

TESTIMONY - 01-59 IL AG DISTRIBUTION SYSTEM - DS - DIRECT - AUG-01.DOC



ILLINOIS COMMERCE COMMISSION
DOCKET NO. 01-0423

COMMONWEALTH EDISON COMPANY

PETITION FOR APPROVAL OF
DELIVERY SERVICES TARIFFS AND TARIFF REVISIONS
AND OF RESIDENTIAL DELIVERY SERVICES
IMPLEMENTATION PLAN AND FOR APPROVAL OF
CERTAIN OTHER AMENDMENTS AND
ADDITIONS TO ITS RATES, TERMS, AND CONDITIONS

**Direct Testimony of
David A. Schlissel**

**On behalf of
The People of the State of Illinois
The City of Chicago
The Citizens Utility Board and
The Cook County State's Attorney's Office**

August 23, 2001

1

2 **Q. Please state your name, position and business address.**

3 A. My name is David A. Schlissel. I am a Senior Consultant at Synapse Energy
4 Economics, Inc., 22 Pearl Street, Cambridge, MA 02139.

5 **Q. On whose behalf are you testifying in this case?**

6 A. I am testifying on behalf of the People of the State of Illinois, by and through
7 James E. Ryan, Illinois Attorney General (“the People”), the City of Chicago
8 (“the City”), the Citizens Utility Board (“CUB”), and the Cook County State's
9 Attorney's Office (“CCSAO”).

10 **Q. Please describe Synapse Energy Economics.**

11 A. Synapse Energy Economics ("Synapse") is a research and consulting firm
12 specializing in energy and environmental issues, including electric generation,
13 transmission and distribution system reliability, market power, electricity market
14 prices, stranded costs, efficiency, renewable energy, environmental quality, and
15 nuclear power.

16 **Q. Please summarize your educational background and recent work experience.**

17 A. I graduated from the Massachusetts Institute of Technology in 1968 with a
18 Bachelor of Science Degree in Engineering. In 1969, I received a Master of
19 Science Degree in Engineering from Stanford University. In 1973, I received a
20 Law Degree from Stanford University. In addition, I studied nuclear engineering
21 at the Massachusetts Institute of Technology during the years 1983-1986.

22 Since 1983, I have been retained by governmental bodies, publicly-owned
23 utilities, and private organizations in 24 states to prepare expert testimony and
24 analyses on engineering and economic issues related to electric utilities. My
25 clients have included the Staff of the California Public Utilities Commission, the
26 Staff of the Arizona Corporation Commission, the Staff of the Kansas State
27 Corporation Commission, the Arkansas Public Service Commission, municipal

1 utility systems in Massachusetts, New York, Texas, and North Carolina, and the
2 Attorney General of the Commonwealth of Massachusetts.

3 I have testified before state regulatory commissions in Arizona, New Jersey,
4 Connecticut, Kansas, Texas, New Mexico, New York, Vermont, North Carolina,
5 South Carolina, Maine, Illinois, Indiana, Ohio, Massachusetts, Missouri, and
6 Wisconsin and before an Atomic Safety & Licensing Board of the U.S. Nuclear
7 Regulatory Commission.

8 A copy of my current resume is attached as Exhibit DAS-1.

9 **Q. What is the purpose of your testimony?**

10 A. Synapse was retained by the People, the City, CUB, and the CCSAO to examine
11 the reasonableness of both the distribution system capital improvement projects
12 whose cost ComEd is seeking to add to rate base in this proceeding and the O&M
13 expenditures that the Company is seeking to recover from ratepayers. This
14 testimony presents the initial results of our investigation.

15 **Q. Please summarize your testimony.**

16 A. ComEd is reaching the end of a massive two-year program to recover from past
17 mismanagement and inadequate funding and maintenance of its T&D system
18 during the 1990s. The capital expenditures and O&M expenses that ComEd
19 proposes to include in its delivery service rates are unreasonably high and should
20 not all be allowed in ratebase. They are unreasonably high for two main reasons:
21 (1) they represent an accelerated, intensive, and finite effort to achieve good
22 utility practice and do not represent what the Company's steady-state
23 expenditures will be over the period the delivery service rates are likely to be in
24 effect, and (2) some of the costs could have been avoided or reduced had the
25 Company properly maintained and invested in its T&D system.

26

1 **Q. Please explain how Synapse conducted its investigations and analyses on this**
2 **issue.**

3 A. We reviewed the testimony and supporting exhibits submitted by ComEd and
4 prepared data requests that the People has submitted to the Company. We also
5 have reviewed the reports of the investigations conducted for the Company and
6 the Illinois Commerce Commission (“ICC” or “Commission”) which addressed
7 the serious outages experienced on the Company's system during the summer of
8 1999 and the implementation and progress reports submitted by the Company
9 starting in late 1999. Finally, we have reviewed the Electric Power Delivery
10 Reliability Reports prepared by ComEd in the years 1998-2000.

11 **Q. Please describe the data requests that the People have submitted to ComEd**
12 **on distribution system capital improvement and O&M expenditures.**

13 A. On July 25, 2001, the People submitted its first set of data requests to ComEd. A
14 copy of this set of data requests is attached as Exhibit DAS-2 to this testimony.
15 These data requests sought information on the capital projects that ComEd is
16 seeking to add to rate base, the Company’s test year O&M expenditures, and their
17 relationship to ComEd’s past planning, design, and maintenance of its electric
18 distribution system.

19 **Q. Has ComEd provided complete answers to these data requests?**

20 A. No. The Company has only started on August 21, 2001, two days before this
21 testimony is due, to provide some limited information and a few documents
22 related to some of the 42 data requests that were submitted by the People on July
23 25, 2001 and that were due August 8, 2001. The Company has refused to provide
24 much of the information and many of the documents we have requested. ComEd
25 also is only willing to make many of the other documents we have requested
26 available for review at its offices in Chicago.¹ For these reasons, I have had no
27 chance to review any internal ComEd documents during the preparation of this

1 testimony other than the Company's September 1999 Blueprint for Change
2 investigation report.²

3 **Q. Why did the People submit these data requests to the Company?**

4 A. It is critical to review these types of internal ComEd documents in order to
5 evaluate the validity of the claims made by the Company's witnesses in this
6 proceeding and to determine the reasonableness of both the distribution system
7 capital expenditures which the Company is seeking to add to rate base and its test
8 year O&M expenditures. It is particularly important to review these types of
9 documents to determine the extent to which the distribution system capital
10 expenditures that the Company is seeking to add to rate base and test year O&M
11 expenditures have been increased as a result of the Company's past
12 mismanagement of its distribution system and to evaluate whether the
13 expenditures are consistent with the level of expenditures that the Company is
14 likely to incur in future years.

15 **Q. Have other utilities provided similar documents in proceedings before state
16 regulatory commissions?**

17 A. Yes. I have regularly received these types of documents in state commission
18 proceedings involving reviews of utility capital and O&M expenditures and the
19 adequacy of electric utility generating, transmission, and distribution construction
20 and maintenance programs. For example, I recently received precisely the same
21 documents as the People has sought from ComEd in three proceedings before the
22 Connecticut Department of Public Utility Control involving investigations of
23 overall electric utility transmission and distribution system reliability and one
24 company's specific transmission and generation related expenditures. I also
25 received precisely the same types of documents in reviews of telephone utility

¹ In fact, ComEd is seeking to require us to review documents at more than one location, including its Corporate Headquarters, its Lincoln Centre Offices, certain unspecified "operating offices," and unnamed "ComEd offices."

