 Comm. El.	Total Amount Budgeted
2261	Advertising-Promotional				
	Promotional/Service Advertising Advertising expenses for service advertising and other promotional programs.	125000			125000
		125000	0	0	125000

Function #	Description	1999	1999	1999	Total Amount Budgeted
2271	Advertising Equipment Replacement	COM/Gas	CEL	Comm/Elec	
	Merchandise & Jobbing Advertisement	290000			290000

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PROPRIETARY & CONFIDENTIAL

		290000	0	0	290000

Function #	Description	1999	1999	1999	Total Amount Budgeted
2852	Administration Salaries	COM/Gas	CEL	Comm/Elec	
	General Salaries	229000	0	0	229000
		229000	0	0	229000

Function #	Description	1999	1999	1999	Total Amount Budgeted
2756	Dues/Co. Memberships	COM/Gas	CEL	Comm/Elec	
	AGA	204000			204000
	NEGA	98000			98000
	Other	148000			148000
		450000	0	0	450000

Function #	Description	1999	1999	1999	Total Amount Budgeted
2755	Public Relations	COM/Gas	CEL	Comm/Elec	
	Kindervision	11000			11000
	Field of Dreams	20000			20000
	Police & Fire Chief Dinner	9000			9000
	Senator Durand's Senior Conference	1500			1500
	Partners in Education	7500			7500
	Misc.	11000			11000
		60000	0	0	60000

Employee Dues & Subscrip. (For entire company)	20000 0	0 0	0 0	20000

PROPRIETARY & CONFIDENTIAL

Function #	Description	1999 COM/Gas	1999 CEL	1999 Comm. El.	Total Amount Budgeted
2770	Donations				
	General Donation Fund	125000			125000
	Good Neighbor Energy Fund	15000			15000
		140000	0	0	140000

PROPRIETARY & CONFIDENTIAL

Function #	Description	1999 COM/Gas	1999 CEL	1999 Comm. El.	Total Amount Budgeted
2809	Employee Expenses				
	Misc. Expenses (Tolls, out of pocket expenses)	2000	0	0	2000
		2000	0	0	2000

Function #	Description	1999 COM/Gas	1999 CEL	1999 Comm. El.	Total Amount Budgeted
2810	Other Labor & Expenses				
	Training/Seminars	8000	0	0	8000
		8000	0	0	8000

Function #	Description	1999 COM/Gas	1999 CEL	1999 Comm. El.	Total Amount Budgeted
2812	Mileage				
	Auto Mileage	12000	0	0	6000

Function #	Description	1999 COM/Gas	1999 CEL	1999 Comm. El.	Total Amount Budgeted
2815	Office Supplies				
	Misc. Office Supplies	5000	0	0	5000
	Software (Internet & intranet)	2000	0	0	2000
	Cell Phone Expenses	1000			1000
		8000	0	0	8000

SYNERGIES SUMMARY

Savings Area: Benefits Administration

Clipper's Position:

Clipper's benefits expenses for 1997 are estimated at $18.4 million (based on internal data). Total benefits administration costs are estimated to be $1.1 million. Total cost per 1997 employee is $8,509.

Crimson's Position:

Crimson's benefits expenditures for 1997 were $12.5 million. Total benefits administration costs are estimated to be over $751 thousand. Total cost per employee was $7,845.

Ten Year Savings ($000):

❑ Capital	$ 5,185
❑ O&M - Expense	$15,555
O&M - Revenue Requirements	$ 4,821
❑ O&M - Total	$20,376

Rationale for Savings:

Cost savings can occur in several areas, primarily driven by increased purchasing power in negotiating third party administration fees. Savings are also available by reducing the per dollar cost of benefits provided by the combined company through purchasing leverage from the combination of plans.

Basis for Calculation:

Combined benefit costs were reduced to reflect merger personnel reductions. The administration costs were reduced by 25% to reflect the re-negotiation of administration fees. In addition, total benefit costs were reduced by 4% to reflect consolidation of provider savings.

Key Assumptions:

- ❑ Combination of plans and acquisition of a single provider.
- ❑ Re-negotiation of per dollar cost of benefits provided.
- ❑ Does not assume increase or decrease in level of benefits provided.

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Benefits

2000 Savings ($000)	$	-
2001 Savings ($000)	$	1,802 F3
2002 Savings ($000)	$	1,897 F3
2003 Savings ($000)	$	2,009 F3
Percentage of Savings Capitalized		25.0%
Revenue Req. Rate		20.22%
Inflation Rate		6.3%
Partial Year Savings		100%
Partial Year Revenue Req. Rate		20.22%

Annual Savings

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total
Annual Savings Amount	$0	$ 1,802	$ 1,897	$ 2,009	$2,136	$2,272	$2,416	$2,570	$2,733	$2,906	$20,740
O&M Savings	$0	$1,351	$1,423	$1,507	$1,602	$1,704	$1,812	$1,927	$2,050	$2,180	$15,555 A3
Capital Savings	$0	$450	$474	$502	$534	$568	$604	$642	$683	$727	$5,185 A5
		$0	$450	$474	$502	$534	$568	$604	$642	$683	
			$0	$450	$474	$502	$534	$568	$604	$642	
				$0	$450	$474	$502	$534	$568	$604	
					$0	$450	$474	$502	$534	$568	
						$0	$450	$474	$502	$534	
							$0	$450	$474	$502	
								$0	$450	$474	
									$0	$450	
										$0	
Cumulative Capital Savings	$0	$450	$925	$1,427	$1,961	$2,529	$3,133	$3,775	$4,458	$5,185	
Revenue Requirements Savings	$0	$91	$96	$102	$108	$115	$122	$130	$138	$147	
		$0	$91	$96	$102	$108	$115	$122	$130	$138	
			$0	$91	$96	$102	$108	$115	$122	$130	
				$0	$91	$96	$102	$108	$115	$122	
					$0	$91	$96	$102	$108	$115	
						$0	$91	$96	$102	$108	
							$0	$91	$96	$102	
								$0	$91	$96	
									$0	$91	
										$0	
Total Revenue Req. Savings	$0	$91	$187	$289	$397	$511	$633	$763	$902	$1,048	$4,821 A4
Total O&M and Revenue Requirements Savings	A2 $0	$1,442	$1,610	$1,795	$1,999	$2,215	$2,446	$2,691	$2,951	$3,228	$20,376

F2

Savings Summary-Benefits

Clipper Admin Cost Factor 6.0%

Company	Total benefits Cost (1997)	Administration Cost	Total Employees	Admin Cost/Employee	Benefit Cost/Employee	Total Cost/Employee
Clipper	$ 18,373,632	$ 1,102,418	2,274	$ 485	$ 8,080	$ 8,565
Crimson	$ 12,522,105	$ 751,326	1,628	$ 462	$ 7,692	$ 8,153
Total	$ 30,895,737	$ 1,853,744	3,902	$ 473	$ 7,918	$ 8,393

Combined Administration Cost (Current)	$ 1,853,744	Escalation Rate:	6.35%
Administration Savings (25% of total)	463,436	Years to Escalate:	3

	1997 ($)	Escalated to Current Year ($)	Years to Escalate
2001 Savings			
Average Cost Per Employee	$ 8,393		
NewCo Employees (2000)	3,036		
NewCo Benefit Cost Pool (less Admin cost)	23,627,400.06		
Consolidation Of Provider Savings (4%)	945,096		
Total Savings	$ 1,408,532	$ 1,801,787	4
2002 Savings			
Average Cost Per Employee	$ 8,393		
NewCo Employees (2001)	2,994		
NewCo Benefit Cost Pool (less Admin cost)	23,274,894.11		
Consolidation Of Provider Savings (4%)	930,996		
Total Savings	$ 1,394,432	$ 1,897,004	5
2003 Savings			
Average Cost Per Employee	$ 8,393		
NewCo Employees (2002)	2,976		
NewCo Benefit Cost Pool (less Admin cost)	23,123,820.13		
Consolidation Of Provider Savings (4%)	924,953		
Total Savings	$ 1,388,389	$ 2,008,705	6

2001 Savings ($000)	**$ 1,802**
2002 Savings ($000)	**$ 1,897**
2003 Savings ($000) (steady state)	**$ 2,009**

Source: Internal Data

Assumptions: Administration Costs are 6% of the Total benefit costs
Administration Costs savings are 25% or total Combined amount

F3

Clipper 1997 Total Benefits

		Benefits	Retiree Costs**
Life Insurance (includes AD&D)	$	734,568	F6
Dental	$	1,675,154	
Medical Plans:			
Blue Cross Blue Shield of Mass.	$	1,248,524	
Tufts Community Health Plan	$	675,448	
HMO Blue (BC&BS of MA)	$	629,631	
Blue Care Elect (BC&BS of MA)	$	6,932,109	
Harvard/Pilgrim Health Care	$	3,201,664	
Total Medical Plan Costs	**$**	**12,687,376**	
Prescription Drug	$	2,491,100	F6
Vision	$	424,812	
401k Match			$ 8,316,029
Disability	$	360,622	
Post Retirement Benefits			$ 23,265,000
Other			
Annual Workers Comp expenditures			$ 2,117,814
Total Benefit Costs	**$**	**18,373,632**	

** retiree costs not included

F4

Crimson 1997 Total Benefits

	Benefits	Retiree Costs**
Life Insurance	$	
Group Ins.		
Active Employees	516,400	
Retirees		337,317
Accidental Death Ins.		
Active Employees	186,552	
Payment in lieu of Ins.		
Retirees		45,492
Survivor Income Ins.		
Active Employees	511,200	
Total Life Plans	**1,214,152**	
Health Plans		
Master Medical		
Active Employees	8,179,566	
Retirees		2,573,673
HealthFlex Blue		
Active Employees	1,240,286	
Retirees		119,011
Medex		
Retirees		2,163,032
OBRA	37,821	
Medicare B Reimbursement		
Retirees		654,594
Dental		
Active Employees- Delta Dental	882,850	
Active Employees-Dental Blue	504,554	
Retirees- Dental Blue		422,023
Dental Total	**1,387,404**	
Total Health Plans	**12,059,229**	
Other Plans		
Savings		4,220,667
Pension		7,782,200
Long term disability	434,985	
Business Travel Accident	14,983	
Voucher Program	12,908	
Total Other Plans	462,876	
Total Benefits Costs	12,522,105	

** retiree costs not included

F5

BENE COSTS

CATEGORY	1997 Cost	1998 Planned Cost	Vendor
Life Insurance (Includes AD&D)	734,568 FY	999,999	Metropolitan
Dental	1,675,154 FY	1,873,827	Delta Dental of Massachusetts
Medical Plans:			
Blue Cross Blue Shield of Massachusetts	1,248,524 FY	1,505,747	
Tufts Community Health Plan	675,448 FY	650,775	
HMO Blue (BC&BS of MA)	629,631 FY	625,590	
Blue Care Elect (BC&BS of MA)	6,932,109 FY	6,679,089	
Harvard/Pilgrim Health Care	3,201,664 FY	3,205,169	
Total Medical Plan Costs	12,687,376 FY	12,666,370	
Prescription Drug	2,491,100 FY	2,458,718	PAID Prescriptions
Vision	424,812 FY	304,802	Blue Cross Blue Shield of MA
401k Match	8,316,029	8,129,751	Fidelity
Disability	360,622 FY	399,999	Metropolitan
Post Retirement Benefits	23,265,000	17,333,529	
Other			
Administrative Fees:			
Medical			
Dental			
Savings (401k)			
PAYSOP/ESOP			
Life Insurance			
Pension			
Actuarial			
(Pension & OPEB)			
Other			

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F6

COMMONWEALTH ENERGY SYSTEM AND SUBSIDIARY COMPANIES
1997 EMPLOYEE BENEFITS COSTS
TOTAL ACTIVE & RETIRED

	Total	Commonwealth Electric	Cambridge Electric	Canal Electric	Commonwealth Gas	Adv. Energy Systems	Com/Energy Technologies	Com/Energy Marketing	COM/Energy Services
Life Insurance Plans									
Group Insurance									
Active Employees	$516,400 FS	$367,688	$3,948	$3,948	$134,048	$0	$0	$0	$6,768
Retirees	337,317 FS	94,520	38,857	240	137,100	0	0	0	66,600
Group Insurance Total	853,717	462,208	42,805	4,188	271,148	0	0	0	73,368
Accidental Death Insurance									
Active Employees	186,552 FS	182,242	647	431	2,371	0	0	0	862
Payment in lieu of Insurance									
Retirees	45,492	21,112	6,841	0	9,630	0	0	0	7,909
Survivor Income Insurance									
Active Employees	511,200 FS	215,681	42,557	38,639	156,855	1,535	0	0	55,933
Total Life Plans	1,596,961	881,243	92,849	43,258	440,004	1,535	0	0	138,072
Health Plans									
Master Medical									
Active Employees	8,179,566 FS	3,927,749	557,884	608,605	2,566,531	2,220	0	977	515,600
Retirees	2,573,673	1,216,334	136,179	289,859	734,732	0	0	0	196,569
Master Medical Total	10,753,239	5,144,083	694,063	898,464	3,301,263	2,220	0	977	712,169
HealthFlex Blue									
Active Employees	1,240,286 FS	299,990	268,165	15,228	415,544	0	0	0	241,359
Retirees	119,011	35,131	12,722	318	54,403	0	0	0	16,437
HealthFlex Blue Total	1,359,297	335,121	280,887	15,546	469,947	0	0	0	257,796
Medex									
Retirees	2,163,032	785,155	233,218	91,653	833,881	0	0	0	219,125
OBRA	37,821 FS	24,045	8,543	49	5,184	0	0	0	0
Medex Total	2,200,853	809,200	241,761	91,702	839,065	0	0	0	219,125
Medicare B Reimbursement									
Retirees	654,594	256,712	76,957	26,455	235,951	0	0	0	58,519
Dental									
Active Employees - Delta Dental	882,850 FS	407,189	88,459	68,900	318,303	0	0	0	0
Active Employees - Dental Blue	504,554 FS	201,779	28,328	17,453	118,908	446	0	332	137,308
Retirees - Dental Blue	422,023	186,351	39,879	23,398	132,685	0	0	0	39,710
Dental Total	1,809,426	795,318	156,665	109,751	569,896	446	0	332	177,018
Total Health Plans	16,777,409	7,340,434	1,450,333	1,141,918	5,416,123	2,666	0	1,309	1,424,627
Other Plans									
Savings Plan	4,220,667	1,693,098	306,128	260,047	1,383,711	6,784	0	10,349	560,550
Pension Plan	7,782,200	3,799,443	0	621,576	2,221,245	18,383	0	0	1,121,553
Long Term Disability	434,985 FS	189,880	30,430	37,410	123,730	0	0	0	53,535
Business Travel Accident	14,983 FS	6,324	1,122	895	4,974	15	0	0	1,653
Voucher Program	12,908 FS	4,857	562	300	2,754	0	0	0	4,435
Total Other Plans	12,465,742	5,693,602	338,242	920,228	3,736,414	25,182	0	10,349	1,741,726
Total Costs	$30,840,112	$13,915,278	$1,881,425	$2,105,403	$9,592,540	$29,383	$0	$11,658	$3,304,424

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00200

Insurance

2000 Savings ($000)	$1,436 63										
2000 Capital Savings ($000)	$0										
Percentage of Savings Capitalized	0.0%										
Revenue Requirements Rate	20.2%										
Inflation Rate	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	
Partial Year Savings	100%										

Annual Savings

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total
Annual Savings Amount	$1,436	$1,472	$1,509	$1,547	$1,585	$1,625	$1,666	$1,707	$1,750	$1,794	$16,091
O&M Savings	$1,436	$1,472	$1,509	$1,547	$1,585	$1,625	$1,666	$1,707	$1,750	$1,794	$16,091 A2
Capital Savings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		$0	$0	$0	$0	$0	$0	$0	$0	$0	
			$0	$0	$0	$0	$0	$0	$0	$0	
				$0	$0	$0	$0	$0	$0	$0	
					$0	$0	$0	$0	$0	$0	
						$0	$0	$0	$0	$0	
							$0	$0	$0	$0	
								$0	$0	$0	
									$0	$0	
										$0	
Cumulative Capital Savings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
Fixed Charge Savings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total O&M and Revenue Requirements Savings	A2 $1,436	$1,472	$1,509	$1,547	$1,585	$1,625	$1,666	$1,707	$1,750	$1,794	$16,091

1998 Insurance Expenses (Annualized Most Recent Premiums)

Category	Crimson		Clipper		Combined	Savings % of total		Savings
Property	800,756		356,303		1,157,059	10%	A	115,706
Excess Liability	1,135,833		1,363,090		2,498,923	25%	H	624,731
General Liability	99,137		70,000	B	169,137	0%	C	-
Fiduciary and Crime	86,000		49,254		135,254	100%	of smaller	49,254
D&O	748,500		507,132		1,255,632	25%	H	313,908
Workers Comp:								
Primary	128,189	D	-		128,189	NA	D	
Excess	92,005		430,920		522,925	100%	of smaller	92,005
Bond	19,344		25,600		44,944	100%	of smaler	19,344
Comm. Of MA	-		97,279		97,279	0%		-
Ins. Years Retro	-		61,880		61,880	0%	G	-
Reserve adj.	-		29,834		29,834	0%	G	-
Employment Practices	150,000		-		150,000	100%	E	150,000
Professional Liability	2,080		-		2,080	100%	E	2,080
	3,261,844		2,991,292		6,253,136			1,367,028

G4

* BEC's nuclear expenses excluded.

Total 1998 Savings	1,367,028
Years of Escalation	2
Escalation (F)	2.50%
Year 2000 Savings	1,436,233

(A) savings per broker (of both CES and BEC)
(B) Costs of claims are deleted for BEC
(C) GL coverages (bonds, misc. liabilities) not likely to decrease
(D) Need to check if claims are included
(E) Coverage included in Excess Liability
(F) Insurance escalated at 2.5%
(G) These costs are phasing out
(H) Per Aegis' quick estimate

G3

1.367

1998 Insurance Expenses (Annualized Most Recent Premiums)

Category	Com/Energy		BEC		Combined	Savings % of Total		Savings
Property	800,756		356,303		1,157,059	10%	(A)	115,706 ✓
Excess Liability	1,135,833		1,363,090		2,498,923	25%	(H)	624,731 ✓
General Liability	99,137		70,000	(B)	169,137	None	(C)	0 ✓
Fiduciary and Crime	86,000		49,254		135,254	~~50%~~ 100% of smaller		~~67,627~~ 49,254
D &O	748,500		507,132		1,255,632	25%	(H)	313,908 ✓
Workers Comp: Primary	128,189	(D)	0		128,189	NA	(D)	?
Excess	92,005		430,920		522,925	100 ~~30%~~ % of smaller		~~156,878~~ 92,005
Bond	19,344		25,600		44,944	~~40%~~ 100% of smaller		17,978 19,344
Comm. Of MA	-		97,279		97,279	None		
Ins. Years Retro	-		61,880		61,880	100%	(G)	61,880 0*
Reserve adj.	-		29,834		29,834	100%	(G)	29,834 0*
Employment Practices	150,000		-		150,000	100%	(E)	150,000
Professional Liability	2,080		-		2,080	100%	(E)	2,080
Total:	3,261,844		2,991,292		6,253,136			1,540,621

*BEC's nuclear expenses excluded.

Total 1998 Savings	$1,540,621	
Years of Escalation	2	
Escalation rate	zero (F)	
Year 2000 Savings	$	1,540,621

(A) Est. savings per broker (of both CES and BEC)
(B) Costs of claims are deleted for BEC
(C) GL coverages (bonds, misc. liabilities) not likely to decrease.
(D) Need to check if claims are included.
(E) Coverage includeed in Excess Liability.
(F) Insurance costs not escalating.
(G) These costs are phasing out.
(H) Per Aegis' quick estimate

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data confirmed by
Dan Anastasia 2912
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00204

SYNERGIES SUMMARY

Savings Area: Information Systems - Capital

Clipper Position:

All major systems and hardware are, or will be, year 2000 compliant. Applications are scalable to allow for additional users and usage. Oracle financials being implemented for Financial Management ERP solution. Currently evaluating implementation of new work management system.

Crimson Position:

Major information systems assumed to be upgraded or replaced in the near term include Customer Information System ($12.5 million in 2000-2002), Financials ($7.5 million in 2000-2001), Work Management (2.5 million in 2002-2003), and Market Intelligence ($1.5 million in 2000-2001). System enhancement and replacement estimates are based upon Third Party evaluation.

Total Savings ($000):

❑ Capital Savings	$36,764
❑ O&M Savings	$ 0
❑ Revenue Requirements Savings $50,777	
❑ O&M and Revenue Requirements Savings	$50,777

Rationale for Savings:

Capital savings will result from the avoidance and elimination of duplicate or unnecessary system development expenditures and the extension of a common IT infrastructure and architecture across the combined company. Additionally, the combined entity will avoid system development costs going forward and realize the benefits of developing applications on a common platform rather than each company expending capital separately.

Basis for Calculation:

Parallel efforts for specific systems by both companies can be avoided. Projected capital expenditures associated with the development of duplicative systems and future application development have been converted to revenue requirements assuming a 6 year depreciable life converting to a 27.4% annual fixed charge rate. Assumed future expenditures on CIS, financials, work management and trouble management systems beyond 2000 are assumed avoidable for one company with migration to the common architecture and platform.

Key Assumptions:

❑ Existing parallel system development efforts would be discontinued in the near term.

❑ Systems currently in place or near development completion are adequate for the combined entity.

❑ Migration to common architecture and platform occurs over a two year timeframe.

06205

HA

SYNERGIES SUMMARY

Savings Area: Information Systems - O&M/PCs

Crimson Position:

Currently has an inventory of 751 workstations including laptops. There are 890 workstation users in the company resulting in a ratio of employees to computers of approximately 1:1. Each personal computer is leased at a cost of approximately $525 per year for hardware and $67 for required software and maintenance. Additionally, leased mainframe hardware, software licenses, and associated maintenance cost approximately $2.2 million per year. Annual application O&M is approximately $200,000 per year.

Clipper Position:

Currently has an inventory of 1,901 workstations including laptops. There are 1,800 workstation users in the company resulting in a ratio of employees to computers of approximately 1:1. Each personal computer is leased at a cost of approximately $750 per year for hardware. Additionally, leased servers, software licenses, and associated maintenance run approximately $6.5 million annually. Annual application O&M is approximately $2.3 million per year.

Total Savings ($000):

❑ Capital Savings	$ 0
❑ O&M Savings	$25,733
❑ Revenue Requirements Savings $ 0	
❑ O&M and Revenue Requirements Savings	$25,733

Rationale for Savings:

Cost savings will be realized from the avoidance of leasing PCs due to the reduced number of positions requiring workstations.

Savings will also occur due to the elimination of software and hardware leases, and associated maintenance, resulting from the migration to a common operating platform.

Basis for Calculation:

PC savings were estimated from the corporate and administrative labor position reductions multiplied by the savings per personal computer (hardware and software)

Data center and application savings were estimated by increasing Clipper's current costs by 25% to accommodate Crimson's operations, then reducing or eliminating Crimson's non-labor operating expenses.

Key Assumptions:

- ❑ Clipper applications expandable to accommodate Crimson over two year phase in period
- ❑ 2 year migration to common platform and architecture
- ❑ Applications migrated at same rate as hardware

Management Information Systems (Development Projects)

Percentage of Savings Capitalized	100.0%											
Revenue Requirements Rate	24.04%	24.04%	24.04%	24.04%	24.04%	24.04%	0.00%	0.00%	0.00%	0.00%	0.00%	
Inflation Rate	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	
Estimated Life	3											
Partial Year Savings	100%											
Partial Year Revenue Req. Rate	24.04%											

Annual Savings

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
Annual Savings Amount	$4,458	$14,800	$11,031	$2,821	$572	$586	$601	$616	$631	$647	$0	$36,764
O&M Savings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Capital Savings	$4,458	$14,800	$11,031	$2,821	$572	$586	$601	$616	$631	$647	$0	$36,764 A5
Capital Savings (Depreciated)	$4,458	$14,800	$11,031	$2,821	$572	$586	$601	$616	$631	$647	$0	
		$4,458	$14,800	$11,031	$2,821	$572	$586	$601	$616	$631	$0	
			$4,458	$14,800	$11,031	$2,821	$572	$586	$601	$616	$0	
				$4,458	$14,800	$11,031	$2,821	$572	$586	$601	$0	
					$4,458	$14,800	$11,031	$2,821	$572	$586	$0	
						$4,458	$14,800	$11,031	$2,821	$572	$0	
							$0	$0	$0	$0	$0	
								$0	$0	$0	$0	
									$0	$0	$0	
										$0	$0	
											$0	
Cumulative Capital Savings	$4,458	$19,258	$30,289	$33,110	$33,682	$34,268	$30,411	$16,227	$5,828	$3,654	$0	
Revenue Requirements Savings	$125	$252	$2,819	$7,417	$8,098	$8,239	$8,259	$8,280	$5,864	$1,423	$0	
		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
			$0	$0	$0	$0	$0	$0	$0	$0	$0	
				$0	$0	$0	$0	$0	$0	$0	$0	
					$0	$0	$0	$0	$0	$0	$0	
						$0	$0	$0	$0	$0	$0	
							$0	$0	$0	$0	$0	
								$0	$0	$0	$0	
									$0	$0	$0	
										$0	$0	
											$0	
Total Revenue Requirements Savings	$125	$252	$2,819	$7,417	$8,098	$8,239	$8,259	$8,280	$5,864	$1,423	$0	$50,777 A4
Total O&M and Revenue Requirements Savings	$125	$252	$2,819	$7,417	$8,098	$8,239	$8,259	$8,280	$5,864	$1,423	$0	$50,777 A2

Management Information Systems (Operating Costs)

1999 O&M Savings ($000)	$1,319											
Percentage of Savings Capitalized	0.0%											
Revenue Requirements Rate	24.04%	24.04%	24.04%	24.04%	24.04%	24.04%	0.00%	0.00%	0.00%	0.00%		
Inflation Rate	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%		
Estimated Life	3											
Partial Year Savings	100%											
Annual Savings	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**Total**	
Annual Savings Amount	$1,319	$1,931	$2,574	$2,638	$2,704	$2,771	$2,841	$2,912	$2,985	$3,059	$25,733	<== From IT Model
O&M Savings	$1,319	$1,931	$2,574	$2,638	$2,704	$2,771	$2,841	$2,912	$2,985	$3,059	$25,733 A3	
Capital Savings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
Capital Savings (Depreciated)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0		
		$0	$0	$0	$0	$0	$0	$0	$0	$0		
			$0	$0	$0	$0	$0	$0	$0	$0		
				$0	$0	$0	$0	$0	$0	$0		
					$0	$0	$0	$0	$0	$0		
Cumulative Capital Savings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0		
Revenue Requirements Savings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
Total O&M and Revenue Requirements Savings	$1,319	$1,931	$2,574	$2,638	$2,704	$2,771	$2,841	$2,912	$2,985	$3,059	$25,733 A2	

IT Synergies - Summary (in $000)

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total
SAVINGS												
O&M												
Data Centers	H12 (A)	$1,021	$1,569	$2,145	$2,198	$2,253	$2,310	$2,367	$2,427	$2,487	$2,549	$21,326
Workstations	H7 (A)	$19	$20	$20	$21	$21	$22	$22	$23	$23	$24	$216
Telecommunications	H16 (A)	$170	$174	$178	$183	$187	$192	$197	$202	$207	$212	$1,902
Applications Consolidation	H10 (A)	$110	$168	$230	$236	$242	$248	$254	$261	$267	$274	$2,290
Projects (Applications Development)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total O&M Savings		$1,319	$1,931	$2,574	$2,638	$2,704	$2,771	$2,841	$2,912	$2,985	$3,059	$25,733
Capital												
Data Centers		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Workstations	H7 (B)	$203	$208	$213	$219	$224	$230	$235	$241	$247	$254	$2,275
Telecommunications		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Applications Consolidation		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Projects (Applications Development)	H15 (E)	$4,255	$14,592	$10,817	$2,602	$348	$357	$366	$375	$384	$394	$34,489
Total Capital Savings		$4,458	$14,800	$11,031	$2,821	$572	$586	$601	$616	$631	$647	$36,764
Revenue Requirements												
Data Centers		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Workstations	H7 (C)	$49	$99	$150	$203	$257	$312	$320	$328	$336	$344	$2,396
Telecommunications		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Applications Consolidation		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Projects (Applications Development)	H14 (A)	$76	$153	$2,669	$7,214	$7,842	$7,928	$7,940	$7,952	$5,529	$1,078	$48,381
Total Revenue Requirements Savings		$125	$252	$2,819	$7,417	$8,098	$8,239	$8,259	$8,280	$5,864	$1,423	$50,777
TOTAL SAVINGS (O&M and RR)		**$1,444**	**$2,184**	**$5,393**	**$10,055**	**$10,802**	**$11,011**	**$11,100**	**$11,191**	**$8,849**	**$4,482**	**76,510**
COST TO ACHIEVE												
O&M												
Data Centers	H4 (A)	$807	$1,211	$1,615	$1,615	$1,615	$1,615	$1,615	$1,615	$1,615	$1,615	$14,935
Workstations		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Telecommunications		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Applications Consolidation	H11 (A)	$6,935	$3,858	$4,109	$637	$653	$670	$686	$703	$721	$739	$19,712
Projects (Applications Development)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total O&M Cost to Achieve		$7,743	$5,069	$5,724	$2,252	$2,268	$2,284	$2,301	$2,318	$2,336	$2,354	$34,647
Capital												
Data Centers		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Workstations		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Telecommunications		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Applications Consolidation	H11 (B)	$3,420	$1,753	$1,797	$0	$0	$0	$0	$0	$0	$0	$6,970
Applications Development Projects		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Capital Cost to Achieve		$3,420	$1,753	$1,797	$0	$0	$0	$0	$0	$0	$0	$6,970
Revenue Requirements												
Data Centers		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Workstations		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Telecommunications		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Applications Consolidation	H11 (C)	$822	$1,244	$1,676	$1,676	$1,676	$1,676	$853	$432	$0	$0	$10,055
Projects (Applications Development)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Revenue Requirements CTA		$822	$1,244	$1,676	$1,676	$1,676	$1,676	$853	$432	$0	$0	$10,055
TOTAL COST TO ACHIEVE (O&M and RR)		**$8,565**	**$6,312**	**$7,400**	**$3,928**	**$3,944**	**$3,960**	**$3,154**	**$2,750**	**$2,336**	**$2,354**	**44,702**
						43						
NET		**($7,121)**	**($4,129)**	**($2,007)**	**$6,127**	**$6,859**	**$7,051**	**$7,946**	**$8,441**	**$6,513**	**$2,128**	**$31,809**

60209

H1

Applications - Savings (in $000)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
Revenue Requirements Rates (by year)	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
O&M Savings	$110	$168	$230	$236	$242	$248	$254	$261	$267	$274	$0	$2,290
Capital Savings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		0	0	0	0	0	0	0	0	0	0	
			0	0	0	0	0	0	0	0	0	
				0	0	0	0	0	0	0	0	
					0	0	0	0	0	0	0	
						0	0	0	0	0	0	
							0	0	0	0	0	
								0	0	0	0	
									0	0	0	
										0	0	
Cumulative Capital Savings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
Revenue Requirements Savings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
		0	0	0	0	0	0	0	0	0	0	
			0	0	0	0	0	0	0	0	0	
				0	0	0	0	0	0	0	0	
					0	0	0	0	0	0	0	
						0	0	0	0	0	0	
							0	0	0	0	0	
								0	0	0	0	
									0	0	0	
										0	0	
											0	
Cumulative Revenue Requirements Savings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total O&M and Revenue Requirements Savings	$110	$168	$230	$236	$242	$248	$254	$261	$267	$274	$0	$2,290

H3 (A) →

H2

Applications - Costs to Achieve (in $000)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
Revenue Requirements Rates (by year)	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
O&M Cost to Achieve	$6,935	$3,858	$4,109	$637	$653	$670	$686	$703	$721	$739	$0	$19,712
Capital Cost to Achieve	$3,420	$1,753	$1,797	$0	$0	$0	$0	$0	$0	$0	$0	$6,970
		3,420	1,753	1,797	0	0	0	0	0	0	0	
			3,420	1,753	1,797	0	0	0	0	0	0	
				3,420	1,753	1,797	0	0	0	0	0	
					3,420	1,753	1,797	0	0	0	0	
						3,420	1,753	1,797	0	0	0	
							0	0	0	0	0	
								0	0	0	0	
									0	0	0	
										0	0	
Cumulative Capital Cost to Achieve	$3,420	$5,173	$6,970	$6,970	$6,970	$6,970	$3,550	$1,797	$0	$0	$0	
Revenue Requirements Cost to Achieve	$822	$421	$432	$0	$0	$0	$0	$0	$0	$0	$0	
		822	421	432	0	0	0	0	0	0	0	
			822	421	432	0	0	0	0	0	0	
				822	421	432	0	0	0	0	0	
					822	421	432	0	0	0	0	
						822	421	432	0	0	0	
							0	0	0	0	0	
								0	0	0	0	
									0	0	0	
										0	0	
											0	
Cumulative Revenue Requirements Cost to Achiev	$822	$1,244	$1,676	$1,676	$1,676	$1,676	$853	$432	$0	$0	$0	$10,055
Total O&M and Revenue Requirements Cost to Achieve	$7,758	$5,101	$5,785	$2,313	$2,329	$2,345	$1,540	$1,135	$721	$739	$0	$29,767