² At the time I file supplemental testimony I will be in a better position to comment on the specific materials provided by ComEd and the data requests that the Company has answered incompletely or not at all.

1 maintenance and natural gas utility construction programs I performed for the
2 Arizona Corporation Commission and in the power plant outage investigations I
3 performed in Illinois and sixteen other states.

4 **Q. Even though ComEd has not provided any meaningful answers to the**
5 **People's data requests have you nevertheless seen any evidence that the**
6 **Company's recent capital investments and O&M expenditures have been**
7 **higher as a result of its past distribution system mismanagement?**

8 A. Yes. In-depth investigations conducted by ComEd and by Vantage Consulting
9 and Liberty Consulting Group for the Commission reveal that ComEd's
10 mismanagement of its distribution system planning, design, and maintenance led
11 to serious system problems in 1998 and 1999 and, consequently, to the
12 significantly higher capital and O&M expenditures that the Company is seeking
13 to pass along to ratepayers in this proceeding.

14 For example, ComEd's September 19, 1999 Blueprint for Change acknowledged
15 that there were serious issues in the Company's transmission and distribution
16 system, especially in the areas of system maintenance, planning and design.³
17 More particularly, among the findings of ComEd's internal investigation were the
18 conclusions that:

- 19 • A cycle of increasingly diminishing performance had set in, accelerated by a
20 growing acceptance of crises management as an acceptable, sustainable way
21 to do business.⁴
- 22 • The maintenance that was performed on the underground transmission and
23 distribution system was inconsistent.⁵ As an example, underground
24 transmission lines had not been inspected systematically since 1989 and
25 certain elements of the system were in poor physical condition.⁶
- 26 • Some high priority substation maintenance repairs had not been completed.⁷
- 27 • There had been a lack of focus on substation maintenance activities and a lack
28 of clear responsibility for equipment and system condition assessment.⁸

3 *Commonwealth Edison Blueprint for Change, Executive Summary, September 15, 1999, at page 1.*

4 *Commonwealth Edison Blueprint for Change, September 15, 1999, at page C.11.*

5 *Commonwealth Edison Blueprint for Change, September 15, 1999, at page D.100.*

6 *Commonwealth Edison Blueprint for Change, September 15, 1999, at page D. 104*

7 *Commonwealth Edison Blueprint for Change, September 15, 1999, at page D.118.*

- 1 • There were a large number of unidentified problems affecting distribution
2 feeder reliability. Existing overhead maintenance programs were disjointed
3 and unsynchronized. There were large corrective annual maintenance
4 backlogs.⁹
- 5 • Many overhead programmatic and preventive maintenance programs for the
6 overhead transmission system had been discontinued. There was no existing
7 maintenance work management and tracking system. A review of industry
8 practices indicated that ComEd was below average in many maintenance
9 areas.¹⁰
- 10 • Overall, the Company's Transmission and Distribution ("T&D") organization
11 was not uniformly working on the right work or optimizing the allocation of
12 resources.¹¹

13 **Q. Did the Vantage Consulting and Liberty Consulting Group investigations for**
14 **the ICC find similar serious problems?**

15 A. Yes. Vantage Consulting found that poor maintenance of the Company's electric
16 system and the routine overloading of electric cables had led to the serious power
17 outages experienced in July and August, 1999.¹² According to the Vantage
18 Report, ComEd rated the current carrying capacity of its distribution cables higher
19 than the cable manufacturers typically recommended under similar circumstances,
20 and then loaded the cables well above these elevated ComEd load ratings.¹³ This
21 led to transformer failures at several substations.

22 Although Liberty Consulting Group observed that there were many positive
23 aspects of ComEd's T&D systems, it found that there were significant problems
24 as of the summer of 1999. Liberty noted that reliable T&D systems require good
25 planning, design, construction, maintenance, and operation. However, Liberty
26 found that **ComEd fell far short of good utility practices in system planning**
27 **and system maintenance.**¹⁴ ComEd also did not meet the standard of good utility
28 practice by not testing cables, by its inadequate distribution line vegetation line

8 *Commonwealth Edison Blueprint for Change*, September 15, 1999, at page D.120.

9 *Commonwealth Edison Blueprint for Change*, September 15, 1999, at page D.130.

10 *Commonwealth Edison Blueprint for Change*, September 15, 1999, at page D.142.

11 *Commonwealth Edison Blueprint for Change*, September 15, 1999, at page D.188.

12 *Stage I Review of Commonwealth Edison's 1999 Summer Outages*, December 1999, at page 2.

13 *Stage I Review of Commonwealth Edison's 1999 Summer Outages*, December 1999, at page 9.

1 standards and management oversight, and by its failure to have adequate lightning
2 protection of its substations rated 138kV and below.¹⁵

3 More specifically, Liberty found that:

- 4 • ComEd's goals and objectives for its T&D system were dominated by cost
5 control and did not provide sufficient focus on customer service and
6 reliability during most of the 1990s.¹⁶ In fact, Liberty found that a
7 common theme is that ComEd possessed good standards, policies,
8 procedures, practices, and good people, but often failed to meet its own
9 standards or follow its own procedures because it failed to budget enough
10 money for necessary capital improvements and maintenance.¹⁷ For
11 example, the amount of distribution system construction that ComEd
12 performed after 1992 was not consistent with the age and growth of the
13 distribution system.¹⁸
- 14 • In many aspects, ComEd was in a reactive mode of operation, often
15 waiting for parts of its T&D systems to fail before taking any action and
16 only attempting to improve the worst parts of its T&D systems.¹⁹ In fact,
17 there was no evidence that ComEd was attempting to be proactive and
18 prevent problems with aging cable or other equipment before they
19 occurred.²⁰ For example, ComEd had failed to adopt criteria for
20 reinforcing or replacing equipment in its T&D systems long before they
21 reached a heavily loaded condition or before they reached the likely end of
22 their useful life.²¹ Too often ComEd replaced equipment only when it
23 failed.²²
- 24 • ComEd did not use reasonable, conservative assumptions in making peak
25 electrical load estimates and did not adequately reinforce its distribution

14 *Final Report on the Investigation of Commonwealth Edison's Transmission and Distribution*
15 *System*, December 2000, at pages 11 and 14.

16 *Final Report on the Investigation of Commonwealth Edison's Transmission and Distribution*
17 *System*, December 2000, at pages 16 and 19 and *Investigation of Commonwealth Edison's*
18 *Transmission and Distribution Systems, Second Report*, July 2000, at page XIII-7.

19 *Final Report on the Investigation of Commonwealth Edison's Transmission and Distribution*
20 *System*, December 2000, at page 21.

21 *Investigation of Commonwealth Edison's Transmission and Distribution Systems, First Report*,
22 June 2000, at page ES-2.

23 *Investigation of Commonwealth Edison's Transmission and Distribution Systems, Second Report*,
24 July 2000, at page ES-3.

25 *Investigation of Commonwealth Edison's Transmission and Distribution Systems, First Report*,
June 2000, at page ES-2.

Final Report on the Investigation of Commonwealth Edison's Transmission and Distribution
System, December 2000, at page 12.

Final Report on the Investigation of Commonwealth Edison's Transmission and Distribution
System, December 2000, at page 12.

Investigation of Commonwealth Edison's Transmission and Distribution Systems, Second Report,
July 2000, at page A-5.

1 system.²³ For example, one of ComEd’s most significant weaknesses was
2 its method for making electric load adjustments when planning its T&D
3 system, i.e., its use of an average peak-day weather load adjustment
4 “which practically ensured that the assumed weather, and thus the electric
5 load, would have a 50 percent chance of exceeding the forecast in any
6 given year.” Liberty further noted that ComEd had rejected a 1995
7 consultant’s recommendation that it adopt a higher peak-day design
8 temperature.²⁴ In addition, the distribution planning process lack a formal,
9 objective review process for accuracy of the load forecasts.

- 10 • ComEd’s planning of projected substation loads did not meet good utility
11 practices.²⁵
- 12 • ComEd’s failures in the areas of load forecasting and planning could be
13 traced to a corporate desire to minimize the money spent to improve the
14 transmission and distribution system.²⁶
- 15 • ComEd routinely overloaded its transformers and cables.²⁷ But ComEd did
16 not track overloading of its cables or adequately record and track
17 substation transformer loading.²⁸ Nor did the Company follow its
18 standard policy regarding replacing overloaded distribution transformers.²⁹
- 19 • ComEd was not adequately maintaining its distribution system to provide
20 reliable service and had not been adequately maintaining the system for a
21 period of at least five years.³⁰ For example, in the summer of 1999, there
22 were 79,000 items back-logged from 1998 and earlier inspections.³¹ At
23 the same time, over 25,000 substation maintenance tasks were overdue. As
24 of August 1999, over 25, 000 substation maintenance tasks were
25 overdue.³²

23 *Investigation of Commonwealth Edison’s Transmission and Distribution Systems, First Report*,
June 2000, at page ES-4.

24 *Final Report on the Investigation of Commonwealth Edison’s Transmission and Distribution
System*, December 2000, at page 11.

25 *Investigation of Commonwealth Edison’s Transmission and Distribution Systems, Second Report*,
July 2000, at page A-2.

26 *Investigation of Commonwealth Edison’s Transmission and Distribution Systems, First Report*,
June 2000, at page ES-2.

27 *Investigation of Commonwealth Edison’s Transmission and Distribution Systems, Second Report*,
July 2000, at page A-8.

28 *Investigation of Commonwealth Edison’s Transmission and Distribution Systems, Second Report*,
July 2000, at pages A-8 and A-9.

29 *Investigation of Commonwealth Edison’s Transmission and Distribution Systems, Second Report*,
July 2000, at page A-9.

30 *Investigation of Commonwealth Edison’s Transmission and Distribution Systems, Second Report*,
July 2000, at pages A-6 and A-10.

31 *Final Report on the Investigation of Commonwealth Edison’s Transmission and Distribution
System*, December 2000, at page 15.

32 *Final Report on the Investigation of Commonwealth Edison’s Transmission and Distribution
System*, December 2000, at page 16.

- 1 • There was a clear reduction in ComEd’s distribution maintenance
2 expenses per customer during the years 1993 through 1995. Even as late
3 as 1997, these expenditures did not reach the level that ComEd had
4 dedicated to distribution system maintenance in 1992.³³
- 5 • As a result of the age of ComEd’s distribution system and the capital
6 cutbacks made by the Company, ComEd should have increased
7 maintenance actions and expenses to try to make up for the lack of system
8 refurbishment. However, it was clear that ComEd decided not to maintain
9 its distribution at the same or an improved level after 1992-1993.
- 10 • ComEd’s tree trimming expenditures had been inadequate to maintain
11 reasonable distribution system reliability. ComEd had cut back on tree
12 trimming expenditures and did not keep up with its own tree trimming
13 policy. The Company had been forced into a reactive mode in which a
14 significant percentage of its tree trimming efforts were directed at
15 “emergency” situations. It will have to spend more money in future years
16 than the money that had been saved in prior years to catch up with a
17 regular tree trimming program.³⁴
- 18 • ComEd’s overhead distribution system was not in a good state of repair
19 and ComEd’s inspection of its overhead distribution system prior to the
20 summer of 1999 had failed to properly assess the physical condition of the
21 system.³⁵
- 22 • There were significant weaknesses in ComEd’s organization and
23 supporting functions that contributed to, or exacerbated, the effects of less
24 than satisfactory service reliability.³⁶
- 25 • Staffing levels for ComEd’s T&D organization from 1992 through 1999
26 were not reasonably determined on the basis of quantified data. ComEd
27 made changes to the T&D organization’s staffing that were not adequately
28 supported by quantified data demonstrating that projected workload would
29 be adequately accomplished and managed.³⁷

33 *Final Report on the Investigation of Commonwealth Edison’s Transmission and Distribution System*, December 2000, at page 14.

34 *Final Report on the Investigation of Commonwealth Edison’s Transmission and Distribution System*, December 2000, at page 18.

35 *Final Report on the Investigation of Commonwealth Edison’s Transmission and Distribution System*, December 2000, at page 17.

36 *Final Report on the Investigation of Commonwealth Edison’s Transmission and Distribution System*, December 2000, at page 21.

37 *Final Report on the Investigation of Commonwealth Edison’s Transmission and Distribution System*, December 2000, at page 21.

1 **Q. Did Liberty identify what it believed were the root causes for the serious**
2 **problems it had found?**

3 A. Yes. Liberty found that there were two root causes to most of ComEd's
4 distribution system problems:

5 The first, which became somewhat apparent early in the investigation,
6 is that ComEd simply did not spend the money required to keep its
7 T&D systems in shape to provide reliable service. But this cause does
8 not explain all of the problems completely. Liberty concluded that the
9 second root cause was that ComEd's management and T&D personnel
10 became lax and complacent about electric delivery systems, possibly
11 having had their attention diverted by other matters, not recognizing
12 the inherent time lag between a failure to take actions and the result of
13 not taking those actions, and not recognizing the seriousness of the
14 developing problem.³⁸

15 **Q. Did Liberty present any further detail on ComEd' funding of T&D**
16 **improvement projects and maintenance activities during the 1990s?**

17 A. Yes. Liberty made the following findings concerning ComEd's funding of its
18 T&D systems during the 1990s:

- 19 • During most of the 1990s, ComEd exercised cost control and reduction
20 policies that resulted in less than adequate funding for its T&D systems.
- 21 • ComEd increased its budgeted T&D capital expenditures each year
22 between 1986 and 1992. However, there was a dramatic drop in the
23 Company's T&D capital budget after 1992.³⁹

³⁸ *Final Report on the Investigation of Commonwealth Edison's Transmission and Distribution System*, December 2000, at page 23.

³⁹ *Investigation of Commonwealth Edison's Transmission and Distribution Systems, First Report*, June 2000, at page III-2.