00211

#3

Applications - Savings and Cost to Achieve Detail

	Annual Savings	Annual Costs to Achieve	Lump Sum Cost to Achieve
Application Consolidation	$ 208,600	$ 563,250	$ 19,150,000
Escalation Rates		2.50%	2.50%
Partial Year Savings	100%		

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
Savings													
Phase in Approach		50%	75%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Savings Amount - O&M	100%	$ 109,580	$ 168,480	$ 230,255	$ 236,012	$ 241,912	$ 247,960	$ 254,159	$ 260,513	$ 267,026	$ 273,701	$ -	$ 2,289,597
Savings Amount - Captial	0%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Annual Costs to Achieve													
Phase in Approach		50%	75%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Annual Costs - O&M	100%	$ 295,882	$ 454,919	$ 621,723	$ 637,266	$ 653,197	$ 669,527	$ 686,265	$ 703,422	$ 721,008	$ 739,033	$ -	$ 6,182,242
Annual Costs - Captial	0%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
One Time Costs to Achieve													
Phase in Approach		50%	25%	25%	0%	0%	0%	0%	0%	0%	0%	0%	100%
One Time Cost - O&M	66%	$ 6,639,425	$ 3,402,705	$ 3,487,773	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 13,529,903
One Time Cost - Capital	34%	$ 3,420,310	$ 1,752,909	$ 1,796,731	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 6,969,950

00212

A-4

Application Systems - Consolidation Assumptions

	SYSTEM NAME		ANNUAL SAVINGS (000)	ANNUAL COSTS TO ACHIEVE (000)			ONE TIME COSTS TO ACHIEVE (000)					
	Clipper	Crimson	Eliminated Maintenance/License Fees	Current Expense for Surving Sys	Incremental Percent	New Maintenance/License Fees	Expand Capacity	Modify Software	Modify Interfaces	Convert Data	Train Users	Total
Customer Support:			$82	$721	25%	$180	0	4,000	1,500	6,000	1,000	12,500
Billing	CIRS Month End	CIS	$57	$1,300								
Customer Information	CIRS	CIS	$0	$0								
VRU	-	Interlynx	$25	$0								
CTI	-	-	$0	$0								
Customer Accounting	CIRS	CIS	$0	$0								
Meter Reading	ITRON Enscan MV-90	CIS	$0	$130								
Marketing	CallBack			$11								
Supply Chain:			$30	$156	25%	$39	0	0	0	1,500	300	1,800
Materials Inventory	MMAPPS	Grace	$10	$312								
Purchasing	MMAPPS	Grace	$10	$0								
Accounts Payable	MMAPPS	Grace	$10	$0								
	-	-	$0	$0								
Human Resource Management:			$62	$41	25%	$10	0	0	0	1,000	450	1,450
Time Entry	BETAS	GEAC	$62	$0								
Contract Interpretation	Contract Interpreter	-	$0	$8								
Payroll	Tesseract	GEAC	$0	$18								
Personnel	OASSIS	GEAC	$0	$39								
	Labor Distribution	GEAC	$0	$16								
Pension & Benefits	Pension	-	$0	$1								
	-	-	$0	$0								
Financial Management:			$10	$312	25%	$78	0	0	0	500	450	950
GL	Oracle Financials	Grace	$10	$217								
Budget	Oracle Financials	custom	$0	$0								
Project Costing	Oracle Financials	-	$0	$0								
Fixed Assets	Oracle Financials	-	$0	$95								
Work Management:			$0	$271	25%	$68	0	1,500	0	500	450	2,450
Distribution - Gas	-	-	$0	$0								
Distribution - Electric	INDUS	-	$0	$161								
Customer Service	IWMS MAO Synergen	BETA	$0	$211								
Dispatch	Field Service	-	$0	$98								
Geo Info System	CAD-Image ($0)	-	$0	$0								
Appointment Scheduling	CRS	-	$0	$52								
Plant Management	-	-	$0	$0								
Estimating	-	-	$0	$0								
Facilities Management	SIMPL	-	$0	$0								
Energy Management:			$0	$753	25%	$188	0	0	0	0	0	0
System Control - Gas	-	-	$0	$0								
System Control - Electric	EMS / SCADA, TLM, DSOM	-	$0	$1,505								
Other:			$25	$96	25%	$24	0	0	0	0	0	0
Electric Outage	-	-	$0	$0								
Shareholder System	-	-	$25	$0								
	-	-	$0	$0								
GUI Front-End for CIRS, TIMS, Rates, CUBS, and IWMS	BETSI	-	$0	$85								
Rates	RTS	-	$0	$85								
Data Warehouse	CDW DW Front-End	-	$0	$22								
			$0	$0								
			$0	$0								
			$0	$0								
			$0	$0								
			$0	$0								
			$0	$0								
Total			$209	$2,349		$563	0	5,500	1,500	9,500	2,650	19,150

Notes:
Labor assumed to be approximately 50%
of total maintenance and licensing cost

00213

H-5

Data Center - Savings Backup

	1997 Clipper	1998 Crimson	SAVINGS Rationale	Percent	Amount
Mainframe - Primary Processing Capacity					
Depreciation / Amortization	$ -	$ -			
Lease Payments	$ 1,279,330	$ 522,000			
HW Maintenance Contracts	$ 138,574	$ 81,000			
Software Maint. & License	$ 1,273,694	$ 506,000			
Total	$ 2,691,597	$ 1,109,000			
Servers - Primary Processing Capacity					
Depreciation / Amortization	$ -	$ -			
Lease Payments	$ 1,264,172	$ 378,000			
HW Maintenance Contracts	$ 1,917,729	$ 184,000			
Software Maint. & License	$ 351,704	$ 272,000			
Total	$ 3,533,605	$ 834,000			
Combined					
Depreciation / Amortization	$ -	$ -		0%	$ -
Disaster Recovery, EDI, Storage, etc	$ 233,000	$ 234,000	Percent of Crimson	0%	$ -
Lease Payments	$ 2,543,502	$ 900,000	Percent of Crimson	100%	$ 900,000
HW Maintenance Contracts	$ 2,056,303	$ 265,000	Percent of Crimson	100%	$ 265,000
Software Maint. & License	$ 1,625,397	$ 778,000	Percent of Crimson	100%	$ 778,000
Total	$ 6,458,202	$ 2,177,000			
Backup processing capacity - Mainframe					$ -

TOTAL DATA CENTER SAVINGS	1998			$ 1,943,000
	2000		2.50%	$ 2,041,364
TOTAL DATA CENTER COSTS TO ACHIEVE		1997		$ 1,614,551
assumes increase of clipper costs of	25%	2000		$ 1,738,694

NOTES:

(1) Assumes Data Center consolidation to Clipper location.

Clipper Labor Removal Calculations	
Payroll Taxes	$ 870,455
Payroll Tax Rate	8.8%
Labor Cost	$ 9,876,859
Total O&M	$ 19,259,279
Labor % of O&M	51.3%

H6

062414

Workstation - Savings (in $000)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
Revenue Requirements Rates (by year)	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
O&M Savings H8(A)	$19	$20	$20	$21	$21	$22	$22	$23	$23	$24	$0	$216
Capital Savings	$203	$208	$213	$219	$224	$230	$235	$241	$247	$254	$0	$2,275
		203	208	213	219	224	230	235	241	247	254	
			203	208	213	219	224	230	235	241	247	
				203	208	213	219	224	230	235	241	
					203	208	213	219	224	230	235	
						203	208	213	219	224	230	
							203	208	213	219	224	
								203	208	213	219	
									203	208	213	
										203	208	
											203	
Cumulative Capital Savings H8(O)	$203	$411	$625	$843	$1,067	$1,297	$1,533	$1,774	$2,021	$2,275	$2,275	
Revenue Requirements Savings	$49	$50	$51	$53	$54	$55	$57	$58	$59	$61	$0	
		49	50	51	53	54	55	57	58	59	0	
			49	50	51	53	54	55	57	58	0	
				49	50	51	53	54	55	57	0	
					49	50	51	53	54	55	0	
						49	50	51	53	54	0	
							0	0	0	0	0	
								0	0	0	0	
									0	0	0	
										0	0	
											0	
Cumulative Revenue Requirements Savings	$49	$99	$150	$203	$257	$312	$320	$328	$336	$344	$0	$2,396
Total O&M and Revenue Requirements Savings	$68	$119	$170	$223	$278	$334	$342	$351	$359	$368	$0	$2,612

Workstation Savings Detail

	Pct. Capital	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
Escalation Rates		2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	
Partial Year Savings	100.00%												
HARDWARE													
Phase in Approach		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Cumulative reductions in computer users (see adjustments below)	From Labor Rate	275	275	275	275	275	275	275	275	275	275	275	
Annual lease per user (1)		$ 738	$ 757	$ 776	$ 795	$ 815	$ 835	$ 856	$ 878	$ 900	$ 922	$ 945	
Total Hardware Savings	100.00%	$ 203,049	$ 208,126	$ 213,329	$ 218,662	$ 224,129	$ 229,732	$ 235,475	$ 241,362	$ 247,396	$ 253,581	$ -	$ 2,274,840
SOFTWARE													
Phase in Approach		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Cumulative reductions in computer users		275	275	275	275	275	275	275	275	275	275	275	
Annual expenses per computer user (1)		$ 70	$ 72	$ 74	$ 75	$ 77	$ 79	$ 81	$ 83	$ 85	$ 87	$ 90	
Total Software Savings	0.00%	$ 19,262	$ 19,744	$ 20,237	$ 20,743	$ 21,262	$ 21,793	$ 22,338	$ 22,896	$ 23,469	$ 24,056	$ -	$ 215,799
MAINTENANCE													
Phase in Approach		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Cumulative reductions in computer users		275	275	275	275	275	275	275	275	275	275	275	
Annual expenses per computer user (1)		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
Total Maintenance Savings	0.00%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Subtotal - O&M	O&M	$ 19,262	$ 19,744	$ 20,237	$ 20,743	$ 21,262	$ 21,793	$ 22,338	$ 22,896	$ 23,469	$ 24,056	$ -	$ 215,799
Subtotal - Capital	Capital	$ 203,049	$ 208,126	$ 213,329	$ 218,662	$ 224,129	$ 229,732	$ 235,475	$ 241,362	$ 247,396	$ 253,581	$ -	$ 2,274,840
TOTAL WORKSTATION SAVINGS													$ 2,490,639

(1) Annual cost calculated as blended average cost

Excluded Sub-Functions from A&G Count	Reductions
Transportation	16
Office Services	4
Facilities Maintenance	15
Storerooms	20
Metershop	10
Total to Exclude	65

Include Sub-Functions in A&G Count	
Distribution Engineering	14
Transmission Engineering & Support	10
Bulk Power Marketing and Sales	6
Transmission Management and Administration	3
Distribution Management and Administration	5
Distribution System Planning	2
Environmental Affairs	3
Test Laboratory	1
Total to Include	44

Workstation - Average Costs

	1998 Clipper		1998 Crimson		1998 Combined	
Hardware Specifications						
Software Specifications						
Number of Employees	2,230	Link to Labor	1,108	Link to	3,338	Labor
Number of Corporate Users	1,800	H30 (A) - Gerro	890	H23 (A)	2,690	
Number of Workstations	1,901	H30 (C) - Gerro	751	H23 (C)	2,652	
Number of Years to Replace (1)	2		3	H23 (B)		
Annual Number of Replacements	951	CALC	250	CALC	1,201	
Workstation Replacement Cost	1,499	per Client	1,575	H23 (D)		
Hardware Blended Average Replacement Cost						
Annual replacement cost per workstation	$	CALC 750	$	CALC 525	$ 703	CALC
Software Blended Average Replacement Cost						
Average software cost per workstation	$	-	$	279	$ 140	CALC
Annual Licensing Fees						
- Licensing and Maintenance	$	-	$	279	H23 (E)	
-	$	-	$	-		
-	$	-	$	-		
-	$	-	$	-		
-	$	-	$	-		
-	$	-	$	-		
- Total	$	-	$	279		
Annual software cost per workstation user	$	-	$	235	$ 67	CALC
Maintenance Blended Average Cost						
Average maintenance cost per workstation	$	-	$	-	$ -	
Annual maintenance costs	$	-	$	-		
Annual maintenance cost per workstation user	$	-	$	-	$ -	

NOTES:

(1) Current PC obsolescence plan for clipper is for 2-3 year replacement; a 2 year average was used to recognize current technology trends. PC's are purchased.

H9

Applications - Savings (in $000)

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
Revenue Requirements Rates (by year)		24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
O&M Savings	H12 D	$110	$168	$230	$236	$242	$248	$254	$261	$267	$274	$0	$2,290
Capital Savings		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
			0	0	0	0	0	0	0	0	0	0	
				0	0	0	0	0	0	0	0	0	
					0	0	0	0	0	0	0	0	
						0	0	0	0	0	0	0	
							0	0	0	0	0	0	
								0	0	0	0	0	
									0	0	0	0	
										0	0	0	
											0	0	
Cumulative Capital Savings		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
Revenue Requirements Savings		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
			0	0	0	0	0	0	0	0	0	0	
				0	0	0	0	0	0	0	0	0	
					0	0	0	0	0	0	0	0	
						0	0	0	0	0	0	0	
							0	0	0	0	0	0	
								0	0	0	0	0	
									0	0	0	0	
										0	0	0	
											0	0	
												0	
Cumulative Revenue Requirements Savings		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total O&M and Revenue Requirements Savings	A	$110	$168	$230	$236	$242	$248	$254	$261	$267	$274	$0	$2,290

00218

H10

Applications - Costs to Achieve (in $000)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
Revenue Requirements Rates (by year)	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
O&M Cost to Achieve H12 (F) + CALC (A)	$6,935	$3,858	$4,109	$637	$653	$670	$686	$703	$721	$739	$0	$19,712
Capital Cost to Achieve H12 (E)	$3,420	$1,753	$1,797	$0	$0	$0	$0	$0	$0	$0	$0	$6,970
		3,420	1,753	1,797	0	0	0	0	0	0	0	
			3,420	1,753	1,797	0	0	0	0	0	0	
				3,420	1,753	1,797	0	0	0	0	0	
					3,420	1,753	1,797	0	0	0	0	
						3,420	1,753	1,797	0	0	0	
							0	0	0	0	0	
								0	0	0	0	
									0	0	0	
										0	0	
Cumulative Capital Cost to Achieve (B)	$3,420	$5,173	$6,970	$6,970	$6,970	$6,970	$3,550	$1,797	$0	$0	$0	
Revenue Requirements Cost to Achieve	$822	$421	$432	$0	$0	$0	$0	$0	$0	$0	$0	
		822	421	432	0	0	0	0	0	0	0	
			822	421	432	0	0	0	0	0	0	
				822	421	432	0	0	0	0	0	
					822	421	432	0	0	0	0	
						822	421	432	0	0	0	
							0	0	0	0	0	
								0	0	0	0	
									0	0	0	
										0	0	
Cumulative Revenue Requirements Cost to Achieve (C)	$822	$1,244	$1,676	$1,676	$1,676	$1,676	$853	$432	$0	$0	$0	$10,055
Total O&M and Revenue Requirements Cost to Achieve	$7,758	$5,101	$5,785	$2,313	$2,329	$2,345	$1,540	$1,135	$721	$739	$0	$29,767

H11

Applications - Savings and Cost to Achieve Detail

	Annual Savings	Annual Costs to Achieve	Lump Sum Cost to Achieve
	H13(B)	H13(C)	H13(A)
Application Consolidation	$ 208,600	$ 563,250	$ 19,150,000
Escalation Rates		2.50%	2.50%
Partial Year Savings	100%		

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
Savings													
Phase in Approach		50%	75%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Savings Amount - O&M	100% D	$ 109,580	$ 168,480	$ 230,255	$ 236,012	$ 241,912	$ 247,960	$ 254,159	$ 260,513	$ 267,026	$ 273,701	$ -	$ 2,289,597
Savings Amount - Captial	0%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Annual Costs to Achieve													
Phase in Approach		50%	75%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Annual Costs - O&M	100% F	$ 295,882	$ 454,919	$ 621,723	$ 637,266	$ 653,197	$ 669,527	$ 686,265	$ 703,422	$ 721,008	$ 739,033	$ -	$ 6,182,242
Annual Costs - Captial	0%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
One Time Costs to Achieve													
Phase in Approach		50%	25%	25%	0%	0%	0%	0%	0%	0%	0%	0%	100%
One Time Cost - O&M	66% E	$ 6,639,425	$ 3,402,705	$ 3,487,773	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 13,529,903
One Time Cost - Capital	34%	$ 3,420,310	$ 1,752,909	$ 1,796,731	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 6,969,950

00220

H12

PER CLIENT ESTIMATE

Application Systems - Consolidation Assumptions

	SYSTEM NAME		ANNUAL SAVINGS (000)	ANNUAL COSTS TO ACHIEVE (000)			ONE TIME COSTS TO ACHIEVE (000)					
	Clipper	Crimson	Eliminated CALC Maintenance/License Fees	Current Expense for Surving Sys CALC	Incremental Percent	New Maintenance/License Fees	Expand Capacity	Modify Software	Modify Interfaces	Convert Data	Train Users	Total
Customer Support:			$82	$721	25%	$180	0	4,000	1,500	6,000	1,000	12,500
Billing	CIRS Month End	CIS	H24 (A) $57	H31 (A)(B) $300								
Customer Information	CIRS	CIS	$0	$0								
VRU	-	Interlynx	H24 (D) $25	$0								
CTI	-	-	$0	$0								
Customer Accounting	CIRS	CIS	$0	$0								
Meter Reading	ITRON Enscan MV-90	CIS	$0	H32 (C) $130								
Marketing	CallBack			H33 (C) $11								
Supply Chain:			$30	$156	25%	$39	0	0	0	1,500	300	1,800
Materials Inventory	MMAPPS	Grace	H24 (B) $10	H36 (A) $312								
Purchasing	MMAPPS	Grace	H24 (B) $10	$0								
Accounts Payable	MMAPPS	Grace	H24 (E) $10	$0								
			$0	$0								
Human Resource Management:			$62	$41	25%	$10	0	0	0	1,000	450	1,450
Time Entry	BETAS	GEAC	H24 (D) $62	$0								
Contract Interpretation	Contract Interpreter	-	$0	H37 (C) $8								
Payroll	Tesseract	GEAC	$0	H37 (D) $18								
Personnel	OASSIS	GEAC	$0	H37 (B) $39								
	Labor Distribution	GEAC	$0	H37 (A) $16								
Pension & Benefits	Pension	-	$0	H37 (E) $1								
			$0	$0								
Financial Management:			$10	$312	25%	$78	0	0	0	500	450	950
GL	Oracle Financials	Grace	H24 (G) $10	H39 (A) $217								
Budget	Oracle Financials	custom	$0	$0								
Project Costing	Oracle Financials	-	$0	$0								
Fixed Assets	Oracle Financials	-	$0	H39 (A) $95								
Work Management:			$0	$271	25%	$68	0	1,500	0	500	450	2,450
Distribution - Gas	-	-	$0	$0								
Distribution - Electric	INDUS	-	$0	H39 (C) $181								
	IWMS											
	MAO											
Customer Service	Synergen	BETA	$0	H35 (A)(B)(C) $211								
Dispatch	Field Service	-	$0	H35 (C) $98								
Geo Info System	CAD-Image ($0)	-	$0	$0								
Appointment Scheduling	CRS	-	$0	H32 (B) $52								
Plant Management	-	-	$0	$0								
Estimating	-	-	$0	$0								
Facilities Management	SIMPL	-	$0	$0								
Energy Management:			$0	$753	25%	$188	0	0	0	0	0	0
System Control - Gas	-	-	$0	H36 (A) $0								
System Control - Electric	EMS / SCADA, TLM, DSOM	-	$0	H34 (A)(B) $1,505								
Other:			$25	$96	25%	$24	0	0	0	0	0	0
Electric Outage	-	-	$0	$0								
Shareholder System	-	-	H24 (H) $25	$0								
	-	-	$0	$0								
GUI Front-End for CIRS, TIMS, Rates, CUBS, and IWMS	BETSI	-	$0	H32 (D) $85								
Rates	RTS	-	$0	H33 (D) $85								
	CDW											
Data Warehouse	DW Front-End	-	$0	H33 (B)(D) $22								
			$0	$0								
			$0	$0								
			$0	$0								
			$0	$0								
			$0	$0								
			$0	$0								
Total			$209 (B)	$2,349		$563 (C)	0	5,500	1,500	9,500	2,650	19,150 (A)

Notes:
Labor assumed to be approximately 50%
of total maintenance and licensing cost

0021

H13

Projects - Savings (in $000)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
Revenue Requirements Rates (by year)	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
O&M Savings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Capital Savings 15 D	$315	$323	$10,463	$18,902	$2,611	$357	$366	$375	$384	$394	$0	$34,489
		315	323	10,463	18,902	2,611	357	366	375	384	394	
			315	323	10,463	18,902	2,611	357	366	375	384	
				315	323	10,463	18,902	2,611	357	366	375	
					315	323	10,463	18,902	2,611	357	366	
						315	323	10,463	18,902	2,611	357	
							315	323	10,463	18,902	2,611	
								315	323	10,463	18,902	
									315	323	10,463	
										315	323	
											315	
Cumulative Capital Savings	$315	$638	$11,101	$30,004	$32,614	$32,971	$33,337	$33,711	$34,095	$34,489	$34,489	
Revenue Requirements Savings	$76	$78	$2,516	$4,545	$628	$86	$88	$90	$92	$95	$0	
		76	78	2,516	4,545	628	86	88	90	92	0	
			76	78	2,516	4,545	628	86	88	90	0	
				76	78	2,516	4,545	628	86	88	0	
					76	78	2,516	4,545	628	86	0	
						76	78	2,516	4,545	628	0	
							0	0	0	0	0	
								0	0	0	0	
									0	0	0	
										0	0	
											0	
Cumulative Revenue Requirements Savings	A $76	$153	$2,669	$7,214	$7,842	$7,928	$7,940	$7,952	$5,529	$1,078	$0	$48,381
Total O&M and Revenue Requirements Savings	$76	$153	$2,669	$7,214	$7,842	$7,928	$7,940	$7,952	$5,529	$1,078	$0	$48,381

00222

H 14

IT Development Projects

Category		1998 Clipper	1998 Crimson	1998 Combined	Savings Opportunities Rationale	Savings Opportunities Percent	Savings Opportunities Annual Savings
Miscellaneous Other Expenses		$589,680	$300,000	$889,680	Percent of lower	100%	$300,000
			← Per Client Discussion				
Escalation Rates (by year)			2.50%	2.50%	2.50%	2.50%	2.50%
Partial Year Savings	100%						

		Pct Capital	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
(1) Miscellaneous Other Expenses		100%	$315,188	$323,067	$331,144	$339,422	$347,908	$356,606	$365,521	$374,659	$384,025	$393,626	$0	$ 3,531,166
(2) Likely Future Projects														
Replacement/Major Upgrade for CIS		100%	$ -	$ 8,076,680	$ 8,278,597	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 16,355,276
Total Project Cost ($1998)	$ 15,000,000	H25 (A) Scaled Per Client Discussion												
Project Beginning Year	2001													
Years to Complete	2													
Replacement/Major Upgrade for Financials		100%	$ 2,626,563	$ 2,692,227	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 5,318,789
Total Project Cost ($1998)	$ 5,000,000	H25 (B) Scaled per Client Discussion												
Project Beginning Year	2000													
Years to Complete	2													
Replacement of Work Management		100%	$ 1,313,281	$ 1,346,113	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,659,395
Total Project Cost ($1998)	$ 2,500,000	H25 (C) Scaled per Client Discussion												
Project Beginning Year	2000													
Years to Complete	2													
Replacement/Upgrade to Energy Sourcing		100%	$ -	$ -	$ 2,207,626	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,207,626
Total Project Cost ($1998)	$ 2,000,000													
Project Beginning Year	2002													
Years to Complete	1													
Implementation of Trouble Management		100%	$ -	$ 2,153,781	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,153,781
Total Project Cost ($1998)	$ 2,000,000	→ Per Client discussion												
Project Beginning Year	2001													
Years to Complete	1													
Implementation of AM/FM		100%	$ -	$ -	$ -	$ 2,262,816	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,262,816
Total Project Cost ($1998)	$ 2,000,000													
Project Beginning Year	2003													
Years to Complete	1													
Total Annual Savings			$ 4,255,031	$ 14,591,868	$ 10,817,366	$ 2,602,239	$ 347,908	$ 356,606	$ 365,521	$ 374,659	$ 384,025	$ 393,626	$ -	$ 34,488,849
Total O&M Savings		(E)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Capital Savings			$ 4,255,031	$ 14,591,868	$ 10,817,366	$ 2,602,239	$ 347,908	$ 356,606	$ 365,521	$ 374,659	$ 384,025	$ 393,626	$ -	$ 34,488,849
Capital Savings for Revenue Requirements Calculation		(D)	$ 315,188	$ 323,067	10,463,109	18,902,325	2,610,724	$ 356,606	$ 365,521	$ 374,659	$ 384,025	$ 393,626	$ -	$ 34,488,849

NOTES:
(1) Escalated annually
(2) Likely future project savings for specific systems are based on avoiding implementation of one system due to the merger

00223

H15

Telecommunications - Savings (in $000)

Revenue Requirements Rates (by year)		24.04%	24.04%	24.04%	24.04%	24.04%	24.04%	0.00%	0.00%	0.00%	0.00%	0.00%	
		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
O&M Savings	H18 I	$170	$174	$178	$183	$187	$192	$197	$202	$207	$212	$0	$1,902
Capital Savings		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
			0	0	0	0	0	0	0	0	0	0	
				0	0	0	0	0	0	0	0	0	
					0	0	0	0	0	0	0	0	
						0	0	0	0	0	0	0	
							0	0	0	0	0	0	
								0	0	0	0	0	
									0	0	0	0	
										0	0	0	
											0	0	
												0	
Cumulative Capital Savings		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
Revenue Requirements Savings		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
			0	0	0	0	0	0	0	0	0	0	
				0	0	0	0	0	0	0	0	0	
					0	0	0	0	0	0	0	0	
						0	0	0	0	0	0	0	
							0	0	0	0	0	0	
								0	0	0	0	0	
									0	0	0	0	
										0	0	0	
											0	0	
												0	
Cumulative Revenue Requirements Savings		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total O&M and Revenue Requirements Savings	A	$170	$174	$178	$183	$187	$192	$197	$202	$207	$212	$0	$1,902

00224

H16

Telecommunications - Costs to Achieve (in $000)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
Revenue Requirements Rates (by year)	24.04%	24.04%	24.04%	24.04%	24.04%	24.04%	0.00%	0.00%	0.00%	0.00%	0.00%	
Escalation Rates	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	
O&M Costs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Capital Costs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		0	0	0	0	0	0	0	0	0	0	
			0	0	0	0	0	0	0	0	0	
				0	0	0	0	0	0	0	0	
					0	0	0	0	0	0	0	
						0	0	0	0	0	0	
							0	0	0	0	0	
								0	0	0	0	
									0	0	0	
										0	0	
											0	
Cumulative Capital Costs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
Revenue Requirements Costs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
		0	0	0	0	0	0	0	0	0	0	
			0	0	0	0	0	0	0	0	0	
				0	0	0	0	0	0	0	0	
					0	0	0	0	0	0	0	
						0	0	0	0	0	0	
							0	0	0	0	0	
								0	0	0	0	
									0	0	0	
										0	0	
											0	
Cumulative Revenue Requirements Costs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total O&M and Revenue Requirements Costs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

062 25

H17

Telecom Savings Detail

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
Escalation Rates		2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	
TELECOM SERVICES SAVINGS													
Annual Long Distance Savings		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
Annual Pager Savings	H19 (6)	$ 6,309	$ 6,466	$ 6,628	$ 6,794	$ 6,964	$ 7,138	$ 7,316	$ 7,499	$ 7,687	$ 7,879	$ 8,076	
Annual Cellular Phone Savings	H19 (11)	$ 163,425	$ 167,511	$ 171,698	$ 175,991	$ 180,391	$ 184,900	$ 189,523	$ 194,261	$ 199,118	$ 204,095	$ 209,198	
Total Telecom Services Savings	O&M	$ 169,734	$ 173,977	$ 178,326	$ 182,785	$ 187,354	$ 192,038	$ 196,839	$ 201,760	$ 206,804	$ 211,974	$ -	$ 1,901,592
OTHER													
Phase in Approach		50%	80%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Cumulative reductions in telecom users		148	237	296	296	296	296	296	296	296	296	296	
Other		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
Total Other Savings	O&M	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Subtotal - O&M	O&M (I)	$ 169,734	$ 173,977	$ 178,326	$ 182,785	$ 187,354	$ 192,038	$ 196,839	$ 201,760	$ 206,804	$ 211,974	$ -	$ 1,901,592
Subtotal - Capital	Capital	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
TOTAL TELECOM SAVINGS													$ 1,901,592

Partial Year Savings 100.00%

06226

H18

TELECOMMUNICATIONS WORKSHEET

PAGER ANALYSIS

Company Name	Vendor	1997 Count	Usage $/Unit	1997 Cost	Vendor	1998 Count	Usage $/Unit	1998 Budget	Weighted avg. Cost per Pager	Savings	Rationale
Clipper	MCI	50	$98.02	$ 4,901 40 A	Multiple Vendors	50 40 B	$100.47	$ 5,024	$ 28.57	$ 6,005 G	
Crimson		1	$0.00	$ -	Pagenet	1000	$25.00	$ 25,000	26 D		
		1	$0.00	$ -		1	$0.00	$ -			
		2		$ -		1001	$24.98 (wgt. average)	$ 25,000			

CELLULAR PHONE ANALYSIS

Company Name	Vendor	Phones	$/phone	1997 Cost	Vendor	Phones	$/phone	1998 Cost	Weighted avg. Cost per Phone	Savings	Rationale
Clipper	Bell Atlantic	750	$720.01	$ 540,011 40 C	Bell Atlantic Cell Charg	750 40 E	$738.02	$ 553,511			
	Nextel	100	$1,134.05	$ 113,405 40 D	Bell Atlantic Usage	100 40 F	$1,162.40	$ 116,240			
		850	768.72	$ 653,416		850	$787.94	$ 669,751	707.05	$ 155,550 H	Number of phones required reduced proportionaly with number of positions reduced
Crimson						250	432.00	$ 108,000	26 D		

	One Time	Annual	Rationale
Fiber Tie-In			
Installation Costs	$ -	$ -	Both companies moving to new locations
Annual charges	$ -	$ -	- assumed that new tie-ins are sunk cost
Call Center & Telecom System			
Switches/Hardware	$ -	$ -	Crimson replacing phone system
VoiceMail	$ -	$ -	- assumed that clipper can handle
Phones	$ -	$ -	crimson for equivalent cost of avoided new crimson system
Total	$ -	$ -	

Partial Year Savings 100%

Details

Contract Length	$/Month	Install Fee
Monthly	$0	$0
1 year	$0	$0

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		Input Year
Company 1	Clipper	1998
Company 2	Crimson	1999

Partial Year Savings	100%

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
escalation_rate (10 Year Model [Assumptions Page])	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
escalation_rate_data_center (10 Year Model [Assumptions Page])	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%

year_savings_begin	2000

labor_premerger_Clipper	2,230
labor_premerger_Crimson	1,108
labor_premerger_corp_Clipper	936
labor_premerger_corp_Crimson	693
labor_premerger_corporate	1,629
labor_reductions	362
labor_reductions_corporate	296
labor_reductions_field	66
labor_reductions_pct_corporate	18%

(Linked to Labor Model)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Revenue Requirements - 10 Year Model [Assumptions Page]	24.04%	24.04%	24.04%	24.04%	24.04%	24.04%	0.00%	0.00%	0.00%	0.00%	0.00%

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Blended Average Workstation Calc. For Clipper **$ 1,499**

	Count		Cost Per		Total Cost
Notebook	1	$	1	$	1
Desktop	1900	$	1,500	$	2,850,000
	1901			$	2,850,001

0% Percent of total that are laptops

Blended Average Workstation Calc. For Crimson **$ 1,700**

	Count		Cost Per		Total Cost
Notebook	1	$	1	$	1
Desktop	750	$	1,700	$	1,275,000
	751			$	1,275,001

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Data Center Costs

	Crimson 1998	
Mainframe- Primary Processing Capacity		
Lease Payments	$522,000	A
HW Maintenance Contracts	$81,000	B
Software Maint & License	$506,000	C
Total	$1,109,000	
Servers - Primary Processing Capacity		
Lease Payments	$378,000	D
HW Maintenance Contracts	$184,000	E
Software Maint & License	$272,000	F
Total	$834,000	
Combined		
Disaster Recovery Program	$59,000	G
Electronic Data Interchange	$32,000	H
Microfiche	$72,000	I
Internet Access	$33,000	J
Off-site Storage	$38,000	K
Lease Payments	$900,000	
HW Maintenance Contracts	$265,000	
Software Maint & License	$778,000	
Total	**$2,177,000**	

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Workstation - Average Costs

	Crimson 1998
Hardware Specifications	Compaq 350MHz Pent II, 64MB RAM 6.4GB HD& 17" monitor
Software Specifications	Word Perfect, Lotus, Smarterm

Number of Employees	$1,100
Number of Workstation Users	$890 (A)
Number of Workstations	$750 (C)
Number of Years to Replace	$3 (B)
Annual Number of Replacements	$250
Workstation Replacement Cost	$1,575 (D)
Hardware Blended Average Replacement Cost	
Average annual cost per workstation	$525
Annual replacement cost per workstation user	$442
Software Blended Average Replacement Cost	
Average software cost per workstation	
- Licensing and Maintenance	
- Lotus	$100
-WordPerfect	$100
-Smarterm	$79
-	
-	
-	
-	
-	
-	
- Total	$279 (E)
Annual software cost per workstation user	
Maintenance Blended Average Cost	
Average maintenance cost per workstation	$0
Annual maintenance cost	$0
Annual maintenance cost per workstation user	$0

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Application System - Consolidated Assumptions

			Crimson 1998	
Customer Support				
Billing	CIS		$57,000	A
Customer Information	CIS	n/a		
VRU	Interlynx		$25,000	B
CTI				
Customer Accounting	CIS	n/a		
Meter Reading	CIS	n/a		
Marketing				
Supply Chain				
Material Management	Grace		$9,900	C
Purchasing	Grace		$9,900	D
Accounting Payable	Grace		$9,900	E
Human Resources				
Time Entry	GEAC		$62,000	F
Contract interpretation				
Payroll	GEAC	n/a		
Personnel	GEAC	n/a		
Pension & Benefits	GEAC	n/a		
Financial Management				
Budgets	custom			
General ledger	Grace		$9,900	G
Work Management				
WMIS	custom		$0	
Energy Management				
Other				
Shareholder System	SSI		$25,000	H
Total			**$208,600**	

Application Overview

▶ *Future State*

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Application	Estimated Duration*	Cost Range*
Customer Information System	18 - 36 Months	$12M - $25M
Financials G/L, Budget, Fixed Assets, Payables, Purchasing, Inventory	12 - 36 Months	$9M - $38M
Operational WMIS CAMRIS Gas Supply	Requires detailed analysis	———
Marketing Data Warehouse Campaign Management Customer Intelligence	12 - 36 Months	$1.5M - $6M

This information presented to provide order of magnitude estimates.