- 1 • The Company’s actual T&D capital expenditures increased by about 8
2 percent from 1991 to 1992 but then decreased by almost 1/3 from 1992 to
3 1994.⁴⁰ Although T&D capital expenditures were increased starting in
4 1995, the Company’s actual T&D capital expenditures from 1991 through
5 1998 were below budgeted amounts by a cumulative total of
6 approximately \$293 million.
- 7 • Distribution system capital additions increased each year from 1988
8 through 1992 with significant cutbacks in subsequent years.⁴¹ Distribution
9 system capital spending in 1998 was still below the amounts that had been
10 spent in 1992.
- 11 • The amount of ComEd’s distribution system construction did not keep
12 pace with system growth and the need for refurbishment considering the
13 age of the system.⁴²
- 14 • The Company’s T&D O&M expenses on a per customer basis decreased
15 during the mid-1990s with expenses in the years 1991-1993 being greater
16 than in the years 1994-1997.⁴³
- 17 • At times during the 1990s T&D bore the brunt of ComEd’s cost control
18 efforts. For example, O&M at ComEd’s generating facilities increased by
19 \$140 million during the period 1994-1996. However, O&M associated
20 with the T&D systems decreased during this same period reflecting cost
21 control efforts.⁴⁴
- 22 • The low levels of T&D funding were the result of a conscious and
23 concerted effort by management to reduce expenditures and maintain costs
24 at a low level. For example, a September 1992 internal Company budget
25 letter stated that ComEd’s overall cost constraint objective continued to be
26 to maintain total O&M expenses at the minimum level consistent with the
27 safe and efficient operation of the Company’s facilities.⁴⁵

⁴⁰ *Investigation of Commonwealth Edison’s Transmission and Distribution Systems, First Report*,
June 2000, at pages III-6 and III-7.

⁴¹ *Investigation of Commonwealth Edison’s Transmission and Distribution Systems, Second Report*,
July 2000, at page XV-3.

⁴² *Investigation of Commonwealth Edison’s Transmission and Distribution Systems, Second Report*,
July 2000, at page XV-12.

⁴³ *Investigation of Commonwealth Edison’s Transmission and Distribution Systems, First Report*,
June 2000, at page III-9.

⁴⁴ *Investigation of Commonwealth Edison’s Transmission and Distribution Systems, First Report*,
June 2000, at page III-16.

⁴⁵ *Investigation of Commonwealth Edison’s Transmission and Distribution Systems, First Report*,
June 2000, at page III-15.

1 • There were signs before 1999 that ComEd’s cost control efforts were
2 having an adverse effect on T&D’s ability to serve its customers.⁴⁶

3 **Q. Did Liberty make any specific findings concerning the Company’s tree**
4 **trimming expenditures during the 1990s?**

5 A. Yes. Liberty first observed that trees and ComEd’s practices related to tree
6 trimming had a significant effect on distribution system reliability.⁴⁷ It then
7 concluded that the Company had reduced the funds for tree trimming beginning in
8 about 1993 because of internally imposed budget restrictions. As a result, tree
9 trimming expenditures had been inadequate to maintain reasonable distribution
10 system reliability:

11 ComEd cut back on tree trimming expenditures and did not keep up
12 with its own tree-trimming policy. ComEd was forced into a reactive
13 mode in which a significant percentage of tree trimming efforts were
14 directed at “emergency” situations. ComEd will be required to spend
15 more money than the money saved in prior years to catch up with a
16 regular tree trimming program.⁴⁸

17 **Q. Is there any evidence that the Company did not effectively and efficiently use**
18 **the funds that actually were spent on distribution capital projects and system**
19 **maintenance?**

20 A. Yes. ComEd’s September 1999 Blueprint for Change noted that T&D funds
21 could have been better allocated among projects and that this misallocation had
22 restricted efforts on some projects.⁴⁹ In addition, the Company’s reactive mode of
23 operation, as compared to planned work, magnified these allocation problems.⁵⁰

⁴⁶ *Investigation of Commonwealth Edison’s Transmission and Distribution Systems, First Report*,
June 2000, at page III-16.

⁴⁷ *Investigation of Commonwealth Edison’s Transmission and Distribution Systems, Second Report*,
July 2000, at page XIII-7.

⁴⁸ *Investigation of Commonwealth Edison’s Transmission and Distribution Systems, Second Report*,
July 2000, at page XIII-8.

⁴⁹ *Commonwealth Edison Blueprint for Change*, at page D.185.

⁵⁰ *Commonwealth Edison Blueprint for Change*, at page D.185.

1 The Blueprint for Change further noted that overall ComEd's T&D organization
2 was not uniformly working on the right work or optimizing the allocation of
3 resources.⁵¹

4 **Q. What observations did Liberty make concerning ComEd's T&D staffing**
5 **levels?**

6 A. Liberty found that as of 1991 ComEd's staffing levels were expected to increase
7 for the next five years. Instead, staffing levels dropped throughout the 1990s as
8 part of the Company's cost control efforts. These staffing level changes were
9 made without any studies to determine whether the required work could be
10 accomplished with a smaller workforce.⁵²

11 Liberty also estimated that while the number of union-craft and union-other
12 personnel decreased by 18 percent from 1992 to 1999, the number of management
13 employees increased by 44 percent.⁵³ Moreover, ComEd data indicated that while
14 staffing levels decreased during the 1990s, the Company did not make up the
15 difference through overtime.⁵⁴

16 **Q. Did the serious outages experienced during 1998 and 1999 and the discovery**
17 **of serious problems lead ComEd to increase its expenditures on distribution**
18 **system capital improvements and maintenance expenses?**

19 A. Yes. In the fall of 1998, ComEd increased its 1999-2001 capital budget for T&D
20 improvements by \$300 million and its tree trimming program by \$30 million.
21 Then, in May of 1999, ComEd committed to spending \$1.1 billion on reliability
22 improvements inside the City of Chicago.

23 Six months later, at the same time that it released its Blueprint for Change in mid-
24 September 1999, ComEd announced a new comprehensive two year recovery

⁵¹ *Commonwealth Edison Blueprint for Change*, at page D.188.

⁵² *Investigation of Commonwealth Edison's Transmission and Distribution Systems, Second Report*, July 2000, at pages ES-3 and XII-2.

⁵³ *Investigation of Commonwealth Edison's Transmission and Distribution Systems, Second Report*, July 2000, at page XII-3.

⁵⁴ *Investigation of Commonwealth Edison's Transmission and Distribution Systems, Second Report*, July 2000, at page XII-5.

1 program “aimed at bringing service reliability up to or beyond industry norms.”⁵⁵
2 The Company pledged accelerated efforts to achieve this goal and committed to
3 spending \$1.5 billion in reliability related T&D investments and expenditures
4 over the following two years.⁵⁶ For example, as part of this program, tree
5 trimming expenditures over the years 1999-2001 were expanded to \$160 million
6 and \$623 million was committed to distribution infrastructure refurbishment from
7 2000-2002.

8 **Q. Do these costs represent a higher level of expenditures for “catching up” on**
9 **reliability rather than the level of expenditures that can be expected to**
10 **represent on-going expenditures following the catch-up period?**

11 A. Yes. It is clear that these higher costs reflect the Company’s accelerated efforts to
12 recover from its past problems and will not reflect future expenditure levels once
13 the Company has caught up with industry norms. In fact, ComEd has
14 acknowledged that:

15 In September 1999, after a massive investigation of our system, we
16 adopted a two-year transmission and distribution recovery strategy.
17 This strategy, perhaps one of the electric industry’s most
18 comprehensive turnaround efforts, has been designed to bring about
19 fundamental core change. Our plan for future investments has been
20 integrally related to this undertaking.⁵⁷

21 * * * *

22 Now, in mid-2001, we are approaching the final months of our
23 recovery plan. Although the intense level of activity associated with
24 the recovery will diminish and reach a steady state, the fundamental
25 programs necessary to maintain the condition of our equipment, meet
26 load growth and improve system reliability will continue.⁵⁸

⁵⁵ September 15, 1999 letter from John Rowe to Charles E. Fisher at the Illinois Commerce Commission.

⁵⁶ *Commonwealth Edison Blueprint for Change*, at page A3.

⁵⁷ *Commonwealth Edison Annual Report in Compliance with the Settlement Agreement Dated June 3, 1999 in ICC Docket No. 98-0514*, June 29, 2001, at page A-1 of Exhibit 2.

⁵⁸ *Commonwealth Edison Annual Report in Compliance with the Settlement Agreement Dated June 3, 1999 in ICC Docket No. 98-0514*, June 29, 2001, at page A-1 of Exhibit 2.

1 Moreover, it is clear that the Company’s expenditures during the years 1999
2 through 2001 included large costs to complete back-logged work tasks that had
3 been identified in earlier years. For example, Liberty found that in the summer of
4 1999, ComEd had 79,000 items back-logged from 1998 and earlier inspections.⁵⁹
5 At the same time, over 25,000 substation maintenance tasks were overdue.⁶⁰ The
6 costs of working down these large backlogs are not representative of future on-
7 going T&D expenditures.

8 **Q. Is ComEd seeking to include these costs in rates?**

9 A. Yes. It seems clear that the Company is seeking to recover not only rate year
10 reliability improvement capital and O&M costs from ratepayers but also capital
11 expenditures between January 1998 and December 1999 and January 2001 and
12 February 28, 2002.⁶¹ For example, Company witness Juracek acknowledges that
13 the Company has increased its capital and O&M expenditures based on its
14 extensive evaluation of its transmission and distribution systems. But then Ms.
15 Juracek claims that “These are not added “repair” costs that [ComEd] incurred
16 because of failures of the past...”⁶²

17 However, Ms. Juracek was unable to provide any documentation to support this
18 assertion. Instead, all ComEd could cite was the unsupported claim that:

19 Ms. Juracek is aware of the expenses that she believes to be “repair”
20 costs that ComEd incurred because of failures of the past. She knows
21 these costs to be outside of the revenue requirement, because she is
22 familiar with the preparation of the revenue requirement and the costs
23 that are included in it.⁶³

24 This statement is in conflict with the testimony of other company witnesses
25 regarding the Company’s revenue requirement. Company witness DeCampli does
26 not even mention, led alone exclude, any expenditures related to past Company

⁵⁹ *Final Report on the Investigation of Commonwealth Edison’s Transmission and Distribution System*, December 2000, at page 16.

⁶⁰ *Final Report on the Investigation of Commonwealth Edison’s Transmission and Distribution System*, December 2000, at page 17.

⁶¹ ComEd Ex. 1.0, at page 4, lines 100-112 and ComEd Ex. 6, at pages 17-19.

⁶² ComEd Ex. 1.0, at page 4, lines 105-106.

1 failures. In fact, he explicitly states that all Distribution Plant, except a small
2 portion used to provide wholesale service, “are properly included in the state-
3 jurisdictional delivery services ratebase.”⁶⁴ In particular, Mr. DeCampli explains
4 that one of the major contributors to the increase in Distribution Plant since 1997
5 is that “plant additions were also necessitated by the need to quickly replace
6 existing facilities, expand existing facilities, or build new facilities because the
7 existing facilities were not performing adequately or reliably.”⁶⁵ Mr. DeCampli
8 summarizes the specific additions to Distribution Plant, including new poles,
9 overhead conductors, underground cables, distribution transformers and new high
10 voltage substations.⁶⁶ However, Mr. DeCampli makes no distinction between
11 plant installed to remedy past failures, and plant that represents more routine
12 investment and maintenance consistent with good utility practice.

13 **Q. Have you seen any evidence that suggests that the Company’s increased**
14 **T&D capital and maintenance expenditures in fact have been higher as a**
15 **result of ComEd’s failures of the past?**

16 A. Yes. Several of the findings in the Company’s Blueprint for Change and the
17 Vantage Consulting and Liberty Consulting Group reports for the ICC identify
18 areas in which the Company’s past mistakes/mismanagement have led to
19 increases in recent capital and/or maintenance expenditures:

- 20 • As I have noted previously, since 1999 the Company has been working off
21 its large backlogs of corrective and maintenance items from 1998 and
22 earlier inspections.
- 23 • Liberty found that ComEd’s practice of routinely thermally overloading
24 equipment had reduced the life expectancy of that equipment.⁶⁷

⁶³ ComEd’s response to Part h. of AG Data Request 1.01.

⁶⁴ ComEd Ex. 6, at page 13.

⁶⁵ ComEd Ex. 6, at page 14.

⁶⁶ ComEd Ex. 6, at page 14.

⁶⁷ *Investigation of Commonwealth Edison’s Transmission and Distribution Systems, Final Report*, December 2000, at page 32.

- 1 • Vantage similarly concluded that the root cause of most ComEd lead-
2 covered cable failures was heat-induced insulation failure brought about
3 by repeated cable overloading:

4 ComEd rated the current carrying capacity of its cables
5 higher than the cable manufacturers typically recommend
6 in similar conditions, and then repeatedly loaded those
7 cables to levels well in excess of its own unusually high
8 ratings. The result of repeated overloads was excess heat
9 that degraded cable insulation. Vantage believes that
10 ComEd continues to employ similarly overloaded cables
11 and that possible future cable failures may arise from the
12 same cause.⁶⁸

13 These cable failures led to internal failures of transformers at two
14 substations.

- 15 • The Company's Blueprint for Change noted that ComEd had had a 10 year
16 inspection cycle for poles which meant that approximately 100,000 to
17 133,000 poles were inspected each year. However, no poles were
18 inspected between 1993 and 1997.⁶⁹ The Company also noted that a rule
19 of thumb was that pole replacement is 6 times the cost of pole repair.
20 Consequently, ComEd has incurred otherwise unnecessary test year pole
21 replacement expenses wherever it has had to replace poles that it might
22 have repaired if these poles had been inspected, and problems discovered
23 and addressed, at an earlier time.