Telecommunication Costs

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	Crimson 1998	
Equipment Lease	$159,000	switch charges - no reduction estimated
Equipment Maintenance	$216,000	
Special Services (MAC)	$154,000	
Fixed Voice and Data charges	$565,000	included Elsewhere
Local Carrier Usage	$435,000	
Long Distance Costs	$69,000	
Mobile Phone	$108,000	B
Pagers	$25,000	A
Total	**$1,731,000**	

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	Deliotte/Touche - 1997	BECo IT Actuals - 1997	Variance	
Mainframe				
Depreciation/Amortization				
Lease Payments	$2,024,848	$1,259,496	($765,352)	A
HW Maintenance Contracts	$929,674	$129,468	($800,206)	B
Software Maint & License	$1,152,033	$1,262,410	$110,377	C
subtotal	**$4,106,555**	**$2,651,374**	**($1,455,181)**	
Servers - Primary Processing Capacity				
Depreciation/Amortization				
Lease Payments	$503,416	$0	($503,416)	
HW Maintenance Contracts	$1,106,683	$167,110	($939,573)	
Software Maint. & License	$457,599	$582,394	$124,795	
subtotal	**$2,067,698**	**$749,504**	**($1,318,194)**	
Combined				
Depreciation/Amortization				
Disaster Recovery Program	$233,000	$166,771	($66,229)	
Lease Payments	$2,528,265	$1,259,496	($1,268,769)	
HW Maintenance Contracts	$2,036,357	$296,578	($1,739,779)	
Software Maint. & License	$1,609,631	$1,844,804	$235,173	
TOTAL	**$6,407,253**	**$3,567,649**	**($2,839,604)**	
LaborRemoval Calculations				
Payroll Taxes	$870,455	870455	$0	
Payroll Tax Rate	8.8%	8.8		
Labor Cost	$9,864,356	$9,876,859 D	$12,503	
Total O & M	$19,059,279	$19,259,279 E	$200,000	
Labor % of O & M	51.8%	51.2%		

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on Methods

Note: Nuclear is service adjusted.

		Total		ED%	Trans	Trans%	Sales	Sales%	Fossil	Fos. %	Nuclear	Nuc.%	HQ	HQ%
a.	# of PCs	2530	417	16.48%	34	1.34%	553	21.86%	160	6.32%	100	3.95%	1266	50.04%
b.	CPU Usage	$1,905,535	$258,962	13.59%	$0	0.00%	$923,041	48.44%	$25,915	1.36%	$239,526	12.57%	$458,091	24.04%
c.	# of Communication Lines	6297	1613	25.62%	55	0.87%	1077	17.10%	281	4.46%	1492	23.69%	1779	28.25%
d.	Full Time Eq (Business Sys.)	61.95	17.75	28.65%	0	0.00%	28.05	45.28%	1.00	1.61%	0.00	0.00%	15.15	24.46%
e.	Full Time Eq (mid-range)	4	2	50.00%	0	0.00%	1	25.00%	0.0	0.00%	0.0	0.00%	1	25.00%
f.	Ave.(a+b+c+d+e)percentages			26.87%		0.44%		31.54%		2.75%		8.04%		30.36%
g.	Full time Eq. (M5) admin	2		66.67%		0.00%		66.67%		0.00%		0.00%		66.67%
h	Full time Eq. Database admin	7		28.50%		0.00%		42.80%		0.20%		0.00%		28.50%

		Network	Applications	Client Svc	Support	Info Srv. Group	Total	ED	Trans	Sales	Fossil	Nuclear	HQ/Corp Svc	HQ%
	Core Functions													
b	Computer Operations - Large Systems	$4,197,115	MF LEASE			G	$4,197,115	$570,388	$0	$2,033,083	$57,081	$527,577	$1,008,986	
e	Computer Operations - Midrange	$972,669	SVR. LEASE			A	$972,669	$486,335	$0	$243,167	$0	$0	$243,167	
e	PC System Support	$744,170		$1,865,554	PC MAINT		$2,609,724	$430,140	$35,071	$570,426	$165,042	$103,151	$1,305,894	
a	Network System Support	$1,330,422				B	$1,330,422	$219,283	$17,879	$290,800	$84,137	$52,586	$665,737	
a	Computer Security			$131,400			$131,400	$21,658	$1,766	$28,721	$8,310	$5,194	$65,752	
f	VT Planning and Admin				$1,608,757		$1,608,757	$432,240	$7,134	$507,336	$44,275	$129,397	$488,374	
c	Voice Network Support	$650,115					$650,115	$166,529	$5,678	$111,192	$29,011	$154,037	$183,668	
f	Other					$282,745	$282,745	$75,968	$1,254	$89,166	$7,782	$22,742	$85,834	
g	Business Application Mgt.		$229,106			D	$229,106	$38,184	$38,184	$38,184	$38,184	$38,184	$38,184	
h	Database		$677,484			E	$677,484	$193,083	$0	$289,963	$1,355	$0	$193,083	
	Sub-Total Core Functions	$7,894,491	$906,590	$1,996,954	$1,608,757	$282,745	$12,689,537	$2,633,808	$106,967	$4,202,038	$435,177	$1,032,868	$4,278,679	
	Optional Functions													
e.	PC Training			$134,000			$134,000	$22,086	$1,601	$29,289	$8,474	$5,296	$67,053	
direct	Account Manager					$134,288	$134,288	$0	$0	$134,288	$0	$0	$0	
d	M5 Maintenance		$2,890,549				$2,890,549	$828,204	$0	$1,308,796	$46,659	$0	$706,890	
d	M5 Enhancements		$1,938,947				$1,938,947	$555,550	$0	$877,925	$31,299	$0	$474,173	
d	M5 Projects		$708,063				$708,063	$202,875	$0	$320,600	$11,430	$0	$173,158	
	IMO		$563,895				$563,895	$93,983	$93,983	$93,983	$93,983	$93,983	$93,983	
	Sub-Total Optional Functions	$0	$6,101,454	$134,000	$0	$134,288	$6,369,742	$1,702,698	$95,783	$2,764,881	$191,844	$99,279	$1,515,257	
	Total of Expense	$7,894,491	$7,008,044	$2,130,954	$1,608,757	$417,033	$19,059,279	$4,336,505	$202,750	$6,966,919	$627,022	$1,132,147	$5,793,936	
	Payroll Taxes	$223,039	$444,285	$101,020	$74,790	$27,321	$870,455							
	Total Expense & Payroll Taxes	$8,117,530	$7,452,329	$2,231,974	$1,683,547	$444,354	$19,929,734							
	Information Projects													
	Messaging/HiSpd Net/Internet				$70,000		$70,000							
	Network Management Systems	$530,000					$530,000							
	Total Capital	$530,000	$0	$0	$70,000	$0	$600,000							
	Total Expense,Payroll, & Capital	$8,647,530	$7,452,329	$2,231,974	$1,753,547	$444,354	$20,529,734							

Performance Indicators	Targets
Planned Network Outage	72 hr advc
System Response Time	adequate
Network/Application Availability	99% during business hours(excluding planned outages)
Help Desk Response	90% w/in 24hr, 100% in 14days
New Projects	On Schedule, budget

Admin includes:

Meals	Leve deduct	Absence	Association dues	
Mileage	Leave Allow	Vacation	postage	
Conv&Comm		Sickness	Miscellaneous	
Disability		Holiday	Telephone costs	

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Cost Area	Department/Team	Current Actual	Current Budget	Current Variance	Current Pct.	Year to Date Actual	Year to Date Budget	Year to Date Variance	Year to Date Pct.	1997 Total Budget	12/17/97 Forecast	Forecasted Variance	Pct.
4H	Client Services Group	188,317	184,134	4,183	2.27	2,065,626	2,231,969	(166,343)	-7.45	2,231,975	2,069,475	(162,500)	-7.28
D4	Info Services Group	(246,897)	221,065	(467,962)	-212	(84,564)	501,059	(585,623)	-116.88	501,059	183,399	(317,660)	-63.40
M3	Network Operations	1,351,449	650,713	700,736	107.69	8,648,180	8,117,525	530,655	6.54	8,117,533	8,187,533	70,000	0.86
M4	IT Support Services	162,677	135,560	27,117	20.00	1,555,560	1,683,539	(127,979)	-7.60	1,683,547	1,535,002	(148,545)	-8.82
M5	Business Applications	1,245,501	640,182	605,319	94.55	7,493,068	7,452,317	40,751	0.55	7,452,326	7,352,326	(100,000)	-1.34
M6	Account Manager	12,765	12,697	68	0.54	134,144	143,294	(9,150)	-6.39	143,294	134,017	(9,277)	-6.47
ITG	TOTAL	2,713,812	1,844,351	869,461	47.14	19,812,014	20,129,703	(317,689)	-1.58	20,129,734	19,461,752	(667,982)	-3.32

Capital	Actual	Authorized
Oracle Perf. Tools	$ 45,300	$ 50,000
DEC Alpha Expan.	$ 107,797	$ 110,000
IT Upgrade Net. Sw.	$ 352,947	$ 350,000
Mass Ave. Switch	$ 62,197	$ 55,000
Oracle financials	$ 636,055	$ -
1997 TOTAL	$ 1,204,296	$ 565,000
Capital Over/Under $	$ 639,296	
Total Capital Budgeted	.....	$ 600,000
Remaining	.....	$ -

Note: All figures include payroll taxes.

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28.0 Inform systems

INSTRUCTIONS:
Please provide the data requested below as specifically and completely as possible. If data requested is not applicable, please provide a complete explanation of why not. Also, please inform us of notable exceptions to or anticipated changes in the data being provided during the forecasted study period.

Person Providing Data:

	Data Requested:	Date of Data Provided:	Notes / Comments:
28.1	Please provide the information requested in Tables 28.1 - 28.9. Please provide the most recent and detailed data possible.		See all attachments and Tables 28.1 - 28.9
28.2	Please describe current IS disaster recovery plans, including offsite data storage, contract terms, hot site location(s), backup facilities, etc., including annual fixed and variable costs of such arrangements.		See Attachment A - Annual costs: $170,000 (Sungard), $63,000 (Iron Mountain) (A)
28.3	Please provide a copy of your most recent Strategic Information Systems Plan.		See Attachment B - IT Strategy for BECo Business Future
28.4	Please provide copies of your previous year actual expenses, your most recent information systems budget and long-term forecast.		See Attachments C, D, and E.
28.5	For each significant class (administrative, developer, etc.) of workstation which you purchase and/or maintain, describe your workstation replacement program with respect to the following: a. - Standard configuration; purchase cost per station b. - Standard applications; purchase cost per station c. - Lease or buy approach and accounting treatment (O&M or capital; depreciation life) d. - Maintenance approach and annual expenses e. - Number of workstations (desktops and laptops listed separately) f. - Number of workstation users (administrative and technical support) in all functional areas - Replacement cycle (in years)		a. Information provided b. Applications are on network c. Purchase strategy, O&M d. PC's have 3 year warranty (C) e. 2,530 PC assets, 1433 of them log into the network, # of laptops needs to be detemined f. Approximate 2,250 based on number of cc:mail accounts. (D)
28.6	Please describe any anticipated change in the company's business which may call for alterations in the current or future IS infrastructure but which are not reflected in the current long-term forecast		See Attachments F and G.

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Business Applications Inventory - as of 10/23/1997

By Business Area

(costs in thousands)

Customer Billing

System	Y2k Issue	Current Backlog	Forecasted Maintenance	Total (Y2k + backlog + forecast)	Rewrite or Repair	Replacement Cost	Beco Labor	Total Cost
CIRS	$1,300	A • $975	$1,669	$3,944	$1,084		$381	$1,465
Month-End	$365	B • $325	$65	$755	$142		$213	$355
Totals	**$1,665**	**$1,300**	**$1,734**	**$4,699**	**$1,226**	**$0**	**$594**	**$1,820**

CIRS

The CIRS application is approximately 70% Year 2000 compliant. We are currently performing a detailed analysis of the costs to make the rest of the system Year 2000 compliant. The backlog for CIRS is known and is being addressed. The last major upgrades/enhancements were the addition of the Accounts Receivable processing in 1994 and the Bimonthly Accounts processing in 1995. Much of the system is relatively new. These two projects provided Boston Edison with one integrated billing system for all of our residential, commercial/industrial, street lighting, outdoor lighting, CATV and special ledger accounts. The estimate for forecasted maintenance includes Open Access enhancements.

Year 2000 costs for CIRS were based on a high level analysis done in 1996. Standard industry methods based on lines of code were used to develop the estimate including a factor of $1.95 per line of application code for repair. These costs may increase based on industry projections of shortages of skilled technical resources to perform the repair work.

Month End

The Month End system (also including BFAN) is not Year 2000 compliant. It is an assembler based system. Changes to the system are labor intensive. This system is considered stable because there have been very few change requests in the past few years. However, in order to become Year 2000 compliant and meet the expected changes required by Open Access, IT has begun planning a rewrite to address these issues.

* - indicates no Y2k problem or needs additional analysis

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Customer Response

System	Y2k Issue	Current Backlog	Forecasted Maintenance	Total (Y2k + backlog + forecast)	Rewrite or Repair	Replacement Cost	Beco Labor	Total Costs
*BETSI	No	(A) • $85	$98	$183				$0
*CRS	No	(b) • $52	$52	$104				$0
*Meter Reading - Enscan - ITRON - MV90	Needs Analysis	(c) • $130		$130				$0
Totals	**$0**	**$267**	**$150**	**$417**	**$0**	**$0**	**$0**	**$0**

BETSI
New technology, client/server, PowerBuilder/Mitem View. The application is a GUI front-end for mainframe systems including; CIRS, TIMS, Rates, CUBS and IWMS.

CRS
New technology, client/server, PowerBuilder/Oracle. Automates the entry of selected field orders. Also does appointment scheduling. Integrates mainframe CIRS processes with the Resource Management System (Field Service).

Meter Reading
There is a combination of purchased and developed software supporting this business process. They are;

- MV-90
- Itron
- Enscan
- ServiceNet

Vendors are evaluating the MV-90, Itron and Enscan packages for Year 2000 compliance. ServiceNet is year 2000 ready.

* - indicates no Y2k problem or needs additional analysis

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Sales & Marketing

System	Y2k Issue	Current Backlog	Forecasted Maintenance	Total (Y2k + backlog + forecast)	Rewrite or Repair	Replacement Cost	Beco Labor	Total Costs
*RTS	Requires Testing	A • $85	$65	$150				$0
*CDW	No	B • $20	$33	$53				$0
*CallBack	Requires Testing	C • $11	$65	$76				$0
*DW Front End	No	D • $2	$13	$15				$0
Totals	**$0**	**$118**	**$176**	**$294**	**$0**	**$0**	**$0**	**$0**

RTS
The Rates system is fully Year 2000 compliant. There will be work required to accommodate changes required by deregulation.

CDW
The Customer Data Warehouse uses client/server technology and an Oracle database. The system is Year 2000 compliant.

CallBack
New technology, client/server, PowerBuilder/Oracle. Provides Sales force automation. Also provides market segmentation functionality. It is Year 2000 compliant. There is no major backlog of work.

DW Front-end
The Data Warehouse front end is a new system. It is Year 2000 compliant. There is no major backlog of work.

* - indicates no Y2k problem or needs additional analysis

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Electric Delivery - Distribution

System	Y2k Issue	Current Backlog	Forecasted Maintenance	Total (Y2k + backlog + forecast)	Rewrite or Repair	Replacement Cost	Beco Labor	Total Costs
TIMS	$200	(A) $0	$0	$200		$2,309	$691	$3,000
*SCADA/EMS	Requires Testing	(B) $949	$65	$1,014				$0
*TLM	$27	(C) $26	$33	$86	$465		$27	$492
*DSOM	No	(D) $65	$0	$65				$0
Totals	**$227**	**$1,040**	**$98**	**$1,365**	**$465**	**$2,309**	**$718**	**$3,492**

TIMS
TIMS is not year 2000 compliant and it lacks major functionality required of a strategically viable Trouble Information System. Weak or missing functionality includes: analysis, call center feedback, dispatch, management reporting, major emergency scalability. Possible replacement vendors include; ABB, CAE and M3i.

SCADA/EMS
EMS is new technology that is year 2000 compliant as stated by the vendor. It's backlog reflects a maintenance work required to keep a complex real time system current and enhancement work to add capacity and implement automation features. The system was integrated by CAE. Testing is required to verify Year 2000 compliance.

TLM
TLM requires some enhancements to make it easier to use by the clients. Some modifications to the TLM file are being driven by changes in the way CAD Image divides the territory into grids.

DSOM
This future application is expected to be in service in 1998.

* - indicates no Y2k problem or needs additional analysis

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Electric Delivery - Work Management

System	Y2k Issue	Current Backlog	Forecasted Maintenance	Total (Y2k + backlog + forecast)	Rewrite or Repair	Replacement Cost	Beco Labor	Total Cost
IWMS	$800	$120	$312	$1,232		$4,375	$785	$5,160
*MAO	Needs Analysis	$42	$208	$250				$0
*Field Service	$153	$98	$293	$544	$100		$53	$153
*Summit/Synergen	No	$49	$130	$179				$0
*SIMPL	No							$0
Totals	**$953**	**$309**	**$943**	**$2,205**	**$100**	**$4,375**	**$838**	**$5,313**

IWMS
Major Year 2000 Issue. Highly functional, significantly customized/enhanced application which meets current business needs. Backlog is for enhancements to accommodate business process improvements which are constant and ongoing. Requires substantial modifications to accommodate the massive Electric Delivery restructuring currently underway (clients can't wait for a new system, need it now). The Indus package is being evaluated. An integrated solution for IWMS and MMAPPS would result in anticipated implementation savings of approximately $1,000k to $2,000k from the separate IWMS and MMAPPS replacement costs due to reduction in interfaces to be developed, reduced internal and external labor costs and volume discounts for software purchases. The total includes estimated costs to provide minimal data conversion.

MAO
New technology, client/server, PowerBuilder/Oracle. Integrates mainframe IWMS/CIRS with PB/Oracle using IDMS-Server.

Field Service
Multiple platform system integration, computer-aided resource management, wireless two-way communication, vehicle-based and portable devices. Integrates legacy applications IWMS and CIRS, RS6000 application CUBS, DEC Alpha/Oracle global order database and client/server application CRS, Tandem machine Resource Management software and Norand Mobile Client devices supported by the vendor - Alliance Software.

Synergen Series
Vendor package for FBU maintenance work management replacing SUMMIT. Developed in Oracle Forms using Oracle Developer 2000 tool set. Will run on FBU server.

Simpl
Substation Information Maintenance and Planning System is a client server PowerBuilder/Oracle application. It has year 2000 functionality and no real backlog issues. This system meets business needs keeping track of substation equipment maintenance information.

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Corporate Services

System	Y2k Issue	Current Backlog	Forecasted Maintenance	Total (Y2k + backlog + forecast)	Rewrite or Repair	Replacement Cost	Beco Labor	Total Cost
Oracle → Financials (GL, Projects, Assets)	$1,500	$26	$91	$1,617		$2,200	$562	$2,762
MMAPPS - Materials - AP - Purchasing	$1,500	(A) • $312	$3,820	$5,632		$5,763	$1,106	$6,869
Telephone System	$165			$165		$138	$27	$165
*Superstore	Needs Analysis							$0
Totals	**$3,165**	**$338**	**$3,911**	**$7,414**	**$0**	**$8,101**	**$1,695**	**$9,796**

Fixed Assets
The Fixed Assets System (Asset Management) has several drawbacks. It is not year 2000 compliant and will actually fail if not replaced by 12/31/98. Most of its code is Assembler which makes this application difficult (almost impossible) to maintain or change to meet business needs. Financial Reporting plans to replace this system over a 3-year span.

General Ledger
General Ledger is not year 2000 compliant. It was last updated in 1992. It currently does not meet business needs because it is difficult for the business community to use. It does, however, have good functionality and was recently changed/adapted to reflect the business units. It is a good candidate for replacement. There is some backlog but not significant. The Finance and Accounting Group has embarked on a replacement strategy.

Note: Replacement cost estimates for Financials are based on Peoplesoft net license costs of $852k x estimated multiplier of 2.5 to project total installation costs.

* - indicates no Y2k problem or needs additional analysis

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Headquarters

System	Y2k Issue	Current Backlog	Forecasted Maintenance	Total (Y2k + backlog + forecast)	Rewrite or Repair	Replacement Cost	Beco Labor	Total Cost
Labor Distribution	$156	(A) • $16	$20	$192	$36		$120	$156
*OASSIS	No	(B) • $39	$7	$46				$0
*EPS	Needs Analysis		$52	$52				$0
*Contract Interpretor	Needs Analysis	(C) • $8	$21	$29				$0
*Tesseract	No	(D) • $18	$78	$96				$0
Pension	$110	(E) • $1	$2	$113	$0		$110	$110
Totals	**$266**	**$82**	**$180**	**$528**	**$36**	**$0**	**$230**	**$266**

Labor Distribution
The Labor Distribution system has drawbacks on several levels. It is not year 2000 compliant. A significant amount of code is written in Assembler modules that are very old. This makes them harder to maintain and less flexible to modify in meeting our changing business environment and the year 2000 issue. The replacement of this system will provide a flexible, easier to maintain, year 2000 compliant, solution.

Oassis
The first phase of this application was implemented in 1996. It is a Client/Server application developed by Essence Systems, Inc.. This system is year 2000 compliant. When all phases of the project are completed, it will allow employees and managers to enter information directly. This reduces workflow and decentralizes input which frees Human Resource personnel to perform more value added functions.

EPS
The Executive Personnel System is a Client/Server application which provides a window to employee data on the desktop. Reports and extracts can be done against this information. There is no significant backlog.

* - indicates no Y2k problem or needs additional analysis

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Engineering Applications

System	Y2k Issue	Current Backlog	Forecasted Maintenance	Total (Y2k + backlog + forecast)	Rewrite or Repair	Replacement Cost	Beco Labor	Scale
*CAD-Image	Needs Additional Analysis			$0				
*TLM	Needs Additional Analysis	$465		$465	$465			
Totals	**$0**	**$465**	**$0**	**$465**	**$465**	**$0**	**$0**	

CAD-Image
The CAD-Image application provides GIS information about the Boston Edison service territory. The application is supported in house and consists basically of ESRI's ARCINFO as a GIS development tool, some in-house developed interfaces and an ORACLE database. High level analysis indicated that their is not a Year 2000 problem with CAD-Image. Additional analysis and testing is required to confirm this.

Transformer Load Management (TLM)
The TLM system provides power system connectivity information between transformers and service addresses. TLM data is critical to systems restoration efforts. The system is based on IDMS and COBOL technologies and does not appear to have a Year 2000 problem based on a high level analysis. Additional analysis and testing should be performed to confirm this. The $465k reflects costs estimated to improve the accuracy of TLM data from a current 30% accuracy level to a targeted 90% accuracy level within one year from project approval. This number does not include IT costs, which are expected to be minimal.

* - indicates no Y2k problem or needs additional analysis

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00246

H38

Author: Susan Cervassi at ~Info-Services
Date: 12/17/98 3:20 PM
Priority: Normal
TO: William Dimoulas
Subject: Maintenance Costs for new Applications for 1999

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Bill:

The maintenance ~~costs~~ Fees are as follows:

Fixed Assets: $95,000 (A)
Oracle G/L and Network DB Licenses: $217,359 (B) → Financials
PassPort (INDUS): $180,736 (C) → Split between WMS & Logistics
M3I: $365,290 (estimated at 20% of license fee; actual to follow) → Restoration
HRIS: $217, 000 (estimated, cost unknown until package is selected)

Susan

Mark,
FYI,
Bill.

IBM Mainframe Lease (1997) $1,259,496

00247

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Boston Edison - 1997 Telecommunications Costs

Long Distance (RCN) - $101,580

Cellular (Bell Atlantic Mobile) - $540,011 (C)
750 (E)

Pagers (Nextel, MCI)
cell/pager 100 (F) $113,405 (B)
pager 50 (D) $4,901 (A)

00248

H40

SYNERGIES SUMMARY

Savings Area: Professional Services

Clipper's Position:

Annual professional services costs of $7.26 million include $451,000 in auditing, $2.1 million in legal, and $4.7 million in business management fees.

Crimson's Position:

Annual professional services costs of $3.43 million include $371,000 in auditing, $2.1 million in legal, $941,000 in business management.

Rationale for Savings:

The combined company will consolidate and reduce professional services activities through economies of scope and elimination of non-recurring duplicate services and increased utilization of a broader skill base. Audit cost savings are similar with additional audit services (e.g. bond insurance letters, pension plan audits, stock issuance) reduced as a result of duplication. Similar legal expenditures (regulatory and corporate) can be reduced due to redundancy and duplication.

Ten Year Savings ($000):

❑ Capital	$ 0
❑ O&M - Expense	$ 22,568
O&M - Revenue Requirements	$ 0
❑ O&M - Total	$ 22,568

Basis for Calculation:

Savings for audit fees are based upon estimated 30% reduction in the audit fee expense for the smaller company. Savings for business management are based on a 75% reduction of the smaller company costs. Legal services were reduced by 20% of the total merged company expense on the basis that duplicative activities can be eliminated, more work can be performed in-house, and external professional fees can be reduced due to increased purchasing power and internal expertise of the combined entity.

Key Assumptions:

- ❑ Purchasing economies result from increased size of the combined company (e.g. audit).
- ❑ Services are obtained on an ongoing basis at the current level.

Professional Services

2000 O&M Savings ($000)	$1,820 I3
2000 Capital Savings ($000)	$0
Percentage of Savings Capitalized	0.0%
Revenue Requirements Rate	20.2%
Inflation Rate	4.7%
Partial Year Savings	100%

Annual Savings

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total
Inflation Rate	4.7%	4.7%	4.7%	4.7%	4.7%	4.7%	4.7%	4.7%	4.7%	4.7%	
Annual Savings Amount	$1,820	$1,906	$1,995	$2,089	$2,187	$2,289	$2,397	$2,509	$2,627	$2,750	$22,568
O&M Savings	$1,820	$1,906	$1,995	$2,089	$2,187	$2,289	$2,397	$2,509	$2,627	$2,750	$22,568 A3
Capital Savings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		$0	$0	$0	$0	$0	$0	$0	$0	$0	
			$0	$0	$0	$0	$0	$0	$0	$0	
				$0	$0	$0	$0	$0	$0	$0	
					$0	$0	$0	$0	$0	$0	
						$0	$0	$0	$0	$0	
							$0	$0	$0	$0	
								$0	$0	$0	
									$0	$0	
										$0	
Cumulative Capital Savings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
Revenue Requirements Savings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total O&M and Revenue Requirements Savings	$1,820	$1,906	$1,995	$2,089	$2,187	$2,289	$2,397	$2,509	$2,627	$2,750	$22,568 A2

1998 Fees for Professional Services (000s)

Category	Clipper	Crimson	Combined	Savings Rationale	Savings
Audit	$ I4 451	$ I5 371	$ 822	30% of smaller	111
Business Management	$ I4 4,702	$ I5 941	$ 5,642	75% of smaller	705
Legal	$ I4 2,107	$ I5 2,116	$ 4,222	20% of total	844
	7,260	3,427	$ 10,687	**Total Savings**	$ 1,661

Total 1998 Savings	$	1,661
Years of Escalation		2
Escalation rate		4.7%
Year 2000 Savings	$	1,820 I2

Assumptions:
Weighted average divestiture reduction based on total professional services.
Total professional services associated with divestiture as provided by Crimson.