24 **Q. What level of funding for tree management activities is ComEd seeking to**
25 **include in rates?**

26 A. ComEd is seeking to include in rates its average expenditures on tree trimming
27 and other tree management expenditures for the 3 year period 1998-2000.⁷⁰

28 **Q. Is this a reasonable level of tree management expenditures to include in**
29 **rates?**

30 A. No. The Company made extraordinarily high expenditures on tree trimming and
31 other related work during the three year period 1998 to 2000 as part of its
32 recovery effort from past years of failing to perform adequate levels of these
33 activities. As Liberty has found:

⁶⁸ *Stage I Investigation of Commonwealth Edison System Outages for the Period of July 30, 1999 to August 13, 1999, December 1999, at page 2.*

1 ComEd's tree trimming policy has been a 4-year trim cycle since at
2 least prior to 1989. However, because of internally imposed budget
3 restrictions, inadequate funds were allocated to implement this policy
4 beginning in about 1993. During the fourth quarter of 1998, ComEd
5 decided to fund tree trimming more aggressively. ComEd
6 acknowledged that trees had had a significant effect on service
7 reliability. Unfortunately, the general condition of tree trimming had
8 declined significantly by this point in time.⁷¹

9 Liberty also noted that the cost to recover from this situation is always greater
10 than the delayed cost savings achieved:

11 Not until the fourth quarter of 1998, after a particularly poor year of
12 reliability performance, did ComEd add substantially to its
13 expenditures for tree trimming. Unfortunately, when a utility does not
14 keep pace with vegetation growth, it costs more to "catch up" than if a
15 sufficient and regular program had been employed. A rule-of-thumb is
16 that for every \$1 that is delayed, another \$1.25 will be required to
17 catch up. And, in the meantime, trees will contribute to customer
18 interruptions at a greater rate.⁷²

19 In fact, ComEd's Annual Reports for 2000 and 2001 in Compliance with the
20 Settlement Agreement dated June 3, 1999 in ICC Docket No. 98-0514 confirm
21 that in late 1998 the Company significantly increased its budget for tree trimming
22 efforts to \$135 million for the years 1999-2001. The Company then intensified
23 these efforts even further after the summer of 1999 interruptions, raising the tree
24 trimming budget to \$160 million and establishing a goal of accelerating its tree
25 trimming to achieve a four-year cycle by June 2000. This goal was achieved on
26 May 19, 2000.

27 ComEd should be allowed to recover in rates a reasonable amount for tree
28 management activities but should not be allowed to recover the additional costs
29 that the Company expended in 1998, 1999, and 2000 to recover from its earlier
30 failure to conduct this essential work.

⁶⁹ *Blueprint for Change*, September 15, 1999, at page D.191.

⁷⁰ ComEd Ex 5.0, page 21, lines 445-450.

⁷¹ *Investigation of Commonwealth Edison's Transmission and Distribution Systems, Second Report*, July 2000, at page XIII-4.

⁷² *Investigation of Commonwealth Edison's Transmission and Distribution Systems, Second Report*, July 2000, at page XIII-7.

1 **Q. Is there any applicable Commission precedent on this issue?**

2 A. Yes, in the Company's last delivery services rate case the Commission explicitly
3 found that it is not appropriate to include costs in future rates if those costs will
4 not recur in the future.⁷³

5 **Q. Have you been able to identify the distribution system capital improvement**
6 **costs that should be disallowed because they related to ComEd's past**
7 **mistakes and mismanagement of its distribution system?**

8 A. No. I have not been able to perform this analysis due to the Company's failure to
9 provide complete responses to the People's data requests in a timely manner and
10 the very short schedule allowed intervenors to prepare testimony in this rate
11 proceeding.

12 **Q. Have you been able to quantify the distribution system O&M expenditures**
13 **that should be disallowed because they result from the Company's past**
14 **mistakes and mismanagement?**

15 A. For the same reason, I have been unable to quantify the O&M expenditures that
16 could have been avoided if the Company had properly managed and maintained
17 its distribution system during the 1990s.

18 **Q. Please summarize any recommendations that you have based on the**
19 **information that was available to you at the time you prepared your**
20 **testimony.**

⁷³ ICC Order in Docket No. 99-0117, August 26, 1999, at page 36.

1 A. The Commission should not allow into rate base the distribution capital costs
2 requested by ComEd or include in rates the levels of test year O&M expenditures
3 proposed by the Company. ComEd should be required to provide more detailed
4 information to show that (a) the capital improvement projects whose cost it seeks
5 to add to rate base and (b) its proposed test year O&M expenses were reasonable
6 and not related to its past mismanagement and inadequate funding and
7 maintenance of its distribution system. The Company also should be required to
8 show that its requested costs reflect a reasonable level of costs on a going-forward
9 basis and not its massive distribution system recovery effort.

10 **Q. Are you reserving the right to supplement this testimony based on further**
11 **materials provided in response to the People's data requests?**

12 A. Yes.

13 **Q. Does this complete your testimony at this time?**

14 A. Yes.

EXHIBIT DAS-1

David A Schlissel

Senior Consultant
Synapse Energy Economics
22 Crescent Street, Cambridge, MA 02138
(617) 661-3248 • fax: 661-0599

SUMMARY

I have worked for twenty-seven years as a consultant and attorney on complex management, engineering, and economic issues, primarily in the field of energy. This work has involved conducting technical investigations, preparing economic analyses, presenting expert testimony, providing support during all phases of regulatory proceedings and litigation, and advising clients during settlement negotiations. I received undergraduate and advanced engineering degrees from the Massachusetts Institute of Technology and Stanford University and a law degree from Stanford Law School

PROFESSIONAL EXPERIENCE

Electric Industry Restructuring and Deregulation - Investigated whether generators have been intentionally withholding capacity in order to manipulate prices in the new spot wholesale market in New England. Evaluated the reasonableness of nuclear and fossil plant sales and auctions of power purchase agreements. Analyzed stranded utility costs in Massachusetts and Connecticut. Examined the reasonableness of utility standard offer rates and transition charges.

System Operations and Reliability Analysis - Investigated the causes of distribution system outages and inadequate service reliability. Evaluated the impact of a proposed merger on the reliability of the electric service provided to the ratepayers of the merging companies. Assessed whether new transmission and generation additions were needed to ensure adequate levels of system reliability. Scrutinized utility system reliability expenditures. Reviewed natural gas and telephone utility repair and replacement programs and policies.

Power Plant Operations and Economics - Investigated the causes of more than one hundred power plant and system outages, equipment failures, and component degradation, determined whether these problems could have been anticipated and avoided, and assessed liability for repair and replacement costs. Reviewed power plant operating, maintenance, and capital costs. Evaluated utility plans for and management of the replacement of major power plant components. Assessed the adequacy of power plant quality assurance and maintenance programs. Examined the selection and supervision of contractors and subcontractors. Evaluated the reasonableness of contract provisions and terms in proposed power supply agreements.

Nuclear Power - Examined the impact of industry restructuring and nuclear power plant life extensions on decommissioning costs and collections policies. Evaluated utility decommissioning cost estimates. Assessed the potential impact of electric industry deregulation on nuclear power plant safety. Reviewed nuclear waste storage and disposal costs. Investigated the potential safety consequences of nuclear power plant structure, system, and component failures.

Economic Analysis - Analyzed the costs and benefits of energy supply options. Examined the economic and system reliability consequences of the early retirement of major electric generating facilities. Quantified replacement power costs and the increased capital and operating costs due to identified instances of mismanagement.

Expert Testimony - Presented the results of management, technical and economic analyses as testimony in more than seventy proceedings before regulatory boards and commissions in twenty one states, before two federal regulatory agencies, and in state and federal court proceedings.

Litigation and Regulatory Support - Participated in all aspects of the development and preparation of case presentations on complex management, technical, and economic issues. Assisted in the preparation and conduct of pre-trial discovery and depositions. Helped identify and prepare expert witnesses. Aided the preparation of pre-hearing petitions and motions and post-hearing briefs and appeals. Assisted counsel in preparing for hearings and oral arguments. Advised counsel during settlement negotiations.

TESTIMONY

New York State Board on Electric Generation Siting and the Environment (Case No. 99-F-1627) - July 2001

The environmental benefits from the proposed 500 MW NYPA Astoria generating facility.

New York State Board on Electric Generation Siting and the Environment (Case No. 99-F-1191) - June 2001

The environmental benefits from the proposed 1,000 MW Astoria Energy generating facility.

New Jersey Board of Public Utilities (Docket No. EM00110870) - May 2001

The market power implications of the proposed merger between FirstEnergy and GPU Energy.

Connecticut Department of Public Utility Control (Docket 99-09-12RE01) - November 2000

The proposed sale of Millstone Nuclear Station to Dominion Nuclear, Inc.

Illinois Commerce Commission (Docket 00-0361) - August 2000

The impact of nuclear power plant life extensions on Commonwealth Edison Company's decommissioning costs and collections from ratepayers.

Vermont Public Service Board (Docket 6300) - April 2000

Whether the proposed sale of the Vermont Yankee nuclear plant to AmerGen Vermont is in the public interest.

Massachusetts Department of Telecommunications and Energy (Docket 99-107, Phase II) - April and June 2000

The causes of the May 18, 1999, main transformer fire at the Pilgrim generating station.

Connecticut Department of Public Utility Control (Docket 00-01-11) - March and April 2000

The impact of the proposed merger between Northeast Utilities and Con Edison, Inc. on the reliability of the electric service being provided to Connecticut ratepayers.

Connecticut Department of Public Utility Control (Docket 99-09-12) - January 2000

The reasonableness of Northeast Utilities plan for auctioning the Millstone Nuclear Station.

Connecticut Department of Public Utility Control (Docket 99-08-01) - November 1999

Generation, Transmission, and Distribution system reliability.

Illinois Commerce Commission (Docket 99-0115) - September 1999

Commonwealth Edison Company's decommissioning cost estimate for the Zion Nuclear Station.

Connecticut Department of Public Utility Control (Docket 99-03-36) - July 1999

Standard offer rates for Connecticut Light & Power Company.

Connecticut Department of Public Utility Control (Docket 99-03-35) - July 1999

Standard offer rates for United Illuminating Company.

Connecticut Department of Public Utility Control (Docket 99-02-05) - April 1999

Connecticut Light & Power Company stranded costs.

Connecticut Department of Public Utility Control (Docket 99-03-04) - April 1999

United Illuminating Company stranded costs.

Maryland Public Service Commission (Docket 8795) - December 1998

Future operating performance of Delmarva Power Company's nuclear units.

Maryland Public Service Commission (Dockets 8794/8804) - December 1998

Baltimore Gas and Electric Company's proposed replacement of the steam generators at the Calvert Cliffs Nuclear Power Plant. Future performance of nuclear units.

Indiana Utility Regulatory Commission (Docket 38702-FAC-40-S1) - November 1998

Whether the ongoing outages of the two units at the D.C. Cook Nuclear Plant were caused or extended by mismanagement.

Arkansas Public Service Commission (Docket 98-065-U) - October 1998

Entergy's proposed replacement of the steam generators at the ANO Unit 2 Steam Generating Station.

Massachusetts Department of Telecommunications and Energy (Docket 97-120) - October 1998

Western Massachusetts Electric Company's Transition Charge. Whether the extended 1996-1998 outages of the three units at the Millstone Nuclear Station were caused or extended by mismanagement.

Connecticut Department of Public Utility Control (Docket 98-01-02) - September 1998
Nuclear plant operations, operating and capital costs, and system reliability improvement costs.

Illinois Commerce Commission (Docket 97-0015) - May 1998
Whether any of the outages of Commonwealth Edison Company's twelve nuclear units during 1996 were caused or extended by mismanagement. Whether equipment problems, personnel performance weaknesses, and program deficiencies could have been avoided or addressed prior to plant outages. Outage-related fuel and replacement power costs.

Public Service Commission of West Virginia (Case 97-1329-E-CN) - March 1998
The need for a proposed 765 kV transmission line from Wyoming, West Virginia, to Cloverdate, Virginia.

Illinois Commerce Commission (Docket 97-0018) - March 1998
Whether any of the outages of the Clinton Power Station during 1996 were caused or extended by mismanagement.

Connecticut Department of Public Utility Control (Docket 97-05-12) - October 1997
The increased costs resulting from the ongoing outages of the three units at the Millstone Nuclear Station.

New Jersey Board of Public Utilities (Docket ER96030257) - August 1996
Replacement power costs during plant outages.

Illinois Commerce Commission (Docket 95-0119) - February 1996
Whether any of the outages of Commonwealth Edison Company's twelve nuclear units during 1994 were caused or extended by mismanagement. Whether equipment problems, personnel performance weaknesses, and program deficiencies could have been avoided or addressed prior to plant outages. Outage-related fuel and replacement power costs.

Public Utility Commission of Texas (Docket 13170) - December 1994
Whether any of the outages of the River Bend Nuclear Station during the period October 1, 1991, through December 31, 1993, were caused or extended by mismanagement.

Public Utility Commission of Texas (Docket 12820) - October 1994
Operations and maintenance expenses during outages of the South Texas Nuclear Generating Station.

Wisconsin Public Service Commission (Cases 6630-CE-197 and 6630-CE-209) - September and October 1994
The reasonableness of the projected cost and schedule for the replacement of the steam generators at the Point Beach Nuclear Power Plant. The potential impact of plant aging on future operating costs and performance.

Public Utility Commission of Texas (Docket 12700) - June 1994
Whether El Paso Electric Company's share of Palo Verde Unit 3 was needed to ensure adequate levels of system reliability. Whether the Company's investment in Unit 3 could be expected to generate cost savings for ratepayers within a reasonable number of years.

Arizona Corporation Commission (Docket U-1551-93-272) - May and June 1994
Southwest Gas Corporation's plastic and steel pipe repair and replacement programs.

Connecticut Department of Public Utility Control (Docket 92-04-15) - March 1994
Northeast Utilities management of the 1992/1993 replacement of the steam generators at Millstone Unit 2.

Connecticut Department of Public Utility Control (Docket 92-10-03) - August 1993
Whether the 1991 outage of Millstone Unit 3 as a result of the corrosion of safety-related plant piping systems was due to mismanagement.

Public Utility Commission of Texas (Docket 11735) - April and July 1993
Whether any of the outages of the Comanche Peak Unit 1 Nuclear Station during the period August 13, 1990, through June 30, 1992, were caused or extended by mismanagement.

Connecticut Department of Public Utility Control (Docket 91-12-07) - January 1993 and August 1995
Whether the November 6, 1991, pipe rupture at Millstone Unit 2 and the related outages of the Connecticut Yankee and Millstone units were caused or extended by mismanagement. The impact of environmental requirements on power plant design and operation.

Connecticut Department of Public Utility Control (Docket 92-06-05) - September 1992
United Illuminating Company off-system capacity sales.