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Clipper Professional Services

	1998 (through 11/98)	Annualized		
ANDERSEN CONSULTING LLP I15	$827,542.00	$864	PROF	Business
GOLDMAN SACHS & CO	$782,245.10	$816	PROF	Business
CLARKE & COMPANY, INC.	$695,106.10	$725	PROF	Business
SALLY & FITCH	$631,029.78	$658	PROF	Business
WILLIAM MERCER INC	$589,421.34	$615	PROF	Business
BRUDER, GENTILE & MARCO	$529,634.55	$553	PROF	Legal
LUSTIG, GLASER & WILSON	$472,132.07	$493	PROF	Legal
COOPERS & LYBR*DO NOT U	$432,649.00	$451	PROF	Audit
MORGAN, BROWN & JOY, LL	$420,348.28	$439	PROF	Legal
CLARKE GOWARD ADVERTISI	$309,689.87	$323	PROF	Business
DELOITTE & TOUCHE, LLP	$287,293.00	$300	PROF	Business
DAWSON, GLENN E.	$160,416.56	$167	PROF	Business
BINGHAM DANA & GOULD	$91,335.14	$95	PROF	Legal
GARGILL,SASSOON & RUDOL	$83,793.92	$87	PROF	Legal
KOPELMAN AND PAIGE, P.C	$81,809.01	$85	PROF	Legal
BADGER, DOLAN, PARKER &	$80,945.90	$84	PROF	Legal
BURNS & LEVINSON, LLP	$69,764.78	$73	PROF	Legal
LEBOEUF, LAMB, GREENE &	$66,154.31	$69	PROF	Legal
KIRKPATRICK & LOCKHART	$222,960.70	$233	PROF	Business
MCDERMOTT, WILL & EMERY	$122,894.56	$128	PROF	Legal
	$6,957,165.97	$7,260		$1,926

Audit	$451	I3
Business Management	$4,702	I3
Legal	$2,107	I3
Total	$7,260	TRUE

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Crimson Professional Services*

Firm Name	Service Provided	1998 (A) Non-Generation Expense	1997 Non-Generation Expense	1996 Non-Generation Expense
Cambridge Electric				
Arthur Anderson	Public Accounting	$ 18,000	$ 16,100	$ 7,800
Crowell & Moring	Legal	$ -	$ 4,654	$ 265,097
Hanify & King	Legal	$ 2,312	$ 11,860	$ -
Keegan, Werlin & Pabian	Legal	$ 24,999	$ 119,900	$ -
Rich May Bilodeau & Flaherty	Legal	$ -	$ 49,224	$ 65,955
GZA Geoenvironmental Inc	Consultant	$ 2,000	$ 760	$ -
WS-Tel	Telecommunications Contract	$ 2,000	$ 4,927	$ 5,873
Goodwin Procter & Hoar	Legal	$ 11,000	$ -	$ 2,163
Kearns & Rubin PC	Legal	$ -	$ 5,190	$ 20,656
Leboeuf Lamb Greene	Legal	$ 53,564	$ -	$ -
Morsley Caskin	Legal	$ 115,000	$ -	$ 38,130
Palmer & Dodge	Legal	$ 964	$ -	$ -
Goldman, Sachs	Banking	$ 70,833	$ -	$ -
	Cambridge Electric Total	$ 300,862	$ 211,635	$ 414,373
	Less 1998 divestiture costs	$ 150,350		
	Broken down' legal	103,928		
(Weighted average divestiture	audit	9,001		
reduction based on total	consulting	1,000		
services)	other	36,421		
	Total divestiture costs	$ 150,350		
	Readjusted Total	$ 150,312	$ 211,635	$ 414,373
Commonwealth Electric				
Arthur Anderson	Public Accounting	$ 35,000	$ 33,000	$ 9,800
Consultive Resources	Consultant	$ 15,000	$ -	$ -
Crowell & Moring	Legal	$ 24,000	$ 2,961	$ 33,165
Hanify & King	Legal	$ 2,000	$ 2,679	$ 6,873
Keegan, Werlin & Pabian	Legal	$ 100,000	$ 738,957	$ -
Palmer & Dodge	Legal	$ 5,266	$ 4,319	$ 39,664
Rich May Bilodeau & Flaherty	Legal	$ -	$ 210,194	$ 163,862
Manpower	Temporary Services	$ 15,000	$ 68,770	$ 40,887
Miner & Miner	Consultant	$ -	$ 40,735	$ 4,192
GZA Geoenvironmental Inc	Consultant	$ -	$ -	$ 198
WS-Tel	Telecommunications Contract	$ 10,000	$ 60,262	$ 62,618
Creative Media Group	Printing	$ 75,000	$ -	$ -
Reynolds Devoll Printing	Printing	$ 50,000	$ -	$ -
Bakers Mfg Co Printing	Printing	$ 12,000	$ 11,522	$ -
Brittany Dyeing and Printing	Printing	$ 9,000	$ 4,962	$ 4,962
Goodwin Procter & Hoar	Legal	$ 4,000	$ 599	$ 19,036
Kearns & Rubin PC	Legal	$ 100,000	$ 125,966	$ 127,997
Leboeuf Lamb Greene	Legal	$ 129,185	$ 16,229	$ -
Morsley Caskin	Legal	$ 50,000	$ 45,459	$ 45,385
Carl O. Gooperrider	Consultant	$ 8,000	$ 7,300	$ 20,000
Goldman, Sachs	Banking	$ (245,631)	$ 418,842	$ -
	Commonwealth Electric Total	$ 383,622	$ 1,790,793	$ 608,459
	1998 Total without banking	$ 629,453		
	Less 1997 and 1998 divestiture costs	$ (47,464)	$ 433,365	
	Broken down': Legal	(30,763)	$ 277,710	
	audit	(2,508)	7,966	
	consulting	(1,707)	11,924	
	other	(12,396)	$ 136,045	
	Total divestiture costs	$ (47,464)		
	Adjusted total	$ 441,086	$ 1,357,428	$ 608,459
Canal Electric				
Arthur Anderson	Public Accounting	$ 25,000	$ 19,500	$ 5,100
Crowell & Moring	Legal	$ 25,000	$ 95,749	$ 40,821
Hanify & King	Legal	$ -	$ -	$ 3,001
Rich May Bilodeau & Flaherty	Legal	$ -	$ -	$ 61,444
Supply Planning Associates	Consultant	$ 30,000	$ 22,320	$ 50,865
Manpower	Temporary Services	$ 10,000	$ -	$ -
WS-Tel	Telecommunications Contract	$ 1,000	$ 4,927	$ 6,360
Goodwin Procter & Hoar	Legal	$ 6,000	$ -	$ 31,634
Kearns & Rubin PC	Legal	$ 1,000	$ 1,160	$ 2,448
Leboeuf Lamb Greene	Legal	$ 132,336	$ 16,230	$ -
Morsley Caskin	Legal	$ 3,000	$ -	$ 11,204
Palmer & Dodge	Legal	$ 2,357	$ -	$ -
Keegan, Werlin & Pabian	Legal	$ 68,512	$ 484	$ -
Goldman Sachs	Banking	$ 174,906	$ -	$ -
	Canal Electric Total	$ 479,203	$ 160,070	$ 217,867
	Less 1997 and 1998 divestiture costs	$ 448,765	$ 43,425	
	Broken down': Legal	$ 223,572	$ 30,825	
	audit	23,464	5,290	
	consulting	$ 28,157	6,055	
	other	174,571.93	$ 1,255	
	Total divestiture costs	$ 449,765	$ 43,425	
	Adjusted total	$ 29,438	$ 116,645	$ 217,867

Firm Name	Service Provided	1998 (A) Non-Generation	1997 Non-Generation E	1996 Non-Generation Expense
Commonwealth Gas				
Arthur Anderson	Public Accounting	$ 30,000	$ 24,000	$ 7,800
Crowell & Moring	Legal	$ 500,000	$ 79,820	$ 141,995
EJ Curtis Associates	Consultant	$ 125,000	$ 120,977	$ 120,292
Supply Planning Associates	Consultant	$ 10,000	$ 12,619	$ 20,747
Hanify & King	Legal	$ 100,000	$ 72,188	$ 6,779
Keegan Werlin & Pabian	Legal	$ 400,000	$ 117,804	$ -
Palmer & Dodge	Legal	$ 10,000	$ 2,007	$ 48,756
Peabody & Arnold LLP	Legal	$ 2,000	$ -	$ -
Office Team	Temporary Services	$ 35,000	$ -	$ -
Office Staffing	Temporary Services	$ 45,000	$ 74,434	$ 13,750
Manpower	Temporary Services	$ 40,000	$ 6,966	$ 279,032
Accountemps	Temporary Services	$ 25,000	$ -	$ -
Suburban Staffing	Temporary Services	$ 65,000	$ 12,619	$ -
Rich May Bilodeau & Flaherty	Legal	$ 100,000	$ 8,227	$ 42,366
Brown Williams Scarborough	Legal	$ 3,000	$ 8,157	$ 1,287
Pendulum Energy LLC	Legal	$ 42,000	$ 31,897	$ 28,363
Schiff Hardin & Waite	Legal	$ 150,000	$ 126,690	$ 173,752
Winthrop Stimson Putnam & Ro	Legal	$ 115,000	$ 21,946	$ 5,298
Intelligent Infrastructure	Consultant	$ 13,000	$ 150,491	$ 666,723
Parisola Vincelli Associates	Consultant	$ 715,000	$ -	$ -
Miner & Miner	Consultant	$ 35,000	$ -	$ -
GZA Geoenvironmental Inc.	Consultant	$ 15,000	$ 156,435	$ 29,567
WS-Tel	Telecommunications Contract	$ 5,000	$ 56,700	$ 61,607
Bakers Mfg Co Printing	Printing	$ 20,000	$ 26,327	$ -
Goodwin Procter & Hoar	Legal	$ 47,000	$ 31,542	$ 39,466
Kearns & Rubin PC	Legal	$ -	$ 68,740	$ 136,869
Leboeuf Lamb Greene	Legal	$ -	$ -	$ 13,058
Morsley Caskin	Legal	$ 8,000	$ 1,142	$ 1,306
McDermott Will & Emery	Legal	$ 42,971	$ -	$ -
Heigler Sally	Consultant	$ -	$ 45,000	$ 113,996
	Commonwealth Gas total	$ 2,697,971	$ 1,270,255	$ 2,003,642
Hopkinton LNG Corporation				
Arthur Anderson	Public Accounting	$ 7,000	$ 8,400	$ -
Crowell & Moring	Legal	$ 32,000	$ 31,973	$ 67,911
Keegan Werlin & Pabian	Legal	$ -	$ 2,776	$ -
Rich May Bilodeau & Flaherty	Legal	$ -	$ 10,871	$ -
	Hopkinton LNG Total	$ 39,000	$ 51,020	$ 67,911

Audit Fees	- Public Accounting	$ 115,000	$ 96,000	$ 30,500
	-Other Audit Fees	$ 265,550	$ 300,700	$ 340,500
	Less divestiture costs	$ (29,867)	$ (13,276)	$ -
	Total Audit Fees	$ 370,683	$ 383,424	$ 371,000
Legal		$ 2,412,458	$ 2,066,629	$ 1,748,193
	- Less divestiture costs	$ 296,736	$ 308,534	$ -
	Total Legal	$ 2,115,722	$ 1,758,095	$ 1,748,193
Consultant		$ 968,000	$ 946,637	$ 1,056,580
	- Less divestiture costs	$ 27,450	$ 17,679	$ -
	Total Consultant	$ 940,550	$ 928,958	$ 1,056,580
Other		$ 415,000	$ 750,507	$ 494,779
	Less divestiture costs	$ 196,597	$ 137,300	$ -
	Total other	$ 218,403	$ 613,207	$ 494,779
	Total	$ 3,643,357	$ 3,307,683	$ 3,672,552
		$ 3,643,357	$ 3,307,683	$ 3,672,552

1998 Expenses

Audit	$ 370,683
Legal	$ 2,115,722
Consultant	$ 940,550
Other	218,403
	$ 3,643,357

Source. Internal Data.

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5.11 Prepared by Kevin Harnett [x 4393]

Please see attached. The original spreadsheet is first adjusted to include some legal fees that were omitted to include adjusted totals for each company (except COM/Gas). Then the legal fees associated with divestiture were deducted from the adjusted total to show legal fees excluding costs of divestiture.

COMMONWEALTH ELECTRIC COMPANY
SPECIAL SERVICES PAYMENTS
FOR THE YEARS 1995 THROUGH 1998

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CONTRACTOR	1995	1996	1997	1998(A)	WORK DESCRIPTION
ARTHUR ANDERSON		$9,800	$33,000	$35,000	PUBLIC ACCOUNTING
CONSULTIVE RESOURCES				15,000	CONSULTANT
CROWELL & MORING	66,029	33,186	2,961	24,000	LEGAL
HANIFY & KING	2,006	6,973	2,876	2,000	LEGAL
KEEGAN WERLIN & PABIAN	0	0	738,957	100,000	LEGAL
PALMER & DODGE	480,134	39,664	4,319	5,268	LEGAL
RICH MAY BILODEAU & FLAHERTY	324,446	193,862	210,194	0	LEGAL
MANPOWER	35,487	40,887	68,770	15,000	TEMPORARY SERVICES
MINER & MINER	0	4,192	40,735	0	CONSULTANT
GZA GEOENVIRONMENTAL INC	1,265	198	0	0	CONSULTANT
WIL-TEL	53,189	62,618	60,262	10,000	TELECOMMUNICATIONS CONTRACTOR
CREATIVE MEDIA GROUP	0	0	0	75,000	PRINTING SERVICES
REYNOLDS DEWALT PRINTING	0	0	0	50,000	PRINTING SERVICES
BAKER MFG CO PRINTERS	0	0	11,522	12,000	PRINTING SERVICES
BRITTANY DYEING & PRINTING	4,962	4,962	4,962	5,000	PRINTING SERVICES
GOODWIN PROCTER & HOAR	8,301	19,036	599	4,000	LEGAL
KEARNS & RUBIN PC	101,048	127,687	125,986	100,000	LEGAL
LEBOEUF LAMB GREENE	0	0	0	105,000	LEGAL
MORELY CASKIN	193,522	45,385	45,459	50,000	LEGAL
CARL D COOPERRIDER	25,272	20,000	7,300	8,000	CONSULTANT
TOTALS	$1,295,661	$608,450	$1,357,902	$615,268	

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ADDITIONAL FEES NOT INCLUDED ABOVE:				
GOLDMAN SACHS & CO.			$416,662	($245,831)
LEBOEUF LAMB GREENE			$16,229	$24,185
ADJUSTED TOTALS	$1,295,661	$608,450	$1,790,793	$393,622
LESS COSTS OF DIVESTITURE			$433,365	($47,464)
LEGAL FEES EXCLUDING COSTS OF DIVESTITURE	$1,295,661	$608,450	$1,357,428	$441,086

A *1998 figures are 8 month actual plus 4 month estimated dollars*

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CANAL ELECTRIC COMPANY
SPECIAL SERVICES PAYMENTS
FOR THE YEARS 1995 THROUGH 1998

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CONTRACTOR	1995	1996	1997	1998(A)	WORK DESCRIPTION
ARTHUR ANDERSON		$5,100	$19,500	$25,000	PUBLIC ACCOUNTING
CROWELL & MORING	124,363	40,821	95,749	25,000	LEGAL
HANIFY & KING	22,728	8,001	0	0	LEGAL
RICH MAY BILODEAU & FLAHERTY	104,756	61,444	0	0	LEGAL
SUPPLY PLANNING ASSOCIATES	38,955	50,865	22,320	30,000	CONSULTANT
MANPOWER	0	0	0	10,000	TEMPORARY SERVICES
WIL-TEL	3,547	6,350	4,627	1,000	TELECOMMUNICATIONS CONTRACTOR
GOODWIN PROCTER & HOAR	187,021	31,634	0	6,000	LEGAL
KEARNS & RUBIN PC	3,529	2,448	1,160	1,000	LEGAL
LEBOEUF LAMB GREENE	0	0	0	105,000	LEGAL
MORELY CASKIN	13,422	11,204	0	3,000	LEGAL
TOTALS	$498,321	$217,867	$143,356	$206,000	
ADDITIONAL FEES NOT INCLUDED ABOVE:					
PALMER & DODGE				$2,357	
KEEGAN WERLIN & PABIAN			$484	$68,512	
GOLDMAN SACHS & CO.				$174,998	
LEBOEUF LAMB GREENE			$16,230	$27,336	
ADJUSTED TOTALS	$498,321	$217,867	$160,070	$479,203	
LESS COSTS OF DIVESTITURE			$43,425	$449,765	
LEGAL FEES EXCLUDING COSTS OF DIVESTITURE	$498,321	$217,867	$116,645	$29,438	

A 1998 figures are 8 month actual plus 4 month estimated dollars

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CAMBRIDGE ELECTRIC LIGHT COMPANY
SPECIAL SERVICES PAYMENTS
FOR THE YEARS 1995 THROUGH 1998

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CONTRACTOR	1995	1996	1997	1998(A)	WORK DESCRIPTION
ARTHUR ANDERSON		$7,800	$16,100	$18,000	PUBLIC ACCOUNTING
CROWELL & MORING	170,500	265,097	4,654	0	LEGAL
HANIFY & KING	0	0	11,880	2,312	LEGAL
KEEGAN WERLIN & PABIAN	0	0	118,900	0	LEGAL
RICH MAY BILODEAU & FLAHERTY	131,630	65,955	49,224	0	LEGAL
GZA GEOENVIRONMENTAL INC	0	0	760	2,000	CONSULTANT
WIL-TEL	4,878	5,573	4,927	2,000	TELECOMMUNICATIONS CONTRACTOR
GOODWIN PROCTER & HOAR	8,290	2,163	0	11,000	LEGAL
KEARNS & RUBIN PC	5,292	29,655	5,190	0	LEGAL
LEBOEUF LAMB GREENE	0	0	0	50,000	LEGAL
MORELEY CASKIN	44,406	38,130	0	115,000	LEGAL
TOTALS	$364,996	$414,373	$211,635	$200,312	

ADDITIONAL FEES NOT INCLUDED ABOVE:

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PALMER & DODGE				$954
KEEGAN WERLIN & PABIAN				$24,999
GOLDMAN SACHS & CO.				$70,833
LEBOEUF LAMB GREENE			$0	$3,564
ADJUSTED TOTALS	$364,996	$414,373	$211,635	$300,662
LESS COSTS OF DIVESTITURE				$150,350
LEGAL FEES EXCLUDING COSTS OF DIVESTITURE	$364,996	$414,373	$211,635	$150,312

A 1998 figures are 8 month actual plus 4 month estimated dollars

HOPKINTON LNG CORP
SPECIAL SERVICES PAYMENTS
FOR THE YEARS 1995 THROUGH 1998

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CONTRACTOR	1995	1996	1997	1998(A)	WORK DESCRIPTION
ARTHUR ANDERSON			$5,400	$7,000	PUBLIC ACCOUNTING
CROWELL & MORING	19,243	87,911	31,973	32,000	LEGAL
KEEGAN WERLIN & PABIAN	0	0	2,776	0	LEGAL
RICH MAY BILODEAU & FLAHERTY	0	0	10,871	0	LEGAL
TOTALS	$19,243	$87,911	$51,020	$39,000	

A 1998 figures are 8 month actual plus 4 month estimated dollars

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COMMONWEALTH GAS COMPANY
SPECIAL SERVICES PAYMENTS
FOR THE YEARS 1995 THROUGH 1998 I5

CONTRACTOR	1995	1996	1997	1998(A)	WORK DESCRIPTION
ARTHUR ANDERSON		$7,800	$24,000	$30,000	PUBLIC ACCOUNTING
CROWELL & MORING	66,887	141,595	79,820	500,000	LEGAL (B)
E J CURTIS ASSOCIATES	111,285	120,292	120,977	125,000	CONSULTANT
SUPPLY PLANNING ASSOCIATES	14,567	20,747	12,619	10,000	CONSULTANT
HANIFY & KING	3,032	6,778	72,186	100,000	LEGAL (B)
KEEGAN WERLIN & PABIAN	0	0	117,804	400,000	LEGAL (B)
PALMER & DODGE	4,523	48,758	2,007	10,000	LEGAL
PEABODY & ARNOLD LLP	0	0	0	2,000	LEGAL
OFFICE TEAM	0	0	0	35,000	TEMPORARY SERVICES
OFFICE STAFFING	74,805	13,750	74,434	45,000	TEMPORARY SERVICES
MANPOWER	0	279,032	6,698	40,000	TEMPORARY SERVICES
ACCOUNTEMPS	0	0	0	25,000	TEMPORARY SERVICES
SUBURURN STAFFING	2,709	0	12,616	65,000	TEMPORARY SERVICES
RICH MAY BILODEAU & FLAHERTY	75,366	42,396	8,227	100,000	LEGAL (B)
BROWN WILLIAMS SCARBROUGH	2,641	1,287	8,167	3,000	LEGAL
PENDULUM ENERGY LLC	38,453	28,363	31,697	42,000	LEGAL
SCHIFF HARDIN & WAITE	230,274	173,752	126,690	150,000	LEGAL
WINTHROP STIMOSON PUTNAM & RE	0	5,298	21,946	115,000	LEGAL (B)
INTELLIGENT INFRASTRUCTURE	605,635	698,723	159,491	13,000	CONSULTANT CAMRIS
PARISELLA VINCELLI ASSOCIATES	0	0	0	715,000	CONSULTANT
MINER & MINER	0	0	0	35,000	CONSULTANT
GZA GEOENVIRONMENTAL INC	1,487	29,567	159,435	15,000	CONSULTANT
WIL-TEL	33,148	81,607	58,700	5,000	TELECOMMUNICATIONS CONTRACTOR
BAKER MFG CO PRINTERS	0	0	26,327	20,000	PRINTING SERVICES
GOODWIN PROCTER & HOAR	16,883	39,466	31,542	47,000	LEGAL
KEARNS & RUBIN PC	79,361	135,869	68,740	0	LEGAL
LEBOEUF LAMB GREENE	14,349	13,056	0	0	LEGAL
MORELY CASKIN	2,598	1,308	1,142	8,000	LEGAL
MCDERMOTT WILL & EMERY	0	0	0	42,971	LEGAL (B)
HAGLER BAILLY	18,500	113,996	45,000	0	CONSULTANT
TOTALS	$1,396,503	$2,003,440	$1,270,265	$2,697,971	

A 1998 figures are 8 month actual plus 4 month estimated dollars
B Legal fees include some cost for other System companies

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professional services

COMMONWEALTH ENERGY SYSTEM
ARTHUR ANDERSEN LLP
AUDIT FEES
1995 (Note 2)

	CES $	CEL $	CANAL $	CE $	CG $	CESV $	LNG $	STEAM $	REALTY $	TOTALS $
QUARTERLY (1)	24,000									
YEAR END	24,500	36,000	47,000	69,000	58,000	34,000	14,000	3,500	9,000	
BENEFIT PLANS:										
Employee Savings	6,000									
Employee Pension	6,000									
Long-Term Disability	5,000									
Life Insurance	5,000									
Union VEBA	5,500									
Non-Union VEBA	5,500									
Sub Total (Benefits)	$33,000									
TAXES: (3)										
TOTALS	$81,500	$36,000	$47,000	$69,000	$58,000	$34,000	$14,000	$3,500	$9,000	$352,000

NOTES:

(1) Work done on Canal, CEL, CE, CG & Consolidated)

(2) Engagement hours not available

(3) Cost for Tax services not available

1995 not included in analysis

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COMMONWEALTH ENERGY SYSTEM
ARTHUR ANDERSEN LLP
AUDIT FEES
1996

	CES $	CES Hrs.	CEL $	CEL Hrs.	CANAL $	CANAL Hrs.	CE $	CE Hrs.	CG $	CG Hrs.	CESV $	CESV Hrs.	LNG $	LNG Hrs.	STEAM $	STEAM Hrs.	REALTY $	REALTY Hrs.	TOTAL $	TOTAL Hrs.
QUARTERLY (1)	24,000	180																		
YEAR END	24,500	260	36,000	320	47,000	330	69,000	580	58,000	500	34,000	290	14,000	105	3,500	35	9,000	75		
BENEFIT PLANS:																				
Employee Savings	6,000	80																		
Employee Pension	6,000	80																		
Long-Term Disability	5,000	50																		
Life Insurance	5,000	50																		
Union VEBA	5,500	70																		
Non-Union VEBA	5,500	70																		
Sub Total (Benefits)	$33,000	400																		
TAXES: (2)																				
Consolidated Federal	11,500																			
Research Revenue Procedures	1,500																			
Sub Total (Taxes)	$13,000																			
OTHER:																				
Stranded Investment Analysis & Disclosure			3,000				3,000													
TOTALS	$94,500	840	$39,000	320	$47,000	330	$72,000	580	$58,000	500	$34,000	290	$14,000	105	$3,500	35	$9,000	75	$371,000	3075

NOTES:
(1) Work done on Canal, CEL, CE, CG & Consolidated)

(2) Hours are not provided for Tax services.

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COMM EALTH ENERGY SYSTEM
ARTHUR ANDERSEN LLP
AUDIT FEES
1997

	CES		CEL		CANAL		CE		CG		CESV		LNG		STEAM		REALTY		TOTAL	
	$	Hrs.	$	Hrs.	$	Hrs.	$	Hrs.	$	Hrs.	$	Hrs.	$	Hrs.	$	Hrs.	$	Hrs.	$	Hrs.
QUARTERLY (1)	24,000	180																		
			est 16,100		19,000		33,000		24,000				5,400							
YEAR END	24,500	260	36,000	320	47,000	330	69,000	580	58,000	500	34,000	290	14,000	105	3,500	35	9,000	75		
BENEFIT PLANS:																				
Employee Savings	6,000	80																		
Employee Pension	6,000	80																		
Long-Term Disability	5,000	50																		
Life Insurance	5,000	50																		
Union VEBA	5,500	70																		
Non-Union VEBA	5,500	70																		
Sub Total (Benefits)	$33,000	400																		
TAXES: (2)																				
Progressive, State, & Matep	10,400																			
Progressive & Research	7,000																			
Consolidated & Research	12,300																			
Subtotal (Taxes)	$29,700																			
OTHER:																				
Transaction Flow Anal. & Computer Risk Mgmt	17,000	218																		
TOTALS	$128,200	1058	$36,000	320	$47,000	330	$69,000	580	$58,000	500	$34,000	290	$14,000	105	$3,500	35	$9,000	75	$398,700	3293

NOTES:

1) Work done on Canal, CEL, CE, CG & Consolidated

2) Hours are not provided for Tax services.

— 98,000 public accountants

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COMMONV[illegible] ENERGY SYSTEM
ART[illegible] ANDERSEN LLP
AUDIT FEES
1998 (Note 2)

	CES $	CEL $	CANAL $	CE $	CG $	CESV $	LNG $	STEAM $	REALTY $	AES $	TOTALS $
QUARTERLY (1)	24,500										
YEAR END	24,500	39,000	47,000	72,000	60,000	35,000	14,500	4,000	9,000	12,000	
BENEFIT PLANS:											
Employee Savings	6,000										
Employee Pension	6,000										
Long-Term Disability	5,000										
Life Insurance	5,000										
Union VEBA	5,500										
Non-Union VEBA	5,500										
Sub Total (Benefits)	$33,000										
TAXES:											
MATEP & Electric Asset Sale	10,050										
MATEP & Electric Asset Sale	12,000										
Sub Total (Taxes)	$22,050										
OTHER:											
MATEP & Electric Restruct.	4,000										
TOTALS	$108,050	$39,000	$47,000	$72,000	$60,000	$35,000	$14,500	$4,000	$9,000	$12,000	$400,550

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NOTES:
(1) Work done on Canal, CEL, CE, CG & Consolidated

(2) No extimated hours were provided for 1998 fees (IAD has requested)

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J & P TREE SERVICE CO.	$65,870.00	$69	ONG	tree trim
ATTACHMATE CORPORATION	$65,663.19	$69	ONG	Software license services
K CHEVROLE (JOE KEL	$58,962.37	$62	ONG	auto parts
GLAND CLEANING SE	$56,313.34	$59	ONG	clean. & svs.
MASS BAY TRANSPORTATION	$167,754.48	$175	ONG	transit system
OSMOSE	$124,598.83	$130	ONG	"
GUERTIN, J. E. ELECTRIC	$72,612.60	$76	ONG	electrical control
NATIONAL FIRE AND MEDIC	$72,348.78	$75	ONG	drug test svcs
DICTRONICS, INC.	$71,230.89	$74	ONG	"
BERNARD HODES ADVERTISI	$59,595.48	$62	ONG	advertising
HULL, CHARLES A.	$58,255.00	$61	ONG	"
	$36,892,962.74	$38,497		
ANDERSEN CONSULTING LLP	$827,542.00	$864	PROF	
GOLDMAN SACHS & CO	$782,245.10	$816	PROF	
CLARKE & COMPANY, INC.	$695,106.10	$725	PROF	
SALLY & FITCH	$631,029.78	$658	PROF	
WILLIAM MERCER INC	$589,421.34	$615	PROF	
BRUDER, GENTILE & MARCO	$529,634.55	$553	PROF	
LUSTIG, GLASER & WILSON	$472,132.07	$493	PROF	
COOPERS & LYBR*DO NOT U	$432,649.00	$451	PROF	
MORGAN, BROWN & JOY, LL	$420,348.28	$439	PROF	
CLARKE GOWARD ADVERTISI	$309,689.87	$323	PROF	
DELOITTE & TOUCHE, LLP	$287,293.00	$300	PROF	
DAWSON, GLENN E.	$160,416.56	$167	PROF	
BINGHAM DANA & GOULD	$91,335.14	$95	PROF	
ARGILL,SASSOON & RUDOL	$83,793.92	$87	PROF	
MAN AND PAIGE, P.C	$81,809.01	$85	PROF	
ER, DOLAN, PARKER &	$80,945.90	$84	PROF	
BURNS & LEVINSON, LLP	$69,764.78	$73	PROF	
LEBOEUF, LAMB, GREENE &	$66,154.31	$69	PROF	
KIRKPATRICK & LOCKHART	$222,960.70	$233	PROF	
MCDERMOTT, WILL & EMERY	$122,894.56	$128	PROF	
	$6,957,165.97	$7,260		
PIRELLI CABLE CORP	$2,643,107.07	$2,758	PROJ	
INDUS INTERNATIONAL, IN	$2,450,908.72	$2,557	PROJ	
UTEC CONSTRUCTORS	$2,431,942.50	$2,538	PROJ	
UTILITY MANAGEMENT SERVICES	$2,180,038.00	$2,275	PROJ	
ABB POWER T & D CO., IN	$1,914,610.28	$1,998	PROJ	
REED CONSULTING	$1,724,657.22	$1,800	PROJ	
SMIT TRANSFORMERS INC	$1,668,725.00	$1,741	PROJ	
NORTH AMERICAN TRANSFOR	$1,261,350.00	$1,316	PROJ	
ORACLE CORPORATION	$1,146,620.94	$1,196	PROJ	
RICHARD WHITE & SONS INC	$1,131,500.75	$1,181	PROJ	
ARAGON CONSULTING GROUP	$824,423.74	$860	PROJ	
ALCOA FUJIKURA LTD. INC	$726,468.13	$758	PROJ	
CYN ENVIRONMENTAL SERVI	$619,107.89	$646	PROJ	
GLOBAL RENTAL COMPANY,	$587,130.52	$613	PROJ	
CAE ELECTRONICS LTD.	$517,377.60	$540	PROJ	
MASS. ELECTRIC CONSTRUC	$342,730.53	$358	PROJ	

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SECTION J

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SYNERGIES SUMMARY

Savings Area: Shareholder Services

Clipper's Position:

1997 actual non-labor expenditures for shareholder services were $836,141. Expenditures consist primarily of Annual Report Costs, Proxy Services, Stock Transfer/Registrar, Postage, Annual Shareholder Meeting, Stock Listing Fees, Outside Agent and Stock Transfer Fees.

Crimson's Position:

1997 actual expenditures for shareholder services were $276,686. Expenditures consist primarily of Annual Report Costs, Proxy Solicitation, Postage, Annual Shareholder Meeting (which was estimated based on Clippers cost and the relative number of shareholders), Stock Listing Fees, and Stock Transfer Fees.

Ten Year Savings ($000):

❑ Capital	$ 0
❑ O&M - Expense	$ 1,716
O&M - Revenue Requirements	$ 0
❑ O&M - Total	$ 1,716

Rationale for Savings:

Cost savings will result through the elimination of duplicative shareholder related activities such as conducting the annual shareholder meeting, proxy services and payment of stock exchange fees. The combination will reduce incremental costs per additional shareholder due to economies of scale. Savings due to shareholder overlap are included.

Basis for Calculation:

Duplicative costs are reduced by the percentage savings realizable through consolidation of fixed cost services. Annual report costs were reduced by 100% of the smaller cost. Proxy services costs were reduced by 100% of the smaller cost. 75% of the smaller company's annual meeting costs was saved. 75% of the smaller NYSE fees were saved. 25% of all other costs of the smaller was saved. Stock exchange costs were reduced by 10% of the smaller cost.

Key Assumptions:

❑ Costs are actual and reflect total costs for shareholder services.