Public Utility Commission of Texas (Docket 10894) - August 1992
Whether any of the outages of the River Bend Nuclear Station during the period October 1, 1988, through September 30, 1991, were caused or extended by mismanagement.

Connecticut Department of Public Utility Control (Docket 92-01-05) - August 1992
Whether the July 1991 outage of Millstone Unit 3 due to the fouling of important plant systems by blue mussels was the result of mismanagement.

California Public Utilities Commission (Docket 90-12-018) - November 1991, March 1992, June and July 1993
Whether any of the outages of the three units at the Palo Verde Nuclear Generating Station during 1989 and 1990 were caused or extended by mismanagement. Whether equipment problems, personnel performance weaknesses and program deficiencies could have been avoided or addressed prior to outages. Whether specific plant operating cost and capital expenditures were necessary and prudent.

Public Utility Commission of Texas (Docket 9945) - July 1991
Whether El Paso Electric Company's share of Palo Verde Unit 3 was needed to ensure adequate levels of system reliability. Whether the Company's investment in the unit could be expected to generate cost savings for ratepayers within a reasonable number of years. El Paso Electric Company's management of the planning and licensing of the Arizona Interconnection Project transmission line.

Arizona Corporation Commission (Docket U-1345-90-007) - December 1990 and April 1991
Arizona Public Service Company's management of the planning, construction and operation of the Palo Verde Nuclear Generating Station. The costs resulting from identified instances of mismanagement.

New Jersey Board of Public Utilities (Docket ER89110912J) - July and October 1990

The economic costs and benefits of the early retirement of the Oyster Creek Nuclear Plant. The potential impact of the unit's early retirement on system reliability. The cost and schedule for siting and constructing a replacement natural gas-fired generating plant.

Public Utility Commission of Texas (Docket 9300) - June and July 1990

Texas Utilities management of the design and construction of the Comanche Peak Nuclear Plant. Whether the Company was prudent in repurchasing minority owners' shares of Comanche Peak without examining the costs and benefits of the repurchase for its ratepayers.

Federal Energy Regulatory Commission (Docket EL-88-5-000) - November 1989

Boston Edison's corporate management of the Pilgrim Nuclear Station.

Connecticut Department of Public Utility Control (Docket 89-08-11) - November 1989

United Illuminating Company's off-system capacity sales.

Kansas State Corporation Commission (Case 164,211-U) - April 1989

Whether any of the 127 days of outages of the Wolf Creek generating plant during 1987 and 1988 were the result of mismanagement.

Public Utility Commission of Texas (Docket 8425) - March 1989

Whether Houston Lighting & Power Company's new Limestone Unit 2 generating facility was needed to provide adequate levels of system reliability. Whether the Company's investment in Limestone Unit 2 would provide a net economic benefit for ratepayers.

Illinois Commerce Commission (Dockets 83-0537 and 84-0555) - July 1985 and January 1989

Commonwealth Edison Company's management of quality assurance and quality control activities and the actions of project contractors during construction of the Byron Nuclear Station.

New Mexico Public Service Commission (Case 2146, Part II) - October 1988

The rate consequences of Public Service Company of New Mexico's ownership of Palo Verde Units 1 and 2.

United States District Court for the Eastern District of New York (Case 87-646-JBW) - October 1988

Whether the Long Island Lighting Company withheld important information from the New York State Public Service Commission, the New York State Board on Electric Generating Siting and the Environment, and the U.S. Nuclear Regulatory Commission.

Public Utility Commission of Texas (Docket 6668) - August 1988 and June 1989

Houston Light & Power Company's management of the design and construction of the South Texas Nuclear Project. The impact of safety-related and environmental requirements on plant construction costs and schedule.

Federal Energy Regulatory Commission (Docket ER88-202-000) - June 1988

Whether the turbine generator vibration problems that extended the 1987 outage of the Maine Yankee nuclear plant were caused by mismanagement.

Illinois Commerce Commission (Docket 87-0695) - April 1988

Illinois Power Company's planning for the Clinton Nuclear Station.

North Carolina Utilities Commission (Docket E-2, Sub 537) - February 1988

Carolina Power & Light Company's management of the design and construction of the Harris Nuclear Project. The Company's management of quality assurance and quality control activities. The impact of safety-related and environmental requirements on construction costs and schedule. The cost and schedule consequences of identified instances of mismanagement.

Ohio Public Utilities Commission (Case 87-689-EL-AIR) - October 1987

Whether any of Ohio Edison's share of the Perry Unit 2 generating facility was needed to ensure adequate levels of system reliability. Whether the Company's investment in Perry Unit 1 would produce a net economic benefit for ratepayers.

North Carolina Utilities Commission (Docket E-2, Sub 526) - June 1987

Fuel factor calculations.

New York State Public Service Commission (Case 29484) - May 1987

The planned startup and power ascension testing program for the Nine Mile Point Unit 2 generating facility.

Illinois Commerce Commission (Dockets 86-0043 and 86-0096) - April 1987

The reasonableness of certain terms in a proposed Power Supply Agreement.

Illinois Commerce Commission (Docket 86-0405) - March 1987

The in-service criteria to be used to determine when a new generating facility was capable of providing safe, adequate, reliable and efficient service.

Indiana Public Service Commission (Case 38045) - December 1986

Northern Indiana Public Service Company's planning for the Schaefer Unit 18 generating facility. Whether the capacity from Unit 18 was needed to ensure adequate system reliability. The rate consequences of excess capacity on the Company's system.

Superior Court in Rockingham County, New Hampshire (Case 86E328) - July 1986

The radiation effects of low power testing on the structures, equipment and components in a new nuclear power plant.

New York State Public Service Commission (Case 28124) - April 1986 and May 1987

The terms and provisions in a utility's contract with an equipment supplier. The prudence of the utility's planning for a new generating facility. Expenditures on a canceled generating facility.

Arizona Corporation Commission (Docket U-1345-85) - February 1986

The construction schedule for Palo Verde Unit No. 1. Regulatory and technical factors that would likely affect future plant operating costs.

New York State Public Service Commission (Case 29124) - January 1986

Niagara Mohawk Power Corporation's management of construction of the Nine Mile Point Unit No. 2 nuclear power plant.

New York State Public Service Commission (Case 28252) - October 1985

A performance standard for the Shoreham nuclear power plant.

New York State Public Service Commission (Case 29069) - August 1985

A performance standard for the Nine Mile Point Unit No. 2 nuclear power plant.

Missouri Public Service Commission (Cases ER-85-128 and EO-85-185) - July 1985

The impact of safety-related regulatory requirements and plant aging on power plant operating costs and performance. Regulatory factors and plant-specific design features that will likely affect the future operating costs and performance of the Wolf Creek Nuclear Plant.

Massachusetts Department of Public Utilities (Case 84-152) - January 1985

The impact of safety-related regulatory requirements and plant aging on power plant operating costs and performance. Regulatory factors and plant-specific design features that will likely affect the future operating costs and performance of the Seabrook Nuclear Plant.

Maine Public Utilities Commission (Docket 84-113) - September 1984

The impact of safety-related regulatory requirements and plant aging on power plant operating costs and performance. Regulatory factors and plant-specific