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K1

Shareholder Services

2000 Annual Savings ($000)	$153 K-3										
2000 Capital Savings ($000)	$0										
Percentage of Savings Capitalized	0.0%										
Revenue Requirements Rate	20.2%										
Inflation Rate	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	
Partial Year Savings	100%										

Annual Savings

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total
Annual Savings Amount	$153	$157	$161	$165	$169	$173	$178	$182	$187	$191	$1,716
O&M Savings	$153	$157	$161	$165	$169	$173	$178	$182	$187	$191	$1,716 A3
Capital Savings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		$0	$0	$0	$0	$0	$0	$0	$0	$0	
			$0	$0	$0	$0	$0	$0	$0	$0	
				$0	$0	$0	$0	$0	$0	$0	
					$0	$0	$0	$0	$0	$0	
						$0	$0	$0	$0	$0	
							$0	$0	$0	$0	
								$0	$0	$0	
									$0	$0	
										$0	
Cumulative Capital Savings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
Revenue Requirements Savings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total O&M and Revenue Requirements Savings	$153	$157	$161	$165	$169	$173	$178	$182	$187	$191	$1,716 A2

Shareholder Services

2000 Savings (000s)	[redacted]153
Escalator	[redacted]2.5%
Number of years	[redacted]3

K-2

Description	Clipper 1997	% Variable With Shareholders	Fixed	Variable	Avg. Variable Cost per Shareholder
	Clipper				
No. of Shareholders	32,200 K-8				
Annual Meeting	$ 29,221	0%	$ 29,221	$ -	$ -
Annual Report	$ 146,027	50%	$ 73,014	$ 73,014	$ 2.27
Annual Proxy Expense	$ 70,000	50%	$ 35,000	$ 35,000	$ 1.09
Preferred/Common Stock/Bonds	$ 311,162	20%	$ 248,930	$ 62,232	$ 1.93
Stock Exchange	$ 39,392	0%	$ 39,392	$ -	$ -
Other	$ 240,339	50%	$ 120,170	$ 120,170	$ 3.73
Total	838,141		545,726	290,415	$ 9.02
			65%	35%	

K-5

Crimson 1997	% Variable With Shareholders	Fixed	Variable	Avg. Variable Cost per Shareholder
Crimson				
12,708 K-9				
$ 20,000 K-4	0%	$ 20,000	$ -	$ -
$ 75,000	50%	$ 37,500	$ 37,500	$ 2.95
$ 13,056	50%	$ 6,528	$ 6,528	$ 0.51
$ 17,340	20%	$ 13,872	$ 3,468	$ 0.27
$ 32,340	0%	$ 32,340	$ -	$ -
$ 118,950	10%	$ 107,055	$ 11,895	$ 0.94
276,886		217,295	59,391	$ 4.67
		79%	21%	

Combined	Fixed	Variable	Average Variable Cost Per Shareholder
Combined			
44,908			
$ 49,221	$ 49,221	$ -	$ -
$ 221,027	$ 110,514	$ 110,514	$ 2.46
$ 83,056	$ 41,528	$ 41,528	$ 0.92
$ 328,502	$ 262,802	$ 65,700	$ 1.46
$ 71,732	$ 71,732	$ -	$ -
$ 359,289	$ 227,225	$ 132,065	$ 2.94
1,112,827	763,021	349,806	$ 7.79
	69%	31%	

Description	Total NewCo	Fixed: Combined Fixed	Savings %	Basis	Savings Fixed	New Co Fixed	Variable: Average Cost / Shareholder	New Co Variable
No. of Shareholders	40,417	(Assume 10% reduction in shareholders)						
Annual Meeting	$ 34,221	$ 49,221	75%	smaller	$ 15,000	$ 34,221	0	$ -
Annual Report	$ 164,659	$ 110,514	100%	smaller	$ 37,500	$ 73,014	2.27	$ 91,646
Annual Proxy Expense	$ 72,375	$ 41,528	100%	smaller	$ 6,528	$ 35,000	0.92	$ 37,375
Preferred/Common Stock/Bonds	$ 311,528	$ 262,802	75%	smaller	$ 10,404	$ 252,398	1.46	$ 59,130
Stock Exchange	$ 68,498	$ 71,732	10%	smaller	$ 3,234	$ 68,498	0.00	$ -
Other	$ 319,318	$ 227,225	25%	smaller	$ 26,764	$ 200,461	2.94	$ 118,857
Total	970,599	763,021			99,430	663,591	7.60	$ 307,008
						68%		32%

	NewCo Expense	Clipper & Crimson Expense	Savings (Cost)
Annual Meeting	$ 34,221	$ 49,221	$ 15,000
Annual Report	$ 164,659	$ 221,027	$ 56,368
Annual Proxy Expense	$ 72,375	$ 83,056	$ 10,681
Preferred/Common Stock/Bonds	$ 311,528	$ 328,502	$ 16,974
Stock Exchange	$ 68,498	$ 71,732	$ 3,234
Other	$ 319,318	$ 359,289	$ 39,971
	970,599	1,112,827	$ 142,228

Note: Preferred/Common Stock/Bonds not used in analysis

K-3

1997 Crimson Shareholder Services

	Category		
1	Mailing Costs (AR, Proxy		
2	Qtrly Reports, DRP)	93,750	K7
3	**Report Distribution:**		
4	Mailing	5,635	K7
5	Copying	5,665	
6	Transfer agent fees	17,340	
7	**Annual Meeting**	20,000	Assumption based on previous synergies
8	**Printing costs:**		
9	Proxy and cards	13,056	K7
10	Annual Report	75,000	
11	Qrtrly Reports	12,900	
12	NYSE fees	32,340	
13	PSE	1,000	
	Total	276,686	

	1997	Items	
Annual Meeting	$ 20,000	7	
Annual Report	$ 75,000	10	
Annual Proxy Expense	$ 13,056	9	K-3
Preferred/Common Stock/Bonds	$ 17,340	6	
Stock Exchange	$ 32,340	12	
Other	$ 118,950	2, 4, 5, 11, 13	
Total	$ 276,686		

00324

K-4

1997 Clipper Shareholder Services

	Category		1997 Cost	1998 Cost (e)
1	Annual Report	K6	$ 146,027	$ 100,000
2	Proxy Services	K6	$ 10,000	$ 1,500
3	Stock Transfer/Registrar	K6	$ 311,162	$ 300,000
4	System Development		$ -	$ -
5	Annual Meeting	K6	$ 29,221	$ 26,784
6	Dividends Processing and Disbursement	K6	$ 26,000	$ 30,000
7	Postage	K6	$ 187,206	$ 130,000
8	Administration		$ -	$ -
9	NYSE Fees	K6	$ 39,392	$ 35,000
10	Qtrly Reports	K6	$ 27,133	$ 27,000
11	Proxy Statement	K6	$ 60,000	$ 15,000
			$ 836,141	$ 665,284

		1997	Items
Annual Meeting	$	29,221	5
Annual Report	$	146,027	1
Annual Proxy Expense	$	70,000	2, 11
Preferred/Common Stock/Bonds	$	311,162	3
Stock Exchange	$	39,392	9
Other	$	240,339	6, 7, 10
Total	$	836,141	

K-3

06325

K-5

17.0 Sh[illegible]er Services Clipper

INSTRUCTIONS:
Please provide the data requested below as specifically and completely as possible. If data requested is not applicable, please provide a complete explanation of why not. Also, please inform us of notable exceptions to or anticipated changes in the data being provided during the forecasted study period.

Person Providing Data:

Category	K5 1997 Cost	Planned 1998 Cost	% Variable (with No. of Shareholders)	Notes / Comments:
Annual Report/Proxy Services				
Stock Transfer/Registrar Fees K5	311,162	[illegible]		
System Maintenance and Development				
Annual Meeting K5	29,221	26,7[illegible]		
Dividends Processing and Disbursement K5	26,000	30,000		
Postage K5	187,206	130,000		
Administration				
NYSE Fees K5	39,392	35,000		
Information Desk-non-labor				
Other (describe)				
[illegible] K5	146,027	100,000		
[illegible] K5	10,000	1,500		
Qtly Reports K5	27,1[illegible]	27,000		
Proxy Statement K5	60,000	15,000		

PROPRIETARY & CONFIDENTIAL

0 -

K-6

06326

Request 5.13

PROPRIETARY & CONFIDENTIAL

Shareholder Services

Mailing costs (AR , Proxy, Qtrly Reports, DRP statements, etc.)	$93,750
Distribution of reports to financial community	
Mailing costs - AR,10-K's, 10-Q's	5,635
Copying costs - 10-K's, 10-Q's	5,665
Transfer agent fees	17,340
Printing costs:	
Proxy and cards	13,056
Annual Report	75,000
Qtrly Reports	12,900
NYSE fees	32,340
PSE	1,000
	$256,686

Crimson

09/17/98 02:42 PM SHARESER.WK4

Part II

Item 5. Market for the Registrant's Common Stock and Related Stockholder Matters

(a) Market Information

The Company's common stock is listed on the New York and Boston Stock Exchanges.

The high and low market value per share of the Company's common stock as reported in the *Wall Street Journal* for each of the quarters in 1997 and 1996 was as follows:

	1997		1996	
	High	Low	High	Low
First quarter	$27 3/8	$26	$30 1/8	$26 1/4
Second quarter	$26 5/8	$24 5/8	$27 1/8	$23 5/8
Third quarter	$30 7/8	$26 1/2	$25 3/8	$21 3/4
Fourth quarter	$38 3/8	$30 1/4	$27	$21 3/4

(b) Holders

As of March 24, 1998, the Company had 32,200 holders of record of its common stock.

(c) Dividends

Dividends declared per share of common stock for each of the quarters in 1997 and 1996 were as follows:

	1997	1996
First quarter	$0.470	$0.470
Second quarter	$0.470	$0.470
Third quarter	$0.470	$0.470
Fourth quarter	$0.470	$0.470

(d) Other Information

Ratio of earnings to fixed charges and ratio of earnings to fixed charges and preferred stock dividend requirements for the year ended December 31, 1997:

Ratio of earnings to fixed charges	2.95
Ratio of earnings to fixed charges and preferred stock dividend requirements	2.51

00328

K-9

PART II.

Item 5. Market for the Registrant's Securities and Related Stockholder Matters

(a) Principal Markets

The System's common shares are listed on the New York and Pacific stock exchanges. The table below sets forth the high and low closing prices as reported on the New York Stock Exchange composite transactions tape.

	1997 by Quarter			
	First	Second	Third	Fourth
High	$24 1/2	$24	$27	$34 9/16
Low	20 7/8	19	23 3/4	25 11/16

	1996 by Quarter			
	First	Second	Third	Fourth
High	$25	$25 3/4	$25 5/8	$24 7/8
Low	21 15/16	22 3/4	21 1/2	22 1/2

(b) Number of Shareholders at December 31, 1997

12,708 shareholders

(c) Frequency and Amount of Dividends Declared in 1997 and 1996

1997		1996	
Declaration Date	Per Share Amount	Declaration Date	Per Share Amount
March 27, 1997	$ .395	March 28, 1996	$ .385
June 26, 1997	.395	June 27, 1996	.385
September 25, 1997	.395	September 26, 1996	.385
December 18, 1997	.395	December 19, 1996	.385
	$1.580		$1.540

(d) Future dividends may vary depending upon the System's earnings and capital requirements as well as financial and other conditions existing at that time.

SYNERGIES SUMMARY

Savings Area: Vehicles

Clipper Position:

Clipper has 31 passenger cars primarily for its A&G employees (707). Total operating cost associated with passenger cars was $183,000 in 1997.

Crimson Position:

Crimson has 43 passenger cars primarily for its A&G employees (499). Total operating cost associated with passenger cars was $224,800 in 1997.

Ten Year Savings ($000)

❑ Capital	$ 0
❑ O&M - Expense	$ 1,028
O&M - Revenue Requirements	$ 0
❑ O&M - Total	$ 1,028

Rationale for Savings:

The combined company will reduce the total number of corporate A&G employees. Due to this reduction, the new company will use fewer passenger cars. Savings will be realized through reduced total operating costs for passenger cars.

Basis for Calculation:

Savings are based on weighted average passenger car operating cost per corporate employee $338 and corporate labor reduction (252).

Key Assumptions:

- ❑ Number of passenger cars (and operating cost) is proportionate to the number of corporate employees.

Vehicles

2000 Savings ($000)	$92 L-3										
Percentage of Savings Capitalized	0%										
Revenue Requirements Rate	20.2%										
Inflation Rate	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	
Partial Year Savings	100%										
Annual Savings	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**Total**
Annual Savings Amount	$92	$94	$96	$99	$101	$104	$106	$109	$112	$115	$1,028
O&M Savings	$92	$94	$96	$99	$101	$104	$106	$109	$112	$115	$1,028 A3
Capital Savings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		$0	$0	$0	$0	$0	$0	$0	$0	$0	
			$0	$0	$0	$0	$0	$0	$0	$0	
				$0	$0	$0	$0	$0	$0	$0	
					$0	$0	$0	$0	$0	$0	
						$0	$0	$0	$0	$0	
							$0	$0	$0	$0	
								$0	$0	$0	
									$0	$0	
										$0	
Cumulative Capital Savings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
Revenue Requirements Savings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
		$0	$0	$0	$0	$0	$0	$0	$0	$0	
			$0	$0	$0	$0	$0	$0	$0	$0	
				$0	$0	$0	$0	$0	$0	$0	
					$0	$0	$0	$0	$0	$0	
						$0	$0	$0	$0	$0	
							$0	$0	$0	$0	
								$0	$0	$0	
									$0	$0	
										$0	
Total Revenue Requirements Savings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	0
Total O&M and Revenue Requirements Savings	$92	$94	$96	$99	$101	$104	$106	$109	$112	$115	$1,028 A2

L-2

1997 Vehicle Expense Summary

Inflation 2.5%

Cost Per Employee	338
A&G Reductions	252
Total 1997 Savings	85,212

2000 Savings	91,764

006332

L-3

Vehicles in Corporate & Customer Service Functions

Department	Cars	Trucks	
Enviornmental Affairs		1	
Safety & Health	3		
Security	5		
Economic Development	4		
Governmental Affairs	2		
Asset Management	5	2	
Client Services		2	
Sales-Volume Services	5		
Sales support		2	
	24	7	31

L6

Annual Costs Per Vehicle		5,000	9,000	
Total Vehicle Costs		120,000	63,000	183,000
Total A&G Employees				707
Total Costs Per Employee				258.84

Source: Internal Data

L-4

0033

1997 Vehicle Summary

Total A&G Vehicle		43
Total Transportation Costs		7,700,000
Total A&G Vehicle Costs		184,800
Employee Reimbursement Costs		40,000
Total Costs		224,800
A & G Employees		499
Cost Per Employee	$	451

L7

L-5

00334

Vehicles in Corporate & Customer Service Functions

Department	Passenger Cars	Light Trucks	
Environmental Affairs		1	
Safety & Health	3		
Security	5		
Economic Development	4		
Government Affairs	2		
Asset Management Pool	5	2	
Client Services		2	
Meter Reading	45	3	
Revenue Recovery (collections)		21	
Sales-Volume Services	5		
Sales support		2	
	69	31	100

Field Vehicles not used in analysis

Cost per Int. Vehicle 5000 5000

345,000 279,000 624,000

Employee Reimbursement

PROPRIETARY & CONFIDENTIAL

Geo Thompson

00335 2933

Are the savings percentages based on benchmarks in other mergers?

Does the 20% savings on property and excess liability insurance include the effect of the sales of generation assets?

PROPRIETARY & CONFIDENTIAL

Shareholder Services:

The CES costs for Stock Transfer/Registrar for 1997 was $17,340. The reason that BECO's amount was so much higher ($311,162) is that they outsource this function. Otherwise the costs and savings estimates appear to be reasonable. In addition, the dollar value is rather immaterial.

Vehicles:

The CES 1997 Vehicle Summary detail page has some minor discrepancies. The vehicle count alone is not a proper indicator with which to allocate costs. An industry standard Vehicle Maintenance Unit (VMU) is a better method with which to use in determining the effort to maintain a passenger car (VMU=1) versus a backhoe (VMU=4.23). Using this methodology, the A&G vehicles for CES would represent 2.4% of the total VMUs for CES. Assuming a total transportation cost of $7.7 million, the allocated cost of 43 A&G vehicles would be $184,859. CES estimates the employee reimbursement costs at $40,000. Based on 501 A&G employees, the total cost per employee would be equal to $449.

Is the BECO cost per employee correct? It appears in reviewing their detail that the leasing costs of $197,748 are not included in their numbers. Their cost per employee would increase to $954 with this change. Ironically, the average of BECO's and CES's revised cost per employee is $702 (relatively close to the D&T's calculated average of $741.

There are additional potential savings in the transportation areas that could be realized through a reengineering process. COM/Electric has five garage facilities (in Cambridge, Wareham, New Bedford, Yarmouth and Plymouth) and COM/Gas has three (in Southboro, Worcester and Dedham). How many does BECO have? The combined company should review the existing service territories and strategically locate the garages. This should be done in conjunction with a review of the T&D operations in that the vehicles would be better serviced at the location where the vehicles are dispatched. For example, the Plymouth, Wareham and New Bedford locations are all within a relatively short distance from each other. On the other hand, the Yarmouth garage and district office is positioned to service the entire Cape area. Given the heavy seasonal traffic, this facility is one that is strategically located.

L7

Directors' Fees Savings Not Present.

SYNERGIES SUMMARY

Savings Area: Association Dues

Clipper Position:

Clipper spent $513,052 in EEI dues and $183,605 on other association dues in 1997. These other dues include business associations, political action groups and chambers of commerce.

Crimson Position:

Crimson spent $103,195 on association dues in 1997, in addition to $173,594 in EEI dues. Dues include business associations, political action groups and chambers of commerce.

Ten Year Savings ($000):

❑ Capital	$ 0
❑ O&M - Expense	$ 2,398
O&M - Revenue Requirements	$ 0
❑ O&M - Total	$ 2,398

Rationale for Savings:

Savings were calculated from both the EEI membership dues model and other dues. EEI's dues model includes decreased rates after the first 500,000 customers and $500 million in electric revenue, decreasing the cost for the combined new company with greater revenue and a larger customer base as compared with two stand-alone companies.

Savings for other association dues will be derived from greater leverage and economies of scale present with the larger new company.

Basis for Calculation:

The new company will have over 367 thousand customers and $500 million dollars of electric revenue that now qualify for the lower rate in the EEI dues calculation model. Of the 1,029,345 million new company combined customers, 500 thousand are subject to the higher rate versus 867 thousand in the combined companies. Of the $2,465 million in electric revenue, $500 million rather than $1 billion is now subject to the higher rate.

10% of the association dues were reduced from the combined company for assumed overlap.

Key Assumptions:

- ❑ Historical association and membership affiliations to be maintained.
- ❑ Number of customers and revenue dollars for the new company is the sum of the two stand-alone companies.

Association Dues

2000 Savings ($000)	$214 N3											
Percentage of Savings Capitalized	0.0%											
Revenue Requirements Rate	20.2%											
Inflation Rate	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	
Partial Year Savings	100%											
Annual Savings												
	2000	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**Total**
Annual Savings Amount	$214	$219	$225	$230	$236	$242	$248	$254	$261	$267	$0	$2,398
O&M Savings	$214	$219	$225	$230	$236	$242	$248	$254	$261	$267	$0	$2,398 A3
Capital Savings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
			$0	$0	$0	$0	$0	$0	$0	$0	$0	
				$0	$0	$0	$0	$0	$0	$0	$0	
					$0	$0	$0	$0	$0	$0	$0	
						$0	$0	$0	$0	$0	$0	
							$0	$0	$0	$0	$0	
								$0	$0	$0	$0	
									$0	$0	$0	
										$0	$0	
											$0	
Cumulative Capital Savings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
Revenue Requirements Savings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total O&M and Revenue Requirements Savings	$214	$219	$225	$230	$236	$242	$248	$254	$261	$267	$0	$2,398 A2

N2

1997 Dues Savings Summary

Total Dues amount		
Clipper	183,605	N5
Crimson	103,195	N6
total	286,800	

Escalator 2.5%

Savings factor 10%

1997 Savings	28,680	
2000 Savings	30,885	
EEI Savings	183,151	N4
2000 Total Savings	214,036	

N3

00340

EEI ASSOCIATION DUES

Escalator [redacted]
Number of Years [redacted]

EEI Calculation			$-Cost per Unit	Clipper Units	Clipper Dollars	Crimson Units	Crimson Dollars	Combined Units	Combined Dollars
Customers									
	First	500,000	0.367935800	500,000	$183,968	367,000	$135,032	500,000	$183,968
	Over	500,000	0.122061100	162,345	$19,816	-	$0	529,345	$64,612
				662,345	$203,784	367,000	$135,032	1,029,345	$248,580
Revenue (000)									
	First	500,000	0.240111600	500,000	$120,056	500,000	$120,056	500,000	$120,056
	Over	500,000	0.080436300	1,276,233	$102,655	188,508	$15,163	1,964,741	$158,036
	Subtotal			1,776,233	$222,711	688,508	$135,219	2,464,741	$278,092
	1997 Total				$426,495		$270,251		$526,673
									$539,839

Stand-alone Cumulative Payment	$696,746
Combined Payment	526,673
1997 Savings	$170,074
2000 Savings	**$ 183,151**

Notes:
Dues formula based on Edison Electric Institute subscriptions for 1999

1996 EEI rates used to estimate savings in 1997, resulting stand-alone fees will not exactly match 1997 actual fees

1997	Clipper	Source	Crimson	Source	Total
Customers	662,345	1997 Annual Report N14	367,000	1997 Annual Report N11	1,029,345
Revenues $000	$ 1,776,233	1997 Annual Report N13	$ 688,508	1997 Annual Report N12	2,464,741

Note: The generation piece was to small to incorporate into the model

Source: 1997 Annuals

N4

1997 Organization Association

Organization/ Association	Nature of Association:	Cost Contribution	% Cost Attributable to Utility	Notes/ Comments
Chamber of Commerce	Bus. Assoc	33,000 N7	100%	Greater Boston Chamber of Commerce
AIM	Bus. Assoc	13,655	100%	Associated Industries of MASS
BMRB	Bus. Research Assoc	20,700	100%	Boston Municipal Research Bureau
MASS. Bus. Roundtable	Bus. Assoc	14,000	100%	
MASS. Insight	Bus. Research Group	4,950	100%	
MASS. Taxpayers	Bus/Lobby group	26,000	100%	MASS. Tax Payers Foundation
N.E. Council	Bus. Assoc	20,000	100%	
Jobs for Mass	Bus. Group	12,500	100%	
GBCVB	Bus. Group	3,000	100%	Greater Boston Convention and Visitors Bureau
ENV. Bus Council	Bus. Assoc	1,800	100%	
Misc. Dues & Exp	Bus. Group	34,000	100%	Local Chambers, Rotary Clubs, Business groups and Civic organizations in 40 cities and towns served by Clipper
	Total	183,605		

Source: Internal Data

N5

1997 Dues

Organization/ Association	Nature of Organization/Assoc.	Amount $	
Corry Associates	Civic, political, and related activities	101,805	N10
Massachusetts Taxpayers Foundation, Inc.		33	N10
National Association of Manufacturers		150	N10
Associated Industries		380	N10
Flanagan & Co.		827	N10
	Total	103,195	

Source:Internal Data

N6

003433

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INSTRUCTIONS:
Please provide the data requested below as specifically and completely as possible. If data requested is not applicable, please provide a complete explanation of why not.
Also, please inform us of notable exceptions to or anticipated changes in the data being provided during the forecasted study period.

Person Providing Data: Dena Lehman

1997 Organization / Association:	Nature of Association:	Cost / Contribution:	Percent of Cost Attributable to Utility:	Frequency:	Date of Data Provided:	Notes / Comments:
Edison Electric Institute (EEI)	Industry Assoc	$513,052	100%	yearly	6/18/98	
National Safety Council	Don't Belong					
American Gas Association	Don't Belong					
National Electric Reliability Council (NERC)	Belong through EEI		N5			
Better Business Bureau	Don't belong					
Chamber of Commerce	Bus. Assoc	$33,000	100%			Greater Boston Chamber of Commerce
Others (describe)						
AIM	Bus. Assoc	$13,655				Associated Industries of MASS
BMRB	Bus./Research Assoc	$20,700				Boston Municipal Research Bureau
Mass. Bus. Roundtable	Bus. Assoc	$14,000				
Mass Insight	Bus/Research grp	$4950				
Mass Taxpayers	Bus/Lobby grp	$26,000				Mass. Taxpayers foundation
N.E. Council	Bus. Assoc	$20,000				
Jobs for Mass	Bus grp	$12,500				
GBCVB	Bus. grp	$3,000				Greater Boston Convention & Visitors Bureau
Env. Bus. Council	Bus. Assoc	$1,800				
Misc. Dues & Exp	Bus. grps	34,000				Local Chambers, Rotary Clubs, Bus. grps & Civic organizations in 40 cities & towns we serve

00344

5/7/98

8.0 Ass Dues

TEM XLS

N7

not included in analysis N8

INSTRUCTIONS:
Please provide the data requested below as specifically and completely as possible. If data requested is not applicable, please provide a complete explanation of why not.
Also, please inform us of notable exceptions to or anticipated changes in the data being provided during the forecasted study period.

Person Providing Data: _____

1996 Organization / Association:	Nature of Association:	Cost / Contribution:	Percent of Cost Attributable to Utility:	Frequency:	Date of Data Provided:	Notes / Comments:
Edison Electric Institute (EEI)	Industry Assoc	490,745.00	100%	yearly	6/18/98	
National Safety Council	Don't Belong					
American Gas Association	Don't Belong					
National Electric Reliability Council (NERC)	Are in EEI Dues					
Better Business Bureau	Don't Belong					
Chamber of Commerce	Bus. Assoc	30,000	100%			Greater Boston Chamber of Commerce
Others (describe)						
AIM	Bus Assoc	12,410				Associated Industries of MASS
BMRB	Bus/Research Grp	20,700				Boston Municipal Research Bureau
Env. Bus Council	Bus. Assoc	1,800				Environmental Business Council
Mass Bus Roundtable	Bus Assoc	14,000				
Mass Insight	Bus/Research grp	4,800				
Mass Taxpayers	Bus. Assoc	24,000				Mass Taxpayers Foundation
GBCVB	Bus Grp	5,000				Greater Boston Convention & Visitors Bureau
Jobs for MASS	Bus Grp	12,500				
N.E. Council	Bus Grp	25,000				
Misc Dues & Exp	Bus. Grps	34,145				Local Chambers, Rotary Club, Bus. Grps & Civic Organizations in 40 cities & towns we serve

06345

010

INSTRUCTIONS:
Please provide the data requested below as specifically and completely as possible. If data requested is not applicable, please provide a complete explanation of why not.
Also, please inform us of notable exceptions to or anticipated changes in the data being provided during the forecasted study period.

Person Providing Data: Dona Lehman

1998 est. Organization / Association:	Nature of Association:	Cost / Contribution:	Percent of Cost Attributable to Utility:	Frequency:	Date of Data Provided:	Notes / Comments:
Edison Electric Institute (EEI)	Industry Assoc.	$513,052	100%	yearly	6/18/98	
National Safety Council	Don't Belong					
American Gas Association	Don't Belong					
National Electric Reliability Council (NERC)	Belong through EEI					
Better Business Bureau	Don't Belong					
Chamber of Commerce	Bus Assoc	$33,000	100%	yearly	6/18/98	Greater Boston Chamber of Commerce
Others (describe)						
AIM	Bus Assoc	$12,500				Associated Industries of MASS
BMRB	Bus/Research grp	$20,700				Boston Municipal Research Bureau
MASS Bus. Roundtable	Bus. Assoc.	$14,000				
MASS Insight	Bus/Research grp	$4,900				
N.E. Council	Bus grp	20,000				
Jobs for MASS	Bus grp	12,500				
MASS Taxpayers	Bus/Lobby grp	20,000				MASS Taxpayers Foundation
Misc. Dues + Exp	Bus. grps	34,000				Local Chambers, Rotary Clubs, Bus. grps + Civic Organizations in 40 cities + towns we serve

12.2 Association Dues. Cost, frequency and nature of association for the following organizations: (FERC Rpt 426.5; also, talk to Fio about the best way to determine dues)
Edison Electric Institute (EEI)
National Safety Council
American Gas Association
National Electric Reliability Council (NERC)
Chamber of Commerce
Others (describe)

The following dues were paid to the following organizations with costs shown for year ended December 31, 1997.

Cambridge Electric Light Company:

Edison Electric Institute	$ 37,653/yr	(See attachment)
Corry Associates	$ 37,321/yr	Civic, political, and related activities

Commonwealth Electric Company:

Edison Electric Institute	$135,941/yr	(See attachment)
Corry Associates	$ 37,300/yr	Civic, political, and related activities

COM/Gas

Lobbying activities:

American Gas Association	$ 5,590/yr	(See attachment)
Corry Associates	$ 27,184/yr	Civic, political, and related activities
Other (Note 1):	$ 1,390/yr	

Note 1

Massachusetts Taxpayers Foundation, Inc.	-	$ 33
National Association of Manufacturers	-	$150
Associated Industries	-	$ 380
Flanagan & Co.	-	$ 827

N6

Corry 37,321 + 37,300 + 27,184 = 101,805

00347 ND

1997 Annual Report

System Profile

Commonwealth Energy System is an exempt public utility holding company with annual revenues exceeding $1 billion and assets of approximately $1.4 billion.

N4

COM/Energy serves 367,000 electric customers and 237,000 gas customers in 78 communities in eastern Massachusetts.

COM/Energy offers a unique blend of energy supply and delivery services including electricity, natural gas, liquefied natural gas and steam. This energy diversity enhances COM/Energy's competitive position in the deregulating energy industry and reduces weather-related volatility in earnings.

In addition to four regulated operating public utility companies, the System includes a steam distribution company; a company engaged in the operation of LNG facilities; three non-utility, unregulated subsidiaries that are pursuing energy-related business opportunities; and five real estate trusts.

The System is a business trust organized in 1926 under the laws of Massachusetts.

COMEnergy

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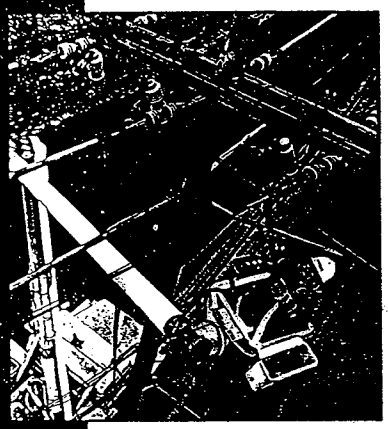
- Trustees and Officers . . . . . Inside back cover

Strong economy in COM/Energy service area



Excellence in utility operations

Customer choice — Massachusetts electric industry restructured

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Selected Financial Data

1997 Annual Report

Commonwealth Energy System and Subsidiary Companies

	1997	1996	1995	1994	1993
	(Dollars in thousands except common share data)				
Operating Revenues					
Electric	$ 688,508	$ 649,678	$ 604,980	$ 638,150	$ 622,039
Gas	333,977	341,867	306,953	323,568	302,644
Steam and other	19,259	19,360	17,355	15,867	14,035
Total	$1,041,744	$1,010,905	$ 929,288	$ 977,585	$ 938,718
Net Income	$ 49,901	$ 59,175	$ 51,396	$ 48,968	$ 45,834
Common Share Data-					
Earnings per share	$2.27	$2.70	$2.36	$2.29	$2.18
Dividends declared per share	$1.58	$1.54	$1.50	$1.50	$1.46
Average shares outstanding	21,531,433	21,529,676	21,311,836	20,827,562	20,431,228
Total Assets	$1,485,050	$1,428,955	$1,392,342	$1,345,032	$1,318,940
Long-term debt	$ 364,311	$ 355,305	$ 377,181	$ 418,307	$ 448,893
Redeemable preferred shares	12,200	13,020	13,840	14,660	15,480
Common share investment	430,770	415,694	390,785	362,997	337,070
Total Capitalization	$ 807,281	$ 784,019	$ 781,806	$ 795,964	$ 801,443

	1997 by Quarter			
	1st	2nd	3rd	4th
	(Dollars in thousands except per share amounts)			
Operating Revenues	$316,190	$221,944	$222,115	$281,495
Operating Income	35,892	7,793	16,887	27,078
Income Before Interest Charges	36,541	8,774	17,227	27,709
Net Income	26,400	(1,334)	7,147	17,688
Earnings per Common Share	1.21	(.07)	.32	.81
Dividends Declared per Common Share	.395	.395	.395	.395
Closing Price of Common Shares-				
High	24½	24	27	34 9/16
Low	20⅞	19	23¾	25 11/16

	1996 by Quarter			
	1st	2nd	3rd	4th
	(Dollars in thousands except per share amounts)			
Operating Revenues	$298,614	$222,667	$226,909	$262,715
Operating Income	36,131	18,608	17,601	24,325
Income Before Interest Charges	38,622	19,863	18,838	24,220
Net Income	27,907	9,463	8,360	13,445
Earnings per Common Share	1.28	.43	.37	.62
Dividends Declared per Common Share	.385	.385	.385	.385
losing Price of Common Shares-				
High	25	25¾	25⅝	24⅞
Low	21 15/16	22¾	21½	22½

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Selected Consolidated Financial Statistics (Unaudited)

	1997	1996	1995	1994	1993
Operating revenues (000)	$ 1,776,233	$ 1,666,303	$ 1,628,503	$ 1,544,735	$ 1,482,159
gs available common (000)	$ 131,493	$ 126,181	$ 96,739 (a)	$ 109,257	$ 102,513
Per common share:					
Earnings	$ 2.71	$ 2.61	$ 2.08 (a)	$ 2.41	$ 2.28
Dividends declared	$ 1.880	$ 1.880	$ 1.835	$ 1.775	$ 1.715
Dividends paid	$ 1.88	$ 1.88	$ 1.82	$ 1.76	$ 1.70
Book value	$ 22.13	$ 21.37	$ 20.61	$ 20.11	$ 19.42
Payout ratio	69 %	72 %	88 %(a)	73 %	75 %
Return on average common equity	12.4 %	12.4 %	10.0 %(a)	12.1 %	11.9 %
Year-end dividend yield	5.0 %	7.0 %	6.4 %	7.6 %	5.9 %
Fixed charge coverage (SEC)	2.95	2.91	2.38	2.46	2.22
Capitalization:					
Total debt	51 %	52 %	54 %	56 %	57 %
Preferred equity	7 %	8 %	8 %	9 %	9 %
Common equity	42 %	40 %	38 %	35 %	34 %
Long-term debt (000)	$ 1,057,076	$ 1,058,644	$ 1,160,223	$ 1,136,617	$ 1,272,497
Mandatory redeemable preferred stock (000)	$ 80,093	$ 83,465	$ 86,837	$ 88,837	$ 90,837
Total assets (000)	$ 3,622,347	$ 3,729,291	$ 3,637,170	$ 3,608,699	$ 3,468,724
Internal generation after dividends (000)	$ 240,362	$ 257,446	$ 184,492	$ 217,030	$ 194,209
expenditures (000)	$ 114,110	$ 145,347	$ 180,822	$ 198,771	$ 246,774
al generation	211 %	177 %	102 %	109 %	79 %
Common shares outstanding:					
Weighted average	48,514,958	48,264,734	46,591,662	45,337,661	44,959,050
Year-end	48,514,973	48,509,537	48,003,178	45,535,477	45,129,227
Stock price:					
High	38 3/8	30 1/8	29 1/2	29 7/8	32 5/8
Low	24 5/8	21 3/4	23 1/8	21 1/2	26 3/8
Year-end	37 7/8	26 7/8	29 1/2	24	29 3/4
Year-end market value (000)	$ 1,837,505	$ 1,303,694	$ 1,416,094	$ 1,092,851	$ 1,342,595
Trading volume (shares)	37,732,900	41,105,700	23,078,900	25,095,100	18,729,400
Market/book ratio (year-end)	1.71	1.26	1.43	1.19	1.53
Price/earnings ratio (year-end)	14.0	10.3	14.2 (a)	10.0	13.0

(a) Amounts excluding $34 million pre-tax restructuring charge:

Earnings available for common (000)	$ 117,403
Earnings	$ 2.52
Payout ratio	72 %
Return on average common equity	12.2 %
Price/earnings ratio	11.7 %

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Certain reclassifications and recalculations were made to the data reported in prior years to conform with the method of presentation used in 1997.

1997 Clipper Annual Report

Selected Consolidated Sales Statistics (Unaudited)

	1997	1996	1995	1994	1993
Electric energy (kWh in thousands):					
s (system output):					
Generated	11,686,810	10,531,745	10,537,114	9,428,931	9,787,092
Purchased	6,014,208	5,680,194	5,446,542	5,920,065	5,326,224
New England Power Pool	887,250	1,842,732	1,513,467	1,535,335	1,575,310
Total	18,588,268	18,054,671	17,497,123	16,884,331	16,688,626
Disposition:					
Commercial	7,991,349	7,821,371	7,454,684	7,478,631	7,263,358
Residential	3,566,405	3,549,899	3,563,626	3,534,372	3,477,870
Industrial	1,467,600	1,547,630	1,538,218	1,539,385	1,580,969
Other (a)	131,187	130,678	131,626	130,721	145,242
Total retail sales	13,156,541	13,049,578	12,688,154	12,683,109	12,467,439
Wholesale and contract sales (a)	2,674,283	3,127,087	2,805,777	2,367,589	2,272,669
New England Power Pool	1,610,860	741,390	884,336	725,439	877,978
Total system	17,441,684	16,918,055	16,378,267	15,776,137	15,618,086
Miscellaneous usage	1,146,584	1,136,616	1,118,856	1,108,194	1,070,540
Total	18,588,268	18,054,671	17,497,123	16,884,331	16,688,626
Kilowatthour sales - annual growth:					
Commercial	2.2 %	4.9 %	(0.3) %	3.0 %	1.2 %
Residential	0.5	(0.4)	0.8	1.6	1.9
Industrial	(5.2)	0.6	(0.1)	(2.6)	(5.4)
Other	0.4	(0.7)	0.7	(10.0)	(50.3)
Total retail sales (a)	0.8	2.8	-	1.7	(0.7)
Wholesale and contract sales	(14.5)	11.5	18.5	4.2	(9.7)
New England Power Pool	117.3	(16.2)	21.9	(17.4)	(53.7)
Total system	3.1 %	3.3 %	3.8 %	1.0 %	(8.0)%
Electric operating revenues by class:					
Commercial	51 %	50 %	50 %	50 %	49 %
Residential	27 %	27 %	28 %	28 %	28 %
Industrial	9 %	9 %	9 %	9 %	10 %
Other	1 %	2 %	2 %	2 %	1 %
Wholesale and contract	12 %	12 %	11 %	11 %	12 %
Average number of customers	662,354	657,487	653,757	655,707	651,141

(a) Effective in both November 1995 and February 1993, a former retail customer became a wholesale customer as allowed under Massachusetts state law.

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1997 Clipper Annual Report

R & D Savings Not Present.

SYNERGIES SUMMARY

Savings Area: Credit Facilities

Clipper Position:

Clipper's current credit commitment includes a $200 million revolving credit line with an annual commitment fee of $250,000 and commitment percentage of 0.125%.

Crimson Position:

Crimson currently has six lines of credit totaling $145 million with commitment percentage of 0.1875% each. Total 1998 commitment fees were $272,000.

Ten Year Savings ($000s):

❑ Capital	$ 0
❑ O&M - Expense	$ 1,949
O&M - Revenue Requirements	$ 0
❑ O&M - Total	$ 1,949

Rationale for Savings:

Neither of the companies fully utilize their respective credit lines. The combined company will be in a better position to schedule its cash flow needs and will be able to reduce the level of combined credit lines. Savings will be realized through avoided commitment fees on the under way credit lines.

Basis for Calculation:

The reduction in the combined credit lines will be a $60 million. The commitment fees for this amount, based on current credit rating is $331,000.

Key Assumptions:

- ❑ Newco's credit requirements will be satisfied at existing commitment rates.

Open Points:

Lines of Credit

2000 Savings ($000)	$174 P3											
2000 Capital Savings ($000)	$0											
Percentage of Savings Capitalized	0.0%											
Revenue Requirements Rate	20.2%											
Inflation Rate	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	
Partial Year Savings	100.0%											
Annual Savings	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**Total**
Annual Savings Amount	$174	$178	$183	$187	$192	$197	$202	$207	$212	$217	$0	$1,949
O&M Savings	$174	$178	$183	$187	$192	$197	$202	$207	$212	$217	$0	$1,949 A3
Capital Savings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
			$0	$0	$0	$0	$0	$0	$0	$0	$0	
				$0	$0	$0	$0	$0	$0	$0	$0	
					$0	$0	$0	$0	$0	$0	$0	
						$0	$0	$0	$0	$0	$0	
							$0	$0	$0	$0	$0	
								$0	$0	$0	$0	
									$0	$0	$0	
										$0	$0	
											$0	
Cumulative Capital Savings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
Revenue Requirements Savings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total O&M and Revenue Requirements Savings	$174	$178	$183	$187	$192	$197	$202	$207	$212	$217	$0	$1,949 A2

P2

CREDIT FACILITIES
($000)

Credit Lines	Amount		Annual Commitment Costs		NewCo		1998	Savings
Description	Clipper	Crimson	Clipper	Crimson	Amount	Commitment Costs	Savings	Rationale
Revolving Credit Line	$200,000 P4A		$250 P4A		$200,000	$250	$0	
Lines of Credit		$30,000 P4B		$56 P4B	$0	$0	$56	Cancel line
Lines of Credit		$20,000		$38	$20,000	$25	$13	
Lines of Credit		$30,000		$56	$0	$0	$56	Cancel line
Lines of Credit		$25,000		$47	$25,000	$31	$16	
Lines of Credit		$20,000		$38	$20,000	$25	$13	
Lines of Credit		$20,000		$38	$20,000	$25	$13	
Total	$200,000	$145,000				$331	$166	
						2000 Savings	**$174**	

Escalation	2.50%
Years	2

Notes
Savings achieved through cancelling/closing $60 million of credit lines due to decreased credit facility need of combined entity

P3

CREDIT FACILITIES
($000)

Clipper

	Credit Facilities	Institution	Commitment Amount	Avg Annual Used	Fee On Committed	Fee On Uncommitted	Annual Cost	Notes
P9 Line 1	Revolving Credit Line	BankBoston	$200,000	0%	0.125%	0.0000%	$250	A
Total			**$200,000**	**0%**			**$250**	

Grimson

	Credit Facilities	Institution	Commitment Amount	Avg Annual Used	Fee On Committed	Fee On Uncommitted	Annual Cost	Notes
P6 Line 1	Line of Credit	BankBoston	$30,000	P7 59%	P4 0.1875%	0.0000%	$56	B
Line 2	Line of Credit	Barclays Bank	$20,000	59%	0.1875%	0.0000%	$38	
Line 3	Line of Credit	Credit Lyonnais	$30,000	59%	0.1875%	0.0000%	$56	
Line 4	Line of Credit	Fleet Bank	$25,000	59%	0.1875%	0.0000%	$47	
Line 5	Line of Credit	Mellon Bank	$20,000	59%	0.1875%	0.0000%	$38	
Line 6	Line of Credit	Sanwa Bank	$20,000	59%	0.1875%	0.0000%	$38	
Total			**$145,000**	**$85,550**			**$272**	

Note: Clipper terminated one revolving credit line of $225 million and one line of credit of $30 million in June 1998

P4

Crimson

PROPRIETARY &
CONFIDENTIAL

12.1 Credit Facilities. All available credit lines and revolving credit facilities including: lending institution, amount of credit line, average annual amount used, interest rate, commitment fees.

A summary of the System's Bank lines is attached. These lines are available to the System and or any of its utility subsidaries subject to certain limitations which are noted under the "Comments" section of the report. Lines are normally renewed upon expiration and require an annual fee of up to .1875%. Interest rates are at an adjusted money market rate and averaged 5.8% in 1997 and 5.6% in 1996. During 1997 the System's utilization of these lines was approximately 59%.

Recently with the acquisition of the Matep facility we added a separate $ 7 million line of credit for the working capital needs of the facility. Interest will be at libor rates and the Company was charged an up front fee of 10 basis points for the facility. The balance of non-utility company borrowing needs are slight and are provided for by the Parent Company at the prime rate.

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COMMONWEALTH ENERGY SYSTEM

Bank Lines of Credit
(Dollars In Thousands)

PROPRIETARY & CONFIDENTIAL

Bank	Committed	Uncommitted	Expiration	Comments
BankBoston	$30 000	$10 000	11/29/98	
Barclays Bank	20 000	--	01/04/99	Including Commonwealth Energy System Cambridge Electric Light Company is limited to $10,000,000
Credit Lyonnais	30 000	--	10/30/98	Including Commonwealth Energy System
Fleet Bank	25 000	--	07/31/99	Including Commonwealth Energy System
Mellon Bank	20 000	--	11/14/98	Cambridge Electric Light Company is limited to $5,000,000
Sanwa Bank	20 000	--	10/31/98	Cambridge Electric Light Company is limited to $10,000,000
Total	**$145 000**	**$10 000**		

KMD
8/31/98

PROPRIETARY & CONFIDENTIAL

COMMONWEALTH ENERGY SYSTEM
BANK LINES OF CREDIT
AVERAGE UTILIZED PORTION FOR 1997

MONTH	COMMITTED	TOTAL
JANUARY	78%	73%
FEBRUARY	72%	67%
MARCH	64%	60%
APRIL	52%	48%
MAY	49%	45%
JUNE	48%	45%
JULY	63%	59%
AUGUST	70%	65%
SEPTEMBER	68%	63%
OCTOBER	42%	39%
NOVEMBER	48%	45%
DECEMBER	58%	54%
AVERAGE YEARLY	**59%**	**55%**

Clipper

TRUCTIONS:

se provide the data requested below as specifically and completely as possible. If data requested is not applicable, please provide a complete explanation of why not.
, please inform us of notable exceptions to or anticipated changes in the data being provided during the forecasted study period.

on Providing Data: JOE HOBSON

edit Lines:	Provider:	Credit Limit:	Avg. Annual % Used:	Fee on Committed Portion:	Fee on Uncommitted Portion:	Notes / Comments:
1	BankBoston Agent for BECo	$200M	0	.125%		Facility Fee
2	Revolver					
3	BankBoston (BETG)	$30M	100	.25%		Fee on the unused portion of the line. Credit
4						Line expected to be terminated June 1998.
5	BankBoston Agent for BEC	$225M	N/A	.15%		Facility Fee; BEC Energy Revolver is
6	Energy Revolver					currently being drawn up. Expected close
7						is June 1998.
8						
9						
10						

P4

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#— P-8

SYNERGIES SUMMARY

Savings Area: Purchasing Economies - Materials & Supply Procurement

Clipper Position:

Clipper's annual purchases were over $ 30.2 million in 1997.

Crimson Position:

Crimson's annual non-gas purchases were over $11.7 million in 1997.

Ten Year Savings ($000):

❑ Capital	$23,302
❑ O&M - Expense	$ 9,987
O&M - Revenue Requirements	$24,956
❑ O&M - Total	$34,943

Rationale for Savings:

Savings will be realized in increased standardization, purchasing power, and vendor consolidation.

Basis for Calculation:

Annual purchases were reduced by 6.7%of combined expenditures. Savings were slightly higher for stock/standard materials (7.0%) and consumable and other materials (7.0%) due to differences in the level of standardization possible across these categories. Savings for engineered materials were slightly lower (5%) due to the level of specialization. This savings results from vendor consolidation and increased purchasing power due to higher volume orders for common materials. 70% of procurement savings were capitalized based on a weighted average capitalization rate for the two companies.

Key Assumptions:

❑ Historical purchases are indicative of future levels.

Procurement

2000 Total Savings ($000)	$2,971 Q3										
Percentage of Savings Capitalized	70.0%										
Revenue Requirements Rate	20.22%										
Inflation Rate	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	
Partial Year Savings	100%										
Partial Year Revenue Req. Rate	20.22%										
Annual Savings	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**Total**
Annual Savings Amount	$2,971	$3,046	$3,122	$3,200	$3,280	$3,362	$3,446	$3,532	$3,620	$3,711	$33,289
O&M Savings	$891	$914	$937	$960	$984	$1,009	$1,034	$1,060	$1,086	$1,113	$9,987 A3
Capital Savings	$2,080	$2,132	$2,185	$2,240	$2,296	$2,353	$2,412	$2,472	$2,534	$2,598	$23,302 A5
		$2,080	$2,132	$2,185	$2,240	$2,296	$2,353	$2,412	$2,472	$2,534	
			$2,080	$2,132	$2,185	$2,240	$2,296	$2,353	$2,412	$2,472	
				$2,080	$2,132	$2,185	$2,240	$2,296	$2,353	$2,412	
					$2,080	$2,132	$2,185	$2,240	$2,296	$2,353	
						$2,080	$2,132	$2,185	$2,240	$2,296	
							$2,080	$2,132	$2,185	$2,240	
								$2,080	$2,132	$2,185	
									$2,080	$2,132	
										$2,080	
Cumulative Capital Savings	$2,080	$4,212	$6,397	$8,637	$10,933	$13,286	$15,698	$18,171	$20,705	$23,302	
Revenue Requirements Savings	$421	$431	$442	$453	$464	$476	$488	$500	$512	$525	
		$421	$431	$442	$453	$464	$476	$488	$500	$512	
			$421	$431	$442	$453	$464	$476	$488	$500	
				$421	$431	$442	$453	$464	$476	$488	
					$421	$431	$442	$453	$464	$476	
						$421	$431	$442	$453	$464	
							$421	$431	$442	$453	
								$421	$431	$442	
									$421	$431	
										$421	
Total Revenue Requirements Savings	421	852	1,294	1,746	2,211	2,686	3,174	3,674	4,187	4,712	24,956 A4
Total O&M and Revenue Requirements Savings	$1,312	$1,765	$2,230	$2,706	$3,195	$3,695	$4,208	$4,734	$5,273	$5,825	$34,943 A2

1998 Procurement

Clipper

	Total Purchases			
	Total	% Capital	Capital	O&M
Engineered	4,532,876	65.00%	2,946,370	1,586,507
Stock	24,175,340	77.00%	18,615,012	5,560,328
Other	-	65.00%	-	-
Consumables	1,510,959	77.00%	1,163,438	347,521
Total	30,219,175	71.00%	22,724,820	7,494,355

Crimson

	Total Purchases			
	Total	% Capital*	Capital	O&M
Engineered	1,798,875	69.33%	1,247,160	551,715
Stock	9,594,000	69.33%	6,651,520	2,942,480
Other	-	69.33%	-	-
Consumables	599,625	69.33%	415,720	183,905
	11,992,500	69.33%	8,314,400	3,678,100

COMBINED

	Total Purchases				
	Total		% Capital	Capital	O&M
Engineered	6,331,751		66.23%	4,193,530	2,138,222
Stock	33,769,340		74.82%	25,266,532	8,502,808
Other	-		67.17%	-	-
Consumables	2,110,584		73.17%	1,579,158	531,426
1997 Costs	42,211,675	TRUE	70.53%	31,039,220	11,172,455

1998 T&D Combined Procurement	$	42,211,675
2000 Estimated Procurement	$	42,238,057
Escalation Rate		2.5%
Years to Escalate		2

5%	Savings on combined engineered materials	$ 333
7%	Savings on combined stock materials	2,484
7%	Savings on combined consumable materials	155

Total 2000 Combined Savings ($000)	2,971
Annual savings as a percent of total spending	7.0%

Notes

* Crimson Capitalization percentage represents a three year average 1995-1997

Crimson 1998 Procurement costs are 1997 escalated 1 year

Clipper Inventory & Procurement Detail

Annualized 1998	Purchases	Segment	Category	Ending Balance
Cable & Wire	$ -	S		$ 3,200,000
Distribution Transformers	$ -	E	T&D	$ 2,700,000
Network transformers	$ -	E	T&D	$ 1,800,000
Network protectors	$ -	E		
Meters	$ -	S	T&D	$ 1,300,000
Underground material	$ -	S		
Poles	$ -	S		
Safety supplies	$ -	S		
O/H line materials	$ -	S		
Misc. tools & operating materials	$ -	S	T&D	$ 5,500,000
Spare Parts	$ -	S	T&D	$ 3,400,000
PC equipment	$ -	S		
Total Purchases	$ 30,219,175			$ 17,900,000
Total Purchases	$ 30,219,175 Q6			$ 17,900,000
Inventory Turns	1.69			
			Total Inventory	$ 17,900,000

E= Engineered
S= Stock
C= Consumables
O= Other
T&D=Transmission & Distribution

Procurement Category Breakdown

Total T&D	$	30,219,175
Total Nuclear Generation	$	-
Total Fossil Generation	$	-
Total Other	$	-
CHECK	$	30,219,175

TRUE

Spare Parts Inventory	3,400,000		11%
Procurement Segment Breakdown			
Engineered	4,532,876.27	Q3	15%
Stock	24,175,340.12		80%
Consumables	1,510,958.76		5%
Other	-		0%
Check	$ 30,219,175	TRUE	

SOURCES:

Internal Documentation

Q4

Crimson Inventory & Procurement Detail

Ending December 31, 1997	Purchases	Segment	Category	Ending Balance
Electric Operations	$ 11,700,000			$ 7,647,059
Total Purchases	$ 11,700,000			$ 7,647,059
Total Purchases	$ 11,700,000 Q9			$ 7,647,059 Q9
Inventory Turns	1.53 Q11		**Total Inventory**	$ 7,647,059

E= Engineered
S= Stock
C= Consumables
O= Other
TD=Transmission & Distribution
FG=Fossil Generation
NG=Nuclear Generation

Procurement Category Breakdown

Total T&D	$ 11,700,000	100.0%	
Total Nuclear Generation	$ -	0.0%	
Total Fossil Generation	$ -	0.0%	
Total Other	$ -	0.0%	
CHECK	$ 11,700,000	100%	TRUE

* Gas operations procurement and inventory are not included in this analysis

Spare Parts Inventory	$ 860,381		11%	Based on Clipper data
Procurement Segment Breakdown				
Engineered	$ 1,755,000	Q3	15%	Segment breakdown based on Clipper data
Stock	$ 9,360,000		80%	
Consumables	$ 585,000		5%	
Other	$ -		0%	
Check	$ 11,700,000	TRUE		

SOURCES:

Internal Documentation

Q-5

WESCO DISTRIBUTION INC	$3,964,888.39	$4,137	MAT
ROME CABLE	$3,679,233.30	$3,839	MAT
COMPUCOM	$2,312,884.24	$2,413	MAT
DIGITAL EQUIPMENT CORPO	$1,872,473.13	$1,954	MAT
HOWARD INDUSTRIES, INC.	$1,864,968.25	$1,946	MAT
EMC CORPORATION	$1,629,064.25	$1,700	MAT
STANDARD ELECTRIC	$1,466,154.58	$1,530	MAT
GULF OIL LIMITED PARTNE	$1,235,766.34	$1,289	MAT
S & C ELECTRIC COMPANY	$1,160,469.18	$1,211	MAT
INTERNATIONAL BUSINESS	$1,136,835.78	$1,186	MAT
HURLEY, ARTHUR J. COMPA	$959,106.45	$1,001	MAT
DATA CARE CORP.	$820,442.06	$856	MAT
STAPLES INC	$659,739.89	$688	MAT
BOC GASES INC.	$637,948.13	$666	MAT
VANYO INCORPORATED	$577,966.61	$603	MAT
CUTLER HAMMER,INC	$573,660.76	$599	MAT
KOPPERS COMPANY, INC.	$536,380.00	$560	MAT
CABLETRON SYSTEMS SALES	$532,205.64	$555	MAT
GRAINGER, W.W., CO., IN	$284,262.19	$297	MAT
HENDRIX WIRE & CABLE CO	$279,677.54	$292	MAT
HINDS & COON COMPANY	$240,967.13	$251	MAT
MOORE BUSINESS FORMS &	$102,949.39	$107	MAT
COMPUTER MERCHANT LTD.,	$97,861.70	$102	MAT
FOR-TEK, INC.	$95,995.50	$100	MAT
ALTEC INDUSTRIES, INC.	$91,770.41	$96	MAT
BAY STATE AUTO ELECTRIC	$75,041.05	$78	MAT
METER DEVICES CO.	$74,134.38	$77	MAT
KERITE COMPANY,INC. THE	$59,938.78	$63	MAT
BEDFORD TOOL & EQUIPMEN	$53,077.18	$55	MAT
BOB'S SPEED & AUTO PART	$50,961.26	$53	MAT
BURKE, DENNIS K. INC.	$50,463.87	$53	MAT
KUHLMAN ELECTRIC CO, IN	$50,432.00	$53	MAT
BISYS NETWORKING SERVIC	$483,387.47	$504	MAT
LEBARON FOUNDRY, INC.	$170,802.00	$178	MAT
G & W ELECTRIC COMPANY	$153,240.00	$160	MAT
ENERGYLINE SYSTEMS, INC	$137,500.00	$143	MAT
INDUSTRIAL PROTECTION P	$135,382.56	$141	MAT
KARNOW BROS.	$127,813.19	$133	MAT
MOTOROLA COMMUNICATION	$120,110.94	$125	MAT
J-W PRODUCTS, INC.	$104,924.55	$109	MAT
DAVIS RUBBER AND SAFETY	$90,447.87	$94	MAT
HADCO LIGHTING CO. INC.	$78,818.06	$82	MAT
CHROMATE INDUSTRIAL COR	$77,328.10	$81	MAT
MAC PRODUCTS INC.	$52,568.75	$55	MAT
	$28,960,042.85	$30,219	Q3

Q-6

PROPRIETARY & CONFIDENTIAL

ATWOOD AND MORRILL CO.,	$475,376.47	$496	INS
AON RISK SERVICES, INC.	$469,371.00	$490	INS
LIBERTY MUTUAL INSURANC	$382,804.00	$399	INS
COMMERCIAL LIFE INSURAN	$113,531.05	$118	INS
	$1,926,937.52	$2,011	
WESCO DISTRIBUTION INC	$3,964,888.39	$4,137	MAT
ROME CABLE	$3,679,233.30	$3,839	MAT
COMPUCOM	$2,312,884.24	$2,413	MAT
DIGITAL EQUIPMENT CORPO	$1,872,473.13	$1,954	MAT
HOWARD INDUSTRIES, INC.	$1,864,968.25	$1,946	MAT
EMC CORPORATION	$1,629,064.25	$1,700	MAT
STANDARD ELECTRIC	$1,466,154.58	$1,530	MAT
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DAVIS RUBBER AND SAFETY	$90,447.87	$94	MAT
HADCO LIGHTING CO. INC.	$78,818.06	$82	MAT
CHROMATE INDUSTRIAL COR	$77,328.10	$81	MAT
MAC PRODUCTS INC.	$52,568.75	$55	MAT

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PROPRIETARY & CONFIDENTIAL

	$28,960,042.85	# $30,219	
CHEM-NUCLEAR SYSTEMS, I	$438,346.50	$457	NUC
FERGUSON ENTERPRISES OF	$434,172.22	$453	NUC
ENVIREX/US FILTER	$331,826.21	$346	NUC
FEDERAL EMERGENCY MANAG	$305,387.00	$319	NUC
BW/IP INTERNATIONAL, IN	$271,956.00	$284	NUC
GPU NUCLEAR/OYSTER CREE	$259,043.95	$270	NUC
HAKE, FRANK W. ASSOC.	$171,939.37	$179	NUC
FEDERAL ENERGY REGULATO	$135,512.00	$141	NUC
GENERAL ELECTRIC SUPPLY	$132,030.41	$138	NUC
MAXEY FLATS STEERING CO	$93,695.05	$98	NUC
INTERSTATE NUCLEAR SERV	$78,554.36	$82	NUC
AIR PRODUCTS & CHEMICAL	$67,445.53	$70	NUC
CARVER, TOWN OF	$61,069.96	$64	NUC
DUXBURY, TOWN OF	$56,492.84	$59	NUC
BARNSTABLE COUNTY FIRE	$50,000.00	$52	NUC
C.M.A. INC.	$271,570.50	$283	NUC
MPR ASSOCIATES, INC.	$271,164.28	$283	NUC
MARINE BIOCONTROL CORP.	$217,178.12	$227	NUC
LORIEN TECHNOLOGIES, IN	$204,856.21	$214	NUC
DUXBURY ASSOCIATES - RE	$180,740.60	$189	NUC
BRAND FIRE PROTECTION S	$178,465.99	$186	NUC
EPICOR, INCORPORATED	$175,781.67	$183	NUC
MANN, GEORGE & COMPANY,	$170,535.91	$178	NUC
GTS DURATEK BEAR CREEK,	$164,582.01	$172	NUC
CASHMAN,JAY,INC	$153,000.00	$160	NUC
HAYES PUMP INC.	$149,864.15	$156	NUC
JOHNSTON PUMP COMPANY	$137,019.94	$143	NUC
INGERSOLL RAND DRESSER	$129,524.35	$135	NUC
ALTRAN CORPORATION	$118,104.67	$123	NUC
ABB COMBUSTION ENGINEER	$112,736.18	$118	NUC
IONICS, INC.	$87,297.33	$91	NUC
CHESTERTON, A.W., COMPA	$85,504.67	$89	NUC
JAMESBURY, INC.	$85,451.01	$89	NUC
MASS SANITARY SUPPLY, I	$78,063.52	$81	NUC
GENERAL PHYSICS CORPORA	$69,792.00	$73	NUC
BATTELLE	$69,149.75	$72	NUC
PARKER, H. & COMPANY, I	$68,400.00	$71	NUC
MARINE RESEARCH, INC.	$68,052.60	$71	NUC
BRADLEY BROS, INC.	$65,724.23	$69	NUC
ALLIED PERSONNEL SERVIC	$64,387.17	$67	NUC
EASTERN REFRACTORIES CO	$63,461.61	$66	NUC
ARKWRIGHT BOSTON INSURA	$57,718.97	$60	NUC
DUFRANE ASSOCIATES, INC	$56,101.90	$59	NUC
COASTAL NETWORK	$50,364.49	$53	NUC
ALLIED SIGNAL, INC.	$1,118,077.02	$1,167	NUC
	$7,610,142.25	$7,941	
CBL CAPITAL CORPORATION	$4,003,797.84	$4,178	ONG - vehicle
DILORENZO UTILITY CONTR	$3,510,904.84	$3,664	ONG - underground m

00368

PROPRIETARY & CONFIDENTIAL

Purchasing Economies - Materials & Supply Procurement:

The CES amount in the Synergies Assessment is based on total Accounts Payable activity for the Company, adjusted for various items such as generation. The amount of $48.2 million is greatly overstated. This approach of backing into an M&S number from total AP did not adjust for many items included in other areas of this Synergies Assessment. The revised total M&S amount for the CES, excluding COM/Gas and Canal Electric, is $11.7 million (See detail attached). This includes 1997 items purchased for inventory, as well as materials that were purchased and expensed directly to operations or charged directly into construction work orders. A check on the validity of this amount was also computed (also attached). Based on a 20% benchmark of O&M (excluding fuel, purchased power, transmission and labor), Cambridge and Commonwealth should have expected to procure $12.6 million of M&S. As a result of these changes, the savings estimate may be considerably overstated.

How is the Ten Year Savings calculated? I cannot tie the Total with the detail. What is the basis of the 20.22% Revenue Requirements Rate?

Purchasing Economies - Inventory:

The inventory levels are a function of the M&S procurement levels. Therefore, as a result of the changes in the M&S levels, the inventory levels will also change. The CES amount for 1997 will now become $7.6 million. This is more realistic with actual inventory balances at 12/31/97. The total savings amount will have to be adjusted.

How is the Ten Year Savings calculated? I cannot tie the Total with the detail.

At your earliest convenience, please call me at (617) 225-4735 to discuss these items.

Sincerely,

Mark P. DeLorey
Sr. Financial Analyst

cc: Steve Fogarty

PROPRIETARY & CONFIDENTIAL

COM/Electric
Materials & Supply Procurement
Actual 1997

	CE	CEL	TOTAL
Direct Materials Purchased - Source 13	2,453,172	1,112,720	3,565,892
Direct Materials Purchased - Source 14	2,867,101	226,889	3,093,990
Account 154 Inventory Account Activity			5,014,233
			11,674,115

COM/Electric
Materials & Supply Procurement
Benchmark Level of M&S

	CE	CEL	TOTAL
Total Operations and Maintenance Expenses (A)	402,225,434	113,669,281	515,894,715
Less: Fuel Expenses	412,752	9,228,953	9,641,705
Less: Purchased Power & Transmission	299,008,084	76,341,852	375,349,936
Less: Labor Expenses	37,417,017	11,414,004	48,831,021
Less: Employee Benefits	14,645,994	4,205,290	18,851,284
O&M, Excliding fuel, purch. power, transm & labor	50,741,587	12,479,182	63,220,769
Estimated M&S Purchases	20%	20%	20%
Benchmark Level of M&S Purchases	10,148,317	2,495,836	12,644,154

(A) Based on 1997 FERC FORM 1

To: James D. Rappoli@Financial
From: Thaddeus M X. Fontes@CONTROLLER@WHRM
Cc:
Bcc:
Subject: Survey Questions
Attachment:
Date: 9/10/98 4:06 PM

PROPRIETARY & CONFIDENTIAL

Ron asked me to provide you with the first part of Question 5.19 Inventory Turnover. Electric has always provided two numbers, active and total. The difference is Emergency/Standby Material which the line department requires be kept on hand for emergencies., but that wouldn't be kept otherwise. For the Gas Company we do not have information for Total other than for 1995. Also no records were kept for 1996 due to the lockout.

	Electric:		Gas:	
	Active	Total	Active	Total
1994	2.17	1.11	2.71	?
1995	3.00	2.72	2.53	1.20
1996	2.94	1.31	Lockout	
199 7	3.13	1.53	2.42	?

Dana will send you 6.1, 6.2, and 6.3 most of this information was gathered for Russ's trustee presentation last February., so he should get it out in tonights mail.

Any questions, call someone else (only joking) let me know.

SYNERGIES SUMMARY

Savings Area: Purchasing Economies - Inventory

Clipper Position:

Clipper's electric inventory was $17.9 million as of 12/31/97.

Crimson Position:

Crimson's electric inventory was $7.6 million as of 12/31/97.

Ten Year Savings ($000):

❑ Capital	$ 1,436
❑ O&M - Expense	$ 0
O&M - Revenue Requirements	$ 1,418
❑ O&M - Total	$ 1,418

Rationale for Savings:

A combined entity would realize a one-time inventory reduction due to inventory duplication.

Basis for Calculation:

Transmissions and distribution inventories were combined and then reduced by 2.0% for low-turn items (spare parts) and 10.0% for high-turn items. A weighted average, fixed charge cost of 10.5% was applied to this amount. This saving results from avoiding the carrying cost of the one time reduction.

Key Assumptions:

❑ Historical inventories are indicative of future levels.

Open Points:

❑ Confirmation of spare parts inventory levels for Crimson.

06372

R1

Inventory

One time year 2000 savings ($000)	$575 R3									
One time year 2001 savings ($000)	$862									
One time year 2002 savings ($000)	$0									
Percentage of Savings Capitalized	100.0%									
Fixed Charge Cost	10.50%									
Inflation Rate	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
Partial Year Savings	100%									

Annual Savings

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total
Annual Savings Amount	$575 R3	$862	$0	$0	$0	$0	$0	$0	$0	$0	$1,436
O&M Savings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Capital Savings	$575	$862	$0	$0	$0	$0	$0	$0	$0	$0	$1,436 A5
		$575	$862	$0	$0	$0	$0	$0	$0	$0	
			$575	$862	$0	$0	$0	$0	$0	$0	
				$575	$862	$0	$0	$0	$0	$0	
					$575	$862	$0	$0	$0	$0	
						$575	$862	$0	$0	$0	
							$575	$862	$0	$0	
								$575	$862	$0	
									$575	$862	
										$575	
Cumulative Capital Savings	$575	$1,436	$1,436	$1,436	$1,436	$1,436	$1,436	$1,436	$1,436	$1,436	
Fixed Charge Savings	$60	$90	$0	$0	$0	$0	$0	$0	$0	$0	$151
		$60	$90	$0	$0	$0	$0	$0	$0	$0	
			$60	$90	$0	$0	$0	$0	$0	$0	
				$60	$90	$0	$0	$0	$0	$0	
					$60	$90	$0	$0	$0	$0	
						$60	$90	$0	$0	$0	
							$60	$90	$0	$0	
								$60	$90	$0	
									$60	$90	
										$60	
Total Fixed Charge Savings	60	151	151	151	151	151	151	151	151	151	1,418 A2 A4
Total O&M and Fixed Charge Savings	$60	$151	$151	$151	$151	$151	$151	$151	$151	$151	$1,418

Inventory Savings (000s)

Data:		Low-Turn	High-Turn	Medium-Turn
Escalation		2.5%	2.5%	2.5%
Inventory Savings %		2.0%	10%	0%

Clipper	1998
High Turn Inventory	5,500,000
Medium Turn Inventory	7,200,000
Low Turn Inventory	5,200,000
Total Inventory	$ 17,900,000 R4

Crimson	1998
High Turn Inventory	$ 6,956,345
Medium Turn Inventory	$ -
Low Turn Inventory	$ 881,890
Total Inventory	$ 7,838,235 R5

Combined	1998	
HighTurn Inventory	$ 12,456,345	
Low-Turn Inventory	$ 6,081,890	
Medium Turn Inventory	$ 7,200,000	TRUE

INVENTORY SAVINGS

			Phase-In	40%	60%			
Savings in year 2000 ($000)				2000	2001	2002	2003	Check
Savings Low-Turn Inventory	$	128		51	77			
Savings High Turn Inventory	$	1,309		523	785	$ -	$ -	
Savings Medim Turn Inventory	$	-		-	-			
Total Savings	$	1,436		$ 575	$ 862	$ -	$ -	$ 1,436

L R2

SOURCES:

Internal Documentation (Clipper)
Internal Documentation (Crimson)

Note: Crimson 1998 Inventory is 1997 costs escalated 1 year

R3

06324

Clipper Inventory & Procurement Detail

Annualized 1998	Purchases	Segment	Category	Ending Balance
Cable & Wire	$ -	S		$ 3,200,000
Distribution Transformers	$ -	E	T&D	$ 2,700,000
Network transformers	$ -	E	T&D	$ 1,800,000
Network protectors	$ -	E		
Meters	$ -	S	T&D	$ 1,300,000
Underground material	$ -	S		
Poles	$ -	S		
Safety supplies	$ -	S		
O/H line materials	$ -	S		
Misc. tools & operating materials	$ -	S	T&D	$ 5,500,000
Spare Parts	$ -	S	T&D	$ 3,400,000
PC equipment	$ -	S		
Total Purchases	$ 30,219,175			$ 17,900,000
Total Purchases	$ 30,219,175			$ 17,900,000
Inventory Turns	1.69			
			Total Inventory	$ 17,900,000

R6

R3

E= Engineered
S= Stock
C= Consumables
O= Other
T&D=Transmission & Distribution

Procurement Category Breakdown

Total T&D	$	30,219,175
Total Nuclear Generation	$	-
Total Fossil Generation	$	-
Total Other	$	-
CHECK	$	30,219,175

TRUE

Spare Parts Inventory	3,400,000	11%
Procurement Segment Breakdown		
Engineered	4,532,876.27	15%
Stock	24,175,340.12	80%
Consumables	1,510,958.76	5%
Other	-	0%
Check	$ 30,219,175	TRUE

SOURCES:

Internal Documentation

00375

R4

Crimson - Inventory & Procurement Detail

Ending December 31, 1997	Purchases	Segment	Category	Ending Balance
Electric Operations	$ 11,700,000			$ 7,647,059
Total Purchases	**$ 11,700,000**			**$ 7,647,059**
Total Purchases	**$ 11,700,000**			**$ 7,647,059** R7 R3
Inventory Turns	1.53			
			Total Inventory	**$ 7,647,059**

E= Engineered
S= Stock
C= Consumables
O= Other
TD=Transmission & Distribution
FG=Fossil Generation
NG=Nuclear Generation

Procurement Category Breakdown

Total T&D	$	11,700,000	100.0%	
Total Nuclear Generation	$	-	0.0%	
Total Fossil Generation	$	-	0.0%	
Total Other	$	-	0.0%	
CHECK	**$**	**11,700,000**	100%	TRUE

* Gas operations procurement and inventory are not included in this analysis

Spare Parts Inventory	$	860,381	11%	Based on Clipper data
Procurement Segment Breakdown				
Engineered	$	1,755,000	15%	Segment breakdown based on Clipper data
Stock	$	9,360,000	80%	
Consumables	$	585,000	5%	
Other	$	-	0%	
Check	**$**	**11,700,000**	TRUE	

SOURCES:

Internal Documentation

06376

R5

Boston Edison Company
Inventory Savings

PROPRIETARY & CONFIDENTIAL

T&D Inventory @ 11/30/98

Category	Balance	Opportunity for Reduction
Wire & Cable	3,200	Medium - some unique specifications 6 %
Operating Material	5,500	High - high turnover, non-unique items 10%
Network transformers	1,800	Low - CE has a small network system; unique specifications 2%
Distribution transformers	2,700	Medium - some unique specifications; moderate turnover 6 %
Meters	1,300	Medium - about half of inventory are AMR meters 6 %
Spare Parts	3,400	Low - low tornover, highly unique material 2 %
	17,900	

Geo T. Thompson 2933

inventory-reduction.xls

00377

PROPRIETARY & CONFIDENTIAL

Purchasing Economies - Materials & Supply Procurement:

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R5

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At your earliest convenience, please call me at (617) 225-4735 to discuss these items.

Sincerely,

Mark P. DeLorey

Mark P. DeLorey
Sr. Financial Analyst

cc: Steve Fogarty

06378

R7

SYNERGIES SUMMARY

Savings Area: Contract Services

Clipper's Position:

Total 1998 contract services costs were $38.5 million. The costs include recurring costs and labor for vegetation control, maintenance, engineering and other services. Material costs are excluded.

Crimson's Position:

Total 1997 contract services costs were $7.2 million. The costs includes costs for vegetation control, maintenance, engineering and other services and is adjusted to exclude gas services and costs.

Rationale for Savings:

The combined company will consolidate and reduce contract services activities through economies of scope and elimination of non-recurring duplicate services, such as treetrimming, construction, etc.

Ten Year Savings ($000):

❑ Capital	$ 6,333
❑ O&M - Expense	$ 3,410
O&M - Revenue Requirements	$ 6,560
❑ O&M - Total	$ 9,970

Basis for Calculation:

Contract Services savings were calculated by reducing the smaller company's costs by 10% to reflect economies of scale arising from the ability to negotiate a lower unit cost with contractor or replacing existing contracts. This opportunity is available due to the geographical density and overlapping population of contractors

Key Assumptions:

- ❑ Purchasing economies result from increased size of the combined company.
- ❑ Services are obtained on an ongoing basis at the current level.

Contract Services

2000 Total Savings ($000)	$ 786 S3										
2000 Capital Savings ($000)	$511										
Percentage of Savings Capitalized	65%										
Revenue Requirements Rate	20.22%										
Inflation Rate	4.7%	4.7%	4.7%	4.7%	4.7%	4.7%	4.7%	4.7%	4.7%	4.7%	
Partial Year Savings	100%										
Partial Year Revenue Req. Rate	20.22%										
Annual Savings	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**Total**
Annual Savings Amount	$786	$823	$861	$902	$944	$988	$1,035	$1,083	$1,134	$1,187	$9,743
O&M Savings	$275	$288	$301	$316	$330	$346	$362	$379	$397	$415	$3,410 A3
Capital Savings	$511	$535	$560	$586	$614	$642	$672	$704	$737	$772	$6,333 A5
		$511	$535	$560	$586	$614	$642	$672	$704	$737	
			$511	$535	$560	$586	$614	$642	$672	$704	
				$511	$535	$560	$586	$614	$642	$672	
					$511	$535	$560	$586	$614	$642	
						$511	$535	$560	$586	$614	
							$511	$535	$560	$586	
								$511	$535	$560	
									$511	$535	
										$511	
Cumulative Capital Savings	$511	$1,046	$1,606	$2,192	$2,805	$3,448	$4,120	$4,824	$5,561	$6,333	
Revenue Requirements Savings	$103	$108	$113	$119	$124	$130	$136	$142	$149	$156	
		$103	$108	$113	$119	$124	$130	$136	$142	$149	
			$103	$108	$113	$119	$124	$130	$136	$142	
				$103	$108	$113	$119	$124	$130	$136	
					$103	$108	$113	$119	$124	$130	
						$103	$108	$113	$119	$124	
							$103	$108	$113	$119	
								$103	$108	$113	
									$103	$108	
										$103	
Total Revenue Requirements Savings	103	211	325	443	567	697	833	975	1,124	1,280	6,560 A4
Total O&M and Revenue Requirements Savings	$378	$499	$626	$759	$898	$1,043	$1,195	$1,355	$1,521	$1,696	$9,970 A2

S2

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10YR_Crimson3.xls Contract Services

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1998 Contract Services

Clipper	Grimson	Combined	Savings %	Savings
$ 55 38,497,005	$ 7,171,000 54	$ 45,668,005	10% of smaller	717,100

Total 1997 savings	$	717,100
Years of escalation		2
Escalation rate		4.7%
Year 2000	$	785,919

1997 Crimson Contractor Services

Company	Service	T	1998 (E)	1997	1996	
Cambridge Electric						
Asplundh Tree Expert	Tree Trimmming	O	$ 28,000	$ -	$ -	
Cambridge Landscape Co	Tree Trimming	o	$ -	$ 86,176	$ 84,828	
Clean Harbors	Clean contaminated areas	O	$ 91,000	$ 100,820	$ 42,446	
Dilorenzo Corp	Underground work	O	$ 249,000	$ 88,454	$ 152,215	S7
F L Kelley	Underground work	O	$ 57,000	$ 100,635	$ 29,660	
McCourt Construction	Underground work	O	$ -	$ -	$ -	
J J O'Brian	Underground work	O	$ 206,000	$ 234,397	$ 1,766	
On Target	Marking Utility	O	$ 26,000	$ -	$ -	
Commonwealth Electric						
Asplundh Tree Expert	Tree Trimmming	O	$ 1,357,000	$ 1,123,366	$ 1,454,256	
Barnes Tree Service	Tree Trimmming & ROW Mowing	O	$ 948,000	$ 1,071,580	$ 1,281,379	
Erik W. Browman	Surface Restoration	O	$ 13,000	$ 11,148	$ 11,796	
Clean Harbors	Clean contaminated areas	O	$ 144,000	$ 187,510	$ 192,606	
Franklin Corp	Underground work	O	$ 1,127,000	$ 664,649	$ 561,356	
Fruean Utilities	Underground work	O	$ 72,000	$ 35,110	$ 22,147	
Holmestead Nursery	Surface Restoration	O	$ 10,000	$ 25,660	$ 50,181	S8
Lawrence Lynch	Paving	O	$ 3,000	$ -	$ 3,474	
On Target	Marking Utility	O	$ 281,000	$ 36,672	$ -	
Osmose Wood Preserving	Pole Inspections	O	$ 80,000	$ 252	$ 190	
Seaward	Line Construction	F	$ 999,000	$ 1,027,409	$ 1,076,647	
Underground Utilities	Reconductoring Cable	O	$ 193,000	$ 13,907	$ 13,193	
Veiga	Surface Restoration	O	$ 1,000	$ -	$ -	
Commonwealth Gas						
A P Conte Paving	Paving	M	$ 87,000	$ 67,695	$ 44,206	
A R Wheeler Co	Paving	M	$ 200,000	$ 162,634	$ 331,706	
A-1 Asphalt	Paving	M	$ -	$ -	$ -	
Anthony A Fantasia	Paving	M	$ 88,000	$ 112,996	$ 113,921	
Ellingwood Construction	Paving	M	$ 56,000	$ 25,825	$ 133,193	S6
Felix A. Marino Co Inc	Paving	M	$ 663,000	$ 705,076	$ 51,144	
GPL Construction	Paving	M	$ 80,000	$ -	$ -	
J Donlon & Sons	Paving	M	$ 74,000	$ 22,002	$ -	
J Marchese & Sons	Paving	M	$ -	$ 14,501	$ 93,405	
JJ O'Brien & Sons Inc	Paving	M	$ -	$ 15,338	$ 6,902	
Vittiglio Construction Corp	Paving	M	$ 38,000	$ 15,745	$ -	
		Totals	$ 7,171,000	$ 5,949,557	$ 5,752,617	

Tree trimming	$ 2,333,000	$ 2,281,122	$ 2,820,463
Clean Contaminants	$ 259,000	$ 325,138	$ 297,029
Underground	$ 1,711,000	$ 1,123,245	$ 767,144
Marking	$ 307,000	$ 36,672	$ -
Paving	$ 1,289,000	$ 1,141,812	$ 777,951
Transmission Line Contractors	$ 1,272,000	$ 1,041,568	$ 1,090,030
Total	$ 7,171,000	$ 5,949,557	$ 5,752,617

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PROPRIETARY & CONFIDENTIAL

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BEACON ELECTRIC INC.	$3,285,391.57	$3,428	ONG	customer service electric
G[illegible] ROBINS NORTH AMERIC	$2,522,075.82	$2,632	ONG	claims mgmt
[illegible]COM SYSTEMS, INC.	$2,325,474.04	$2,427	ONG	PC equip
[illegible]EAN HARBORS ENVIRONME	$1,893,739.70	$1,976	ONG	environmental
BELL ATLANTIC	$1,621,694.35	$1,692	ONG	tele comm
BP PRUCENTER ACQUISITIO	$1,370,187.96	$1,430	ONG	location b/d
A C & S, INC.	$1,332,568.72	$1,391	ONG	contractor
KELLEY, F. L. CORPORATI	$1,268,340.03	$1,323	ONG	undergrn
ELECTRICAL UTILITY CONS	$1,146,808.94	$1,197	ONG	"
NEW ENGLAND UTILITY CON	$1,124,824.95	$1,174	ONG	"
CHARLES CONTRACTING CO.	$681,511.60	$711	ONG	"
BAY STATE PRESS	$609,316.40	$636	ONG	printing
ASPLUNDH TREE EXPERTS	$592,260.23	$618	ONG	
ENERGY INSURANCE MUTUAL	$588,793.00	$614	ONG	ins
BELL ATLANTIC MOBILE	$542,903.43	$567	ONG	tele
BOSTON EQUISERVE	$475,508.32	$496	ONG	stock trans
NEXTEL COMMUNICATIONS	$462,699.76	$483	ONG	tele
LUCENT TECHNOLOGIES, IN	$439,033.80	$458	ONG	tele equip
IKON OFFICE SOLUTIONS,	$437,705.76	$457	ONG	cop machine
AETNA SECURITY GROUP, C	$374,429.25	$391	ONG	security services
LEWIS TREE SERVICE, INC	$371,385.09	$388	ONG	tree
AMERICAN EXPRESS TRAVEL	$369,840.63	$386	ONG	hotel
MOLINARI, INC. CARLO	$339,588.13	$354	ONG	paving
AT&T, INC.	$327,154.91	$341	ONG	long distance
CEDAR LAWN TREE SV. INC	$314,213.63	$328	ONG	tree
[illegible]N, JOHN C & SONS IN	$266,571.32	$278	ONG	trans line clean
[illegible]JOSEPH CO. INC.	$262,240.82	$274	ONG	paving
GARTNER GROUP, INC.	$248,343.16	$259	ONG	consulting
MASSACHUSETTS STATE POL	$228,481.85	$238	ONG	police details
EQUIFAX CREDIT INFORMAT	$223,189.47	$233	ONG	credit
BROWNING FERRIS IND., I	$213,363.81	$223	ONG	waste removal
AMERICAN EXPRESS - M. P	$210,029.15	$219	ONG	travel
MASSPORT PARKING VIOLAT	$190,000.00	$198	ONG	parking violat
NRG INCORPORATED	$189,071.50	$197	ONG	electrical contractor
COMPUTREX, INC.	$183,066.65	$191	ONG	Freight manag
ITRON INC.	$181,816.04	$190	ONG	meter reading
CITIWORKS, INC.	$151,276.10	$158	ONG	fencing
JET-A-WAY, INC.	$131,118.67	$137	ONG	solid waste
LAIDLAW WASTE SYSTEMS,	$117,922.30	$123	ONG	"
COLLECTION COMPANY OF A	$116,376.23	$121	ONG	collection agency
IRON MOUNTAIN RECORDS M	$114,077.99	$119	ONG	wreckage manager
BURLINGTON POLICE DEPT	$97,890.00	$102	ONG	police detail
NOVELL, INC.	$89,285.34	$93	ONG	network software
METROPOLITAN COLLECTION	$83,722.61	$87	ONG	collection
PASEK LOCK CORPORATION	$83,373.06	$87	ONG	lock smith
ASSOCIATED CREDIT SERVI	$79,472.72	$83	ONG	credit collection
GRAYBAR ELECTRIC CORPOR	$77,612.85	$81	ONG	misc supplies
PAYCO GENERAL AMERICAN	$75,225.84	$78	ONG	collection agency
CONNOLLY, JOHN J.	$74,077.60	$77	ONG	labor relations

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PROPRIETARY & CONFIDENTIAL

J & P TREE SERVICE CO.	$65,870.00	$69	ONG
ATTACHMATE CORPORATION	$65,663.19	$69	ONG
CHEVROLE (JOE KEL	$58,962.37	$62	ONG
NEW ENGLAND CLEANING SE	$56,313.34	$59	ONG
MASS BAY TRANSPORTATION	$167,754.48	$175	ONG
OSMOSE	$124,598.83	$130	ONG
GUERTIN, J. E. ELECTRIC	$72,612.60	$76	ONG
NATIONAL FIRE AND MEDIC	$72,348.78	$75	ONG
DICTRONICS, INC.	$71,230.89	$74	ONG
BERNARD HODES ADVERTISI	$59,595.48	$62	ONG
HULL, CHARLES A.	$58,255.00	$61	ONG
	$36,892,962.74	$38,497	
ANDERSEN CONSULTING LLP	$827,542.00	$864	PROF
GOLDMAN SACHS & CO	$782,245.10	$816	PROF
CLARKE & COMPANY, INC.	$695,106.10	$725	PROF
SALLY & FITCH	$631,029.78	$658	PROF
WILLIAM MERCER INC	$589,421.34	$615	PROF
BRUDER, GENTILE & MARCO	$529,634.55	$553	PROF
LUSTIG, GLASER & WILSON	$472,132.07	$493	PROF
COOPERS & LYBR*DO NOT U	$432,649.00	$451	PROF
MORGAN, BROWN & JOY, LL	$420,348.28	$439	PROF
CLARKE GOWARD ADVERTISI	$309,689.87	$323	PROF
DELOITTE & TOUCHE, LLP	$287,293.00	$300	PROF
DAWSON, GLENN E.	$160,416.56	$167	PROF
BINGHAM DANA & GOULD	$91,335.14	$95	PROF
ULL,SASSOON & RUDOL	$83,793.92	$87	PROF
MAN AND PAIGE, P.C	$81,809.01	$85	PROF
BADGER, DOLAN, PARKER &	$80,945.90	$84	PROF
BURNS & LEVINSON, LLP	$69,764.78	$73	PROF
LEBOEUF, LAMB, GREENE &	$66,154.31	$69	PROF
KIRKPATRICK & LOCKHART	$222,960.70	$233	PROF
MCDERMOTT, WILL & EMERY	$122,894.56	$128	PROF
	$6,957,165.97	$7,260	
PIRELLI CABLE CORP	$2,643,107.07	$2,758	PROJ
INDUS INTERNATIONAL, IN	$2,450,908.72	$2,557	PROJ
UTEC CONSTRUCTORS	$2,431,942.50	$2,538	PROJ
UTILITY MANAGEMENT SERVICES	$2,180,038.00	$2,275	PROJ
ABB POWER T & D CO., IN	$1,914,610.28	$1,998	PROJ
REED CONSULTING	$1,724,657.22	$1,800	PROJ
SMIT TRANSFORMERS INC	$1,668,725.00	$1,741	PROJ
NORTH AMERICAN TRANSFOR	$1,261,350.00	$1,316	PROJ
ORACLE CORPORATION	$1,146,620.94	$1,196	PROJ
RICHARD WHITE & SONS INC	$1,131,500.75	$1,181	PROJ
ARAGON CONSULTING GROUP	$824,423.74	$860	PROJ
ALCOA FUJIKURA LTD. INC	$726,468.13	$758	PROJ
CYN ENVIRONMENTAL SERVI	$619,107.89	$646	PROJ
GLOBAL RENTAL COMPANY,	$587,130.52	$613	PROJ
CAE ELECTRONICS LTD.	$517,377.60	$540	PROJ
ASS. ELECTRIC CONSTRUC	$342,730.53	$358	PROJ

CATEGORIZED BY CONTRACTOR ERFORMED
FOR THE YEARS 1995 THR 998

CONTRACTOR	1995	1996	1997	1998 *	TYPE **	WORK DESCRIPTION
ARK ENGINEERING	$0	$0	$0	$18,000	O	Corrosion Control Consulting
CORRPRO COMPANIES, INC.	0	0	21,960	14,000	O	Corrosion Control Consulting
NEW ENGLAND CP INC	0	0	0	24,000	O,M	Corrosion Control Consulting
KEYSTONE PIPELINE SERVICES INC	129,733	244,486	200,653	44,000	M	External Gas Main Repairs (CI Joints)
DH SURVEYS INC	162,341	264,347	167,283	149,000	O	Gas Leak Detection
HEATH CONSULTANTS	145,387	206,948	85,662	69,000	O	Gas Leak Detection
SMITH & DENISON INC	138,317	129,885	63,743	55,000	O	Gas Leak Detection
SURVEYS & ANALYSIS INC	91,976	103,686	186,622	187,000	O,M	Gas Leak Detection
DILORENZO CORPORATION	1,484,281	1,160,119	1,378,907	1,066,000	M,FC	Corrosion, Pipeline Construction & Maintenance
NEW ENGLAND UTILITY CONSTRUCTION INC	993,725	1,241,490	1,610,116	1,660,000	M,FC	Ext. Gas Main Repairs;Corrosion, Pipeline Const. & Maintenanc
PIPELINE EQUIPMENT & SUPPLY	320,153	204,980	379,016	360,000	M,FC	Ext. Gas Main Repairs, Pipeline Construction & Maintenance
F & G CONSTRUCTION CO INC	201,563	210,467	136,783	202,000	M,FC	Pipeline Construction & Maintenance
RH WHITE CONSTRUCTION CO	371,915	938,649	727,297	737,000	M,FC	Pipeline Construction & Maintenance
ROBERT J DEVEREAUX CORP	1,408,640	1,444,863	1,181,847	1,617,000	M,FC	Pipeline Construction & Maintenance
A P CONTE PAVING	60,262	44,206	67,695	87,000	M,FC	Paving
A R WHEELER CO	222,913	331,706	162,634	200,000	M,FC	Paving
A-1 ASPHALT CO INC	52,235	0	0	0	M,FC	Paving
ANTHONY A FANTASIA	203,579	113,921	112,996	88,000	M,FC	Paving
ELLINGWOOD CONSTRUCTION	149,797	133,193	25,826	56,000	M,FC	Paving
FELIX A MARINO CO INC	31,672	51,144	705,076	663,000	M,FC	Paving
GPL CONSTRUCTION	0	0	0	80,000	M,FC	Paving
J DONLON & SONS INC	183,601	0	22,002	74,000	M,FC	Paving
J MARCHESE & SONS INC	52,209	93,405	14,501	0	M,FC	Paving
JJ O'BRIEN & SONS INC	37,816	6,902	15,338	0	M,FC	Paving
VITTIGLIO CONSTRUCTION CORPORATION	34,007	0	15,745	38,000	M,FC	Paving
VARIOUS PLUMBING & ELECTRICAL CONTRS	171,591	181,200	203,926	180,000	O	Delivery & Installation of Leased Water Heaters
VARIOUS PLUMBING & ELECTRICAL CONTRS	137,683	109,855	153,733	130,000	O	Delivery & Installation of Leased Conversion Burners
TOTALS	$6,785,397	$7,215,450	$7,639,361	$7,798,000		

1998 figures are 8 month actual plus 4 month estimated dollars
O - Operations M - Maintenance FC - Fixed Capital

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CAMBRIDGE ELECTRIC LIGHT C ANY
CONTRACTOR PAYMENTS
CATEGORIZED BY CONTRACTOR/WORK PERFORMED
FOR THE YEARS 1995 THROUGH 1998

CONTRACTOR	1995	1996	1997	1998 *	TYPE **	WORK DESCRIPTION
Asplundh Tree Expert	$0	$0	$0	$28,000	O,M	Tree Trimming
Clean Harbors	58,096	42,446	100,820	91,000	O,M	Clean contaminated areas
Dilorenzo Corp	320,569	152,215	88,454	249,000	O,M,FC	Underground work
F L Kelley	194,351	29,660	100,635	57,000	O,M,FC	Underground work
McCourt Construction	0	0	0	0	O,M,FC	Underground work
J J O'Brien & Sons	207,107	1,766	234,397	206,000	O,M,FC	Underground work
On Target	0	0	0	26,000	O,M	Marking utility
TOTALS	$780,123	$226,087	$524,306	$657,000		

1998 figures are 8 month actual plus 4 month estimated dollars
O - Operations M - Maintenance FC - Fixed Capital

PROPRIETARY & CONFIDENTIAL

FOR CALCULATION ONLY
Payments May
Posted thru 9/10/98
$18,616
60,363
163,665
38,000
0
137,007
10,369

$428,020

98 09 10

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COMMONWEALTH ELECTRIC COMPANY
CONTRACTOR PAYMENTS
CATEGORIZED BY CONTRACTOR/WORK PERFORMED
FOR THE YEARS 1995 THROUGH 1998

CONTRACTOR	1995	1996	1997	1998 *	TYPE **	WORK DESCRIPTION
Asplundh Tree Expert	$1,179,130	$1,454,256	$1,123,366	$1,357,000	O,M	Tree Trimming
Barnes Tree Service	658,325	1,281,370	1,071,580	948,000	O,M	Tree Trimming & ROW mowing
Erik W Broman	12,355	11,796	11,148	13,000	O,M,FC	Surface restoration
Clean Harbors	122,379	192,606	187,510	144,000	O,M	Clean contaminated areas
Franklin Corp	751,317	561,356	664,649	1,127,000	O,FC	Underground work
Fruean Utilities	14,404	22,147	35,110	72,000	O,M,FC	Underground work
Holmestead Nursery	20,959	50,181	25,660	10,000	O,M,FC	Surface restoration
Lawrence Lynch	179,285	3,474	0	3,000	O,M,FC	Paving
On Target	0	0	36,672	281,000	O,M	Marking utility
Osmose Wood Preserving	68,010	190	252	80,000	O,M	Pole inspections
Seaward	1,154,855	1,076,647	1,027,409	999,000	FC	Line construction
Underground Utilities	21,780	13,193	13,907	193,000	O,M,FC	Reconductoring cable
Velga	0	0	0	1,000	O,M,FC	Surface restoration
	$4,182,799	$4,667,216	$4,197,263	$5,228,000		

1998 figures are 8 month actual plus 4 month estimated dollars
O - Operations M - Maintenance FC - Fixed Capital

FOR CALCULATION Payments May Posted thru 9/10/98
$959,544
693,025
8,213
81,922
750,877
47,357
6,640
1,513
186,982
52,719
665,796
110,997
400

PROPRIETARY & CONFIDENTIAL

SYNERGIES SUMMARY

Savings Area: Energy Sourcing

Clipper's Position:

Clipper estimates that it will have a maximum demand of 2,835 megawatts in 2000.

Crimson's Position:

Crimson estimates that it will have a maximum demand of 623 megawatts in 2000.

Rationale for Savings:

The combined company will have a lower coincident peak demand than the sum of the two stand alone companies. The effect of system diversity allows for a reduction in overall demand charges throughout each year.

Ten Year Savings ($000):

❑ Capital	$ 0
❑ O&M - Expense	$ 14,306
O&M - Revenue Requirements	$ 0
❑ O&M - Total	$ 14,306

Basis for Calculation:

Hourly load data for the two companies was examined to identify non-coincident and coincident maximum demand. The resulting peak demand reduction (due to diversity) was multiplied by a market demand charge to determine resultant savings.

Key Assumptions:

- ❑ Load growth and customer loss occur roughly as estimated.
- ❑ Market prices are based on Clipper's recent experience.
- ❑ Hourly data for the load analysis was from 1997.

Energy Sourcing

2000 Savings ($000)	$733
2000 Savings ($000) Half-year	$733
Capitalization Rate	0.0%
Revenue Requirements Rate	20.2%
Inflation Rate	4.7%
Partial Year Savings	100.0%

Annual Savings

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
Annual Savings Amount T3 A->	$733	$950	$931	$851	$767	$675	$510	$528	$549	$570		$7,064
O&M Savings	$733	$950	$931	$851	$767	$675	$510	$528	$549	$570	$0	$7,064 A-2
Capital Savings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
			$0	$0	$0	$0	$0	$0	$0	$0	$0	
				$0	$0	$0	$0	$0	$0	$0	$0	
					$0	$0	$0	$0	$0	$0	$0	
						$0	$0	$0	$0	$0	$0	
							$0	$0	$0	$0	$0	
								$0	$0	$0	$0	
									$0	$0	$0	
										$0	$0	
											$0	
Cumulative Capital Savings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
Revenue Requirements Savings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
			$0	$0	$0	$0	$0	$0	$0	$0	$0	
				$0	$0	$0	$0	$0	$0	$0	$0	
					$0	$0	$0	$0	$0	$0	$0	
						$0	$0	$0	$0	$0	$0	
							$0	$0	$0	$0	$0	
								$0	$0	$0	$0	
									$0	$0	$0	
										$0	$0	
											$0	
Total Revenue Requirements Savings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	0
Total O&M and Revenue Requirements Savings	$733	$950	$931	$851	$767	$675	$510	$528	$549	$570	$0	$7,064 A2

rimson Merger
emand Synergies

1997 Dem/

	Clipper	64% Crimson	Sum	Combined
	1997 Maximum Demand (MW)	1997 Maximum Demand (MW)	Non-Coincident Maximum Demand (MW)	Coincident Maximum Demand (MW)
Jan	2,457	513	2,970	2,970
Feb	2,289	480	2,769	2,759
Mar	2,255	481	2,736	2,719
Apr	2,110	441	2,551	2,541
May	2,109	432	2,541	2,517
Jun	2,712	572	3,284	3,260
Jul	2,856	623	3,482	3,470
Aug	2,641	569	3,210	3,184
Sep	2,455	522	2,977	2,977
Oct	2,193	468	2,661	2,640
Nov	2,311	502	2,813	2,811
Dec	2,387	521	2,908	2,903

Assuming NEPOOL load growth assumption, but no load migration to Competitive Suppliers

	1997 Peak Demand Reduction (MW)	2000 Peak Demand Reduction (MW)	2001 Peak Demand Reduction (MW)	2002 Peak Demand Reduction (MW)	2003 Peak Demand Reduction (MW)	2004 Peak Demand Reduction (MW)	2005 Peak Demand Reduction (MW)	2006 Peak Demand Reduction (MW)	2007 Peak Demand Reduction (MW)	2008 Peak Demand Reduction (MW)	2009 Peak Demand Reduction (MW)
Jan	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Feb	9	10.3	10.9	10.7	10.9	11.1	11.3	11.6	11.7	11.9	12.1
Mar	17	19.4	19.6	19.0	19.3	19.7	20.1	20.8	20.6	21.2	21.5
Apr	10	11.0	11.2	11.4	11.6	11.8	12.1	12.3	12.5	12.7	12.9
May	23	26.1	26.5	27.0	27.5	28.0	28.6	29.1	29.6	30.1	30.6
Jun	25	27.6	28.1	28.5	29.0	29.6	30.2	30.9	31.4	32.0	32.6
Jul	12	13.3	13.6	13.8	14.0	14.3	14.6	14.9	15.2	15.5	15.8
Aug	16	17.7	18.0	18.3	18.6	19.0	19.4	19.8	20.2	20.5	20.9
Sep	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oct	21	23.9	24.2	24.6	25.1	25.6	26.1	26.6	27.0	27.5	28.0
Nov	1	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.6	1.6
Dec	6	6.1	6.2	6.3	6.4	6.6	6.7	6.9	6.9	7.1	7.2

Retained Load Assumption

Standard Offer Load	80%	80%	70%	55%	40%	25%	0%	0%	0%	0%
Default Service Load	5%	10%	15%	20%	25%	30%	40%	40%	40%	40%
Total Load	85%	90%	85%	75%	65%	55%	40%	40%	40%	40%

Assuming NEPOOL load growth assumption AND load migration to Competitive Suppliers

	2000 Peak Demand Reduction (MW)	2001 Peak Demand Reduction (MW)	2002 Peak Demand Reduction (MW)	2003 Peak Demand Reduction (MW)	2004 Peak Demand Reduction (MW)	2005 Peak Demand Reduction (MW)	2006 Peak Demand Reduction (MW)	2007 Peak Demand Reduction (MW)	2008 Peak Demand Reduction (MW)	2009 Peak Demand Reduction (MW)
Jan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Feb	8.6	9.4	9.1	8.1	7.2	6.2	4.6	4.7	4.8	4.9
Mar	17.5	16.8	16.1	14.5	12.8	11.1	8.2	8.3	8.5	8.6
Apr	10.5	10.1	9.7	8.7	7.7	6.7	4.9	5.0	5.1	5.2
May	24.8	23.9	22.9	20.6	18.2	15.7	11.6	11.8	12.0	12.3
Jun	26.2	25.3	24.3	21.8	19.2	16.6	12.3	12.6	12.8	13.1
Jul	12.7	12.2	11.7	10.5	9.3	8.0	6.0	6.1	6.2	6.3
Aug	16.8	16.2	15.6	14.0	12.3	10.6	7.9	8.1	8.2	8.4
Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oct	22.7	21.8	20.9	18.8	16.6	14.4	10.8	10.8	11.0	11.2
Nov	1.3	1.2	1.2	1.1	0.9	0.8	0.6	0.6	0.6	0.6
Dec	5.6	5.4	5.4	4.8	4.3	3.7	2.7	2.8	2.8	2.9

	2000 Demand Charge $/kw-yr	2001 Demand Charge $/kw-yr	2002 Demand Charge $/kw-yr	2003 Demand Charge $/kw-yr	2004 Demand Charge $/kw-yr	2005 Demand Charge $/kw-yr	2006 Demand Charge $/kw-yr	2007 Demand Charge $/kw-yr	2008 Demand Charge $/kw-yr	2009 Demand Charge $/kw-yr
Reed Consulting >>>	43.36	58.40	59.61	60.68	61.86	63.06	64.22	65.37	66.73	68.08

	Monthly Reserve (Nov 1997 OC Report)	DRAFT 2000 Savings $	DRAFT 2001 Savings $	DRAFT 2002 Savings $	DRAFT 2003 Savings $	DRAFT 2004 Savings $	DRAFT 2005 Savings $	DRAFT 2006 Savings $	DRAFT 2007 Savings $	DRAFT 2008 Savings $	DRAFT 2009 Savings $	
Jan	26.4%	-	-	-	-	-	-	-	-	-	-	
Feb	30.8%	46,364	60,022	56,870	53,861	46,503	42,761	32,206	33,363	34,626	35,938	
Mar	40.1%	88,261	114,391	112,193	102,649	92,436	81,494	61,383	63,563	65,996	68,492	
Apr	61.7%	61,370	79,319	77,796	71,177	64,066	56,806	42,563	44,078	45,761	47,482	
May	46.7%	133,408	172,707	169,292	154,960	139,562	123,040	92,676	95,968	99,640	103,406	
Jun	24.4%	117,664	153,231	149,912	136,945	123,320	108,465	82,207	85,157	88,606	92,157	
Jul	13.8%	62,126	67,780	66,312	60,578	54,549	47,978	36,364	37,666	39,184	40,785	
Aug	13.9%	68,234	90,009	88,080	80,442	72,439	63,715	48,299	50,032	52,048	54,134	
Sep	28.6%	-	-	-	-	-	-	-	-	-	-	
Oct	58.0%	130,210	168,568	165,333	151,265	136,218	120,091	90,458	93,666	97,252	100,931	
Nov	47.3%	6,842	8,857	8,687	7,946	7,157	6,310	4,753	4,922	5,110	5,303	DRAFT
Dec	29.4%	27,204	35,219	34,542	31,603	28,459	25,080	18,896	19,570	20,316	21,087	Total
Total		732,692	950,102	931,100	851,446	766,743	675,452	509,798	527,964	548,333	568,708	7,063,787

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1994 CELT LOAD GROWTH DATA

	1996	1997	2000	2001	2002	2003	2004	2005	2006	2007		
Sum Pk, MW	19,507	20,569	23,041	23,478	23,826	24,231	24,697	25,163	25,770	26,226		.247
Growth,%	--	5.4%	12.0%	1.9%	1.5%	1.7%	1.9%	2.0%	2.3%	1.8%	1.5%	1.93%
Win Pk, MW	18,480	18,610	20,708	21,010	21,376	21,774	22,193	22,663	23,068	23,467	23,868	24,276
Growth,%	--	0.7%	11.3%	1.5%	1.7%	1.9%	1.9%	2.2%	1.7%	1.7%	1.71%	1.71%
Energy, GWh	114,855	115,962	123,065	125,468	127,179	129,563	132,198	134,996	138,404	141,093	143,802	146,563
Growth,%	--	0.9%	6.5%	2.0%	1.4%	1.9%	2.0%	2.1%	2.5%	1.9%	1.92%	1.92%

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1997	BECo OnPeak Energy (MWh)	BECo OffPeak Energy (MWh)	BECo Total Energy (MWh)	CommElect OnPeak Energy (MWh)	CommElect OffPeak Energy (MWh)	CommElect Total Energy (MWh)	Combined OnPeak Energy (MWh)	Combined OffPeak Energy (MWh)	Combined Total Energy (MWh)
Jan	583,962	792,571	1,376,533	187,438	264,736	452,178	771,400	1,057,309	1,828,709
Feb	607,406	560,007	1,167,412	161,420	224,096	385,516	868,825	904,103	1,772,928
Mar	553,184	732,819	1,286,003	178,050	246,314	424,364	731,264	979,133	1,710,397
Apr	515,361	643,057	1,158,418	162,901	218,665	381,566	678,262	861,722	1,539,984
May	508,152	637,441	1,145,593	163,712	227,568	391,280	671,864	865,009	1,536,873
Jun	568,696	589,965	1,278,661	187,799	240,507	428,306	776,495	930,492	1,706,987
Jul	655,283	738,748	1,395,031	221,810	277,340	499,150	877,093	1,017,088	1,894,181
Aug	578,724	747,931	1,326,655	197,967	281,049	479,036	776,711	1,028,980	1,805,691
Sep	554,668	653,522	1,208,511	183,324	237,716	420,942	737,915	891,538	1,629,453
Oct	553,679	653,861	1,207,540	181,005	231,357	412,362	734,684	885,116	1,619,802
Nov	445,564	773,278	1,218,832	146,465	263,362	408,867	592,039	1,036,640	1,628,699
Dec	586,082	741,764	1,339,856	196,580	250,891	447,551	794,752	992,655	1,787,407
Annual	6,642,761	8,486,264	15,129,085	2,166,523	2,963,523	5,132,046	8,811,304	11,449,807	20,261,111

1997	BECo OnPeak Energy (%)	BECo OffPeak Energy (%)	BECo Load Factor (%)	CommElect OnPeak Energy (%)	CommElect OffPeak Energy (%)	CommElect Load Factor (%)	Combined OnPeak Energy (%)	Combined OffPeak Energy (%)	Combined Load Factor (%)
Jan	42.4%	57.6%	#REF!	41.5%	58.5%	#REF!	42.2%	57.8%	#REF!
Feb	42.7%	57.3%	#REF!	41.9%	58.1%	#REF!	42.5%	57.5%	#REF!
Mar	43.0%	57.0%	#REF!	42.0%	58.0%	#REF!	42.8%	57.2%	#REF!
Apr	44.5%	55.5%	#REF!	42.7%	57.3%	#REF!	44.0%	56.0%	#REF!
May	44.4%	55.6%	#REF!	41.8%	58.2%	#REF!	43.7%	56.3%	#REF!
Jun	46.0%	54.0%	#REF!	43.8%	56.2%	#REF!	45.5%	54.5%	#REF!
Jul	47.0%	53.0%	#REF!	44.1%	55.9%	#REF!	46.3%	53.7%	#REF!
Aug	43.6%	56.4%	#REF!	41.3%	58.7%	#REF!	43.0%	57.0%	#REF!
Sep	45.9%	54.1%	#REF!	43.5%	56.5%	#REF!	45.3%	54.7%	#REF!
Oct	45.9%	54.1%	#REF!	43.9%	56.1%	#REF!	45.4%	54.6%	#REF!
Nov	36.6%	63.4%	#REF!	35.7%	64.3%	#REF!	36.4%	63.6%	#REF!
Dec	44.6%	55.4%	#REF!	43.9%	56.1%	#REF!	44.5%	55.5%	#REF!
Annual	43.9%	56.1%	#REF!	42.3%	57.7%	#REF!	43.5%	56.5%	#REF!

	1999 OnPeak Energy Charge ($/MWh)	1999 OffPeak Energy Charge ($/MWh)	2000 OnPeak Energy Charge ($/MWh)	2000 OffPeak Energy Charge ($/MWh)	2001 OnPeak Energy Charge ($/MWh)	2001 OffPeak Energy Charge ($/MWh)	2002 OnPeak Energy Charge ($/MWh)	2002 OffPeak Energy Charge ($/MWh)	2003 OnPeak Energy Charge ($/MWh)	2003 OffPeak Energy Charge ($/MWh)	2004 OnPeak Energy Charge ($/MWh)	2004 OffPeak Energy Charge ($/MWh)	2005 OnPeak Energy Charge ($/MWh)	2005 OffPeak Energy Charge ($/MWh)	2006 OnPeak Energy Charge ($/MWh)	2006 OffPeak Energy Charge ($/MWh)	2007 OnPeak Energy Charge ($/MWh)	2007 OffPeak Energy Charge ($/MWh)	2008 OnPeak Energy Charge ($/MWh)	2008 OffPeak Energy Charge ($/MWh)	2009 OnPeak Energy Charge ($/MWh)	2009 OffPeak Energy Charge ($/MWh)
Jan	32.2	23.6	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
Feb	31.1	24.0	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
Mar	31.0	23.1	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
Apr	31.5	22.6	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
May	33.4	26.0	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
Jun	37.9	26.6	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
Jul	38.6	33.9	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
Aug	36.6	24.2	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
Sep	35.9	24.2	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
Oct	32.9	22.1	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
Nov	30.9	21.6	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
Dec	31.7	23.1	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!

1997	Hours
Jan	744
Feb	672
Mar	744
Apr	720
May	744
Jun	720
Jul	744
Aug	744
Sep	720
Oct	744
Nov	720
Dec	744
Total	8760

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SYNERGIES SUMMARY

Savings Area: Costs to Achieve

Clipper Position:

Not applicable as stand alone.

Crimson Position:

Not applicable as stand alone.

Rationale for Costs:

Merger savings, in some instances, require a certain level of out of pocket expenditures in order to be achieved. Transaction costs were included in analysis.

Total Cost ($000):

❑ Capital	$ 0
❑ O&M - Expense	$111,058
O&M - Revenue Requirements	$ 0
❑ O&M - Total	$111,058

Basis for Calculation:

❑ Separation - Total separation costs totaled $27.1 million, of which $20.4 million is estimated to be incurred from 2000-2002, considering labor reductions of 10.8%, 2 weeks of pay per year of service 17 year average service assumed, total severance of 34 weeks salary and nine months of medical benefits. Executive separation estimated at $5.8 million and Separation assistance estimated at $1.0 million based on previous transactions.

❑ Retention Costs - $3.0 million estimated based on retaining 100 employees at an average cost of $30K per employee.

❑ Systems Consolidation - $44.7 million in 2000-2010 for systems needing minor and major integration efforts.

❑ Facilities Integration - $1.5 million in 2000, includes field integration as well as HQ integration.

❑ Directors and Officers Tail Coverage Liability - $1.9 million in 2000 for continuing liability coverage for former directors.

❑ Internal & External Communications - $2.0 million in 2000 to educate customers, employees regarding combinations.

❑Transition Costs - $7.0 million in 2000-2002 for external assistance to facilitate integration of individual entities.

❑ Transaction costs - $17.1 million for banker's, legal, and other fees.

❑ Relocation costs - $1.0 million in 2000 for relocation of employees.

❑ Telecommunications - $700K in 2000-2009 for telecommunications integration efforts.

❑ Regulatory process costs - $5 million in 2000 for handling transaction before various regulatory agencies.

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Costs to Achieve
(Dollars in thousands)

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
Separation Costs													
Separation Programs	U5	$16,806	$2,460	$1,091	$0	$0	$0	$0	$0	$0	$0	$0	$20,357
Executive Separation (1)	U4	$5,761	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$5,761
Separation Assistance (2)	U7	$1,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,000
Total Separation Costs - Merger		$23,567	$2,460	$1,091	$0	$0	$0	$0	$0	$0	$0	$0	$27,118
Retention Costs	U8	$3,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$3,000
Relocation Costs	U9	$1,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,000
Facilities Reconfiguration	FOOTNOTE (3)	$1,500	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,500
System Integration Costs (4)	H1	$8,565	$6,312	$7,400	$3,928	$3,944	$3,960	$3,154	$2,750	$2,336	$2,354	$0	$44,702
Telecommunication Costs (5)	U10	$250	$50	$50	$50	$50	$50	$50	$50	$50	$50	$0	$700
Transaction Costs	U15	$17,079	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$17,079
Other													
Directors and Officers' Liability Tail Coverage (3)	U14	$1,883	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,883
Regulatory Process Costs	U16	$5,076	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$5,076
Internal/External Communications (2)	U11	$2,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,000
Transition Costs (2)	U12	$5,000	$2,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$7,000
Total Other Costs		$13,959	$2,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$15,959
TOTAL COSTS TO ACHIEVE		$68,920	$10,822	$8,541	$3,978	$3,994	$4,010	$3,204	$2,800	$2,386	$2,404	$0	$111,058

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(1) Assumes five executive separations with three years compensation for separation
(2) Based on previous transactions
(3) Estimated
(4) Includes O&M and revenue requirements costs
(5) telecommunication costs include $100,000 to tie the switches together and $150,000 for public data networks for the first year, and $50,000 each following year.

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Executive Separation Costs
(Dollars in thousands)

Assumptions:	2000	
(1) Three years' compensation for executives	3	
(2) Average compensation	$ 384	C4
(3) Five executives will be separated	5	C4
TOTAL EXECUTIVE SEPARATION	$ 5,761	43

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Separation Costs
(Dollars in thousands)

		2000	2001	2002	Totals	
Labor Reductions (Less Executive)		297	42	18	357	TRUE
Less: Attrition of affectable base	3%	10	1	1	12	
Net Severance Reductions		287	41	17	345	
Severance per Reduction		$ 58,489	$ 60,536	$ 62,655	181,680	
Total Severance		$ 16,806,337	$ 2,459,837	$ 1,091,113	20,357,287	
Total Annual Phase-In %		70%	20%	10%		
Total Labor Reductions	357					

Severance Package Assumptions:
(1) 34 weeks' pay (2 weeks per year of service, 17 year average service assumed) at average salary and nine months of medical benefits (1997).

Average Salary	Average Service	Weeks/Year	Separation
$ 56,757	17	2	$ 37,111

Tax Rate	Separation Cost	Tax Cost
9.0%	$ 37,111	$ 3,340

Medical Loading	Annual Benefits	Years	Benefits
42.4%	$ 24,051	0.75	$ 18,038

Total Severance	$ 58,489

escalation_rate_labor 3.50%

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		2000	Extended
Executive Staff	23	219,759	5,054,449
Executive Support Staff	15	$48,103	721,543
Legal	12	$100,479	1,205,746
Legal Support Staff	8	50,046	400,368
Administrative & Support Services	253	53,003	13,409,824
Retail Marketing & Sales	188	62,185	11,690,774
Customer Service	494	46,091	22,768,741
External Relations	29	68,890	1,997,813
Finance and Accounting	157	62,835	9,865,052
Purchasing and Materials Mgmt	143	54,472	7,789,464
Human Resources	103	72,236	7,440,268
Information Services & Telecom	238	66,354	15,792,286
Oil and Gas Generation	0	-	-
Nuclear Generation	0	-	-
Coal Supply	0	-	-
Gas System Ops and Transmission	0	-	-
Gas Distribution	0	-	-
Gas Supply & Capacity Management	0	-	-
Hydro Power Supply (Generation)	0	-	-
Nonregulated Operations	0	-	-
Electrical Systems Technical Support	20	69,627	1,392,533
Electric Transmission	193	67,719	13,069,763
Electric Distribution	1462	60,163	87,958,811
Total	1,663	59,012	98,136,328
Total less Executives	1,640	56,757	96,779,060
		45	
Health Benefits Loading			42.4%
Payroll Tax Loading			9.0%
Actual Total less Executives	3,315	58,975	195,502,985

00397

PROPRIETARY & CONFIDENTIAL

Separation Assistance Costs
(Dollars in thousands)

Assumptions:

Separation assistance costs estimated at $1 million based on previous transactions

Separation Assistance Costs

$ 1,000 43

PROPRIETARY & CONFIDENTIAL

Retention Costs

Staying bonus	30,000
Employees	100

TOTAL RETENTION COSTS (in thousands) $ 3,000 43

PROPRIETARY & CONFIDENTIAL

Relocation Costs

Assumptions:
(1) 20 employees will be relocated
(2) Cost of relocation is $50,000 per employee

Calculation

Employees		20
Cost per employee	$	50,000
TOTAL RELOCATION COSTS (in thousands)	$	1,000 43

004600

PROPRIETARY & CONFIDENTIAL

Telecommunications Costs
(Dollars in thousands)

Assumptions:

Costs to bridge the two companies' systems estimated at $100,000 to tie the switches together
and $150,000 for public data networks - both in the first year. $50,000 is estimated for each following year.

Telecommunication Costs

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total
43	$250	$50	$50	$50	$50	$50	$50	$50	$50	$50	$700

PROPRIETARY &
CONFIDENTIAL

Communications Costs
(Dollars in thousands)

Assumptions:

External/Internal Communications estimated at $2 million based on previous transactions

Communication Costs

43 $ 2,000

PRELIMINARY & CONFIDENTIAL

Transition Costs
(Dollars in thousands)

Assumptions:

Transition costs estimated at $7 million
based on previous transactions

Transition Costs

	2000	2,001
43	5,000	2,000

PROPRIETARY &
CONFIDENTIAL

006403

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00404

D&O Tail Coverage Cost
(Dollars in thousands)

Assumptions:
(1) Coverage estimated at 1.5 times the two companies' D&O premium

(2) Clipper 1997 D&O premium:	507,132
(3) Crimson 1997 D&O premium:	748,500
	1,255,632

Calculation:

Combined Premium	1,256
Coverage	1.5
D&O Tail Coverage	1,883 43

00405

PROPRIETARY & CONFIDENTIAL

Transaction Costs
(Dollars in thousands)

Assumptions:

Transaction costs estimated

Transaction Costs (in $000)

Banker's Fees	10,079
Lawyer's Fees	4,000
Registration (NYSE)	2,000
Consultants	1,000
43	17,079

	Stock Price	# of shares	Market Cap		
Clipper	$ 41.75	48,520,000	2,025,710,000	7,292,556	0.36% of market cap
Crimson	$ 36.00	21,500,000	774,000,000	2,786,400	
Total			2,799,710,000	10,078,956	

Banker's Fee 0.36%

Note: Estimate per client

PROPRIETARY & CONFIDENTIAL

00406

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Regulatory Process Costs

Lawyers Fees	4,000	
S4	826	0.0295% times market cap (SEC Rule 457 (f))
Consultants	250	
43	5,076	

004027

Pre-Merger Initiatives

Percentage of Expense Capitalized	0.0%										
Revenue Requirements Rate	20.22%	20.22%	20.22%	20.22%	20.22%	20.22%	20.22%	20.22%	20.22%	20.22%	
Partial Year Savings	100%										
Partial Year Revenue Req. Rate	20.22%	20.22%	20.22%	20.22%	20.22%	20.22%	20.22%	20.22%	20.22%	20.22%	
Full Year PMI - O&M	478	1,476	1,647	1,883	2,207	2,546	2,814	3,163	3,583	4,028	23,826
Full Year PMI - Capital	0	0	0	0	0	0	0	0	0	0	0
Partial Year PMI - O&M	478	1,476	1,647	1,883	2,207	2,546	2,814	3,163	3,583	4,028	23,826
Partial Year PMI - Capital	0	0	0	0	0	0	0	0	0	0	0

Annual Expense

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total
Annual Expense Amount	$478	$1,476	$1,647	$1,883	$2,207	$2,546	$2,814	$3,163	$3,583	$4,028	$23,826
O&M Expense	$478	$1,476	$1,647	$1,883	$2,207	$2,546	$2,814	$3,163	$3,583	$4,028	$23,826
Capital Expense	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		$0	$0	$0	$0	$0	$0	$0	$0	$0	
			$0	$0	$0	$0	$0	$0	$0	$0	
				$0	$0	$0	$0	$0	$0	$0	
					$0	$0	$0	$0	$0	$0	
						$0	$0	$0	$0	$0	
							$0	$0	$0	$0	
								$0	$0	$0	
									$0	$0	
										$0	
Cumulative Capital Expense	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
Revenue Req. Expense	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
		$0	$0	$0	$0	$0	$0	$0	$0	$0	
			$0	$0	$0	$0	$0	$0	$0	$0	
				$0	$0	$0	$0	$0	$0	$0	
					$0	$0	$0	$0	$0	$0	
						$0	$0	$0	$0	$0	
							$0	$0	$0	$0	
								$0	$0	$0	
									$0	$0	
										$0	
Total Revenue Req. Expense	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total O&M and Revenue Requirements Expense	$478	$1,476	$1,647	$1,883	$2,207	$2,546	$2,814	$3,163	$3,583	$4,028	$23,826

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Clipper Labor	$ -	$ -	$ -	$ 159	$ 654	$ 1,167	$ 1,785	$ 2,517	$ 3,369	$ 4,250	$ 5,264	$ 6,419	$ 7,722
Crimson Labor	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
NewCo Non-Labor	$ -	$ -	$ -	$ 318	$ 1,299	$ 2,434	$ 3,699	$ 5,174	$ 6,868	$ 8,801	$ 10,950	$ 13,379	$ 16,104
Cum. Total PMI	**$ -**	**$ -**	**$ -**	**$ 478**	**$ 1,953**	**$ 3,600**	**$ 5,484**	**$ 7,691**	**$ 10,237**	**$ 13,051**	**$ 16,214**	**$ 19,797**	**$ 23,826**
Clipper Labor	$ -	$ -	$ -	$ 159	$ 495	$ 512	$ 619	$ 732	$ 852	$ 882	$ 1,014	$ 1,154	$ 1,303
Crimson Labor	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
NewCo Non-Labor	$ -	$ -	$ -	$ 318	$ 981	$ 1,135	$ 1,265	$ 1,475	$ 1,694	$ 1,933	$ 2,149	$ 2,429	$ 2,725
Yearly Total PMI	**$ -**		**$ -**	**$ 478**	**$ 1,476**	**$ 1,647**	**$ 1,883**	**$ 2,207**	**$ 2,546**	**$ 2,814**	**$ 3,163**	**$ 3,583**	**$ 4,028**

06409

Clipper Pre-Merger Initiative (PMI)

Assumptions			
Wage Escalation	3.50%		
Normalized Rate	2.70%	3.75%	
Non-Labor Component	70%		From FERC 1
Labor Component	30%		From FERC 1

Actual $'s	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Non-Fuel O&M (forecasted)	$ -	$ -	$ 223,889	$ 225,452	$ 224,750	$ 231,523	$ 238,976	$ 245,643	$ 252,550	$ 259,557	$ 267,267	$ 274,483	$ 281,894
Non-Fuel O&M (normalized)	$ -	$ -	$ 223,889	$ 229,934	$ 238,556	$ 247,502	$ 256,783	$ 266,413	$ 276,403	$ 286,768	$ 297,522	$ 308,679	$ 320,255
Delta	$ -	$ -	$ -	$ 4,481	$ 13,806	$ 15,979	$ 17,807	$ 20,769	$ 23,853	$ 27,211	$ 30,255	$ 34,196	$ 38,361
Cost Split													
Non-Labor Delta	$ -	$ -	$ -	$ 3,137	$ 9,664	$ 11,186	$ 12,465	$ 14,538	$ 16,697	$ 19,048	$ 21,179	$ 23,937	$ 26,852
Labor Delta	$ -	$ -	$ -	$ 1,344	$ 4,142	$ 4,794	$ 5,342	$ 6,231	$ 7,156	$ 8,163	$ 9,077	$ 10,259	$ 11,508
Average Salary (loaded)	$ 72	$ 74	$ 77	$ 80	$ 82	$ 85	$ 88	$ 91	$ 95	$ 98	$ 101	$ 105	$ 109
Implied Positions Affected	-	-	-	17	50	56	60	68	76	83	90	98	106
Merger Affected Amount	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Implied Overlaps	-	-	-	17	50	56	60	68	76	83	90	98	106
Merger Impact	11.4%	11.4%	11.4%	11.4%	11.4%	11.4%	11.4%	11.4%	11.4%	11.4%	11.4%	11.4%	11.4%
Position Overlap	-	-	-	2	6	6	7	8	9	9	10	11	12
Position Price-out	$ -	$ -	$ -	$ 159	$ 495	$ 512	$ 619	$ 732	$ 852	$ 882	$ 1,014	$ 1,154	$ 1,303
Cummlative Total	$ -	$ -	$ -	$ 159	$ 654	$ 1,167	$ 1,785	$ 2,517	$ 3,369	$ 4,250	$ 5,264	$ 6,419	$ 7,722

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Transmission	9,368,901	9,368,901	9,368,901	9,368,901	9,603,124	9,843,202	10,089,282	10,341,514	10,600,052	10,865,053
Electric Delivery	91,730,321	91,730,321	91,730,321	94,023,579	96,374,169	98,783,523	101,253,111	103,784,439	106,379,050	##########
1 Customer Care	46,728,753	50,604,378	54,801,443	56,508,562	58,000,000	61,043,000	62,319,000	63,625,000	64,961,000	66,909,830
Corp. Services	67,472,832	72,185,019	69,551,511	64,849,453	67,545,388	69,306,334	71,982,106	74,799,282	77,617,198	80,453,287
Actual (budget)	215,301	3,889	225,452	224,750	231,523	238,976	245,643	252,550	259,557	267,267

1 Customer Care normalized back from 2002 numbers to avoid double counting the 79 position reductions and the severence effect.

98-99 Delta	99-00 Delta	00-01 Delta
0.9234132	0.9697901	0.974285544

00470

Crimson Pre-Merger Initiative (PMI)

Assumptions		
Wage Escalation	3.50%	
Normalized Rate	2.5%	
Non-Labor Component	60%	From FERC 1
Labor Component	40%	From FERC 1

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Non-Fuel O&M (forecasted)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Non-Fuel O&M (normalized)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Delta	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Cost Split													
Non-Labor	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Labor	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Average Salary (loaded)	$ 72	$ 74	$ 77	$ 79	$ 81	$ 83	$ 85	$ 87	$ 89	$ 92	$ 94	$ 96	$ 99
Implied Positions Affected	-	-	-	-	-	-	-	-	-	-	-	-	-
Merger Affected Amount	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Implied Overlaps		-	-	-	-	-	-	-	-	-	-	-	-
Merger Impact	11.4%	11.4%	11.4%	11.4%	11.4%	11.4%	11.4%	11.4%	11.4%	11.4%	11.4%	11.4%	11.4%
Position Overlap	$ -	$ -	$ -	-	-	-	-	-	-	-	-	-	-
Position Price-out	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Cummlative Total	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

506779

$ 238,976

NewCo Pre-Merger Initiative (PMI)

Assumptions		
Normalized Rate	2.7%	
Non-Labor Component (1998)	70%	From FERC 1
Labor Component (1998)	30%	From FERC 1

Actual $'s (000's)	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009		
Non-Fuel O&M (forecasted)	$ -	$ -	$ 223,889	$ 225,452	$ 224,750	$ 231,523	$ 238,976	$ 245,643	$ 252,550	$ 259,557	$ 267,267	$ 274,483	$ 281,894		
Non-Fuel O&M (normalized)	$ -	$ -	$ 223,889	$ 229,934	$ 238,556	$ 247,502	$ 256,783	$ 266,413	$ 276,403	$ 286,768	$ 297,522	$ 308,679	$ 320,255		
Delta	$ -	$ -	$ -	$ 4,481	$ 13,806	$ 15,979	$ 17,807	$ 20,769	$ 23,853	$ 27,211	$ 30,255	$ 34,196	$ 38,361	207,538.65	614772
			-										19180.3448	50477	50477
Cost Split														157,061.65	564295
Non-Labor Delta	$ -	$ -	$ -	$ 3,137	$ 9,664	$ 11,186	$ 12,465	$ 14,538	$ 16,697	$ 19,048	$ 21,179	$ 23,937	$ 26,852		
Labor Delta	$ -	$ -	$ -	$ 1,344	$ 4,142	$ 4,794	$ 5,342	$ 6,231	$ 7,156	$ 8,163	$ 9,077	$ 10,259	$ 11,508		
Implied Non-Labor Delta		$ -	$ -	$ 3,137	$ 9,664	$ 11,186	$ 12,465	$ 14,538	$ 16,697	$ 19,048	$ 21,179	$ 23,937	$ 26,852		
Merger Affected Amount	N/A	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		
Implied Overlaps	N/A	-	-	3,137	9,664	11,186	12,465	14,538	16,697	19,048	21,179	23,937	26,852		
Merger Impact	N/A	10.1%	10.1%	10.1%	10.1%	10.1%	10.1%	10.1%	10.1%	10.1%	10.1%	10.1%	10.1%		
Non-Labor Overlap		-	-	318	981	1,135	1,265	1,475	1,694	1,933	2,149	2,429	2,725		
Cummlative Total	$ -	$ -	$ -	$ 318	$ 1,299	$ 2,434	$ 3,699	$ 5,174	$ 6,868	$ 8,801	$ 10,950	$ 13,379	$ 16,104		

Fifth Year Non-Fuel O&M	$ 238,976	
5thYear Non-Fuel Non Labor O&M	$ 167,283	
Fifth Year O&M Gross Savings	$62,365	<== Input from 10yr
Fifth Year O&M Labor Savings	$34,624	<== Input from 10yr
Fifth Year Fuel Savings	$767	
Fifth Year Generation Dispatch	$0	
Non-Labor Savings	$16,974	Takes out fuel savings
PMI Overlap %	10.15%	

00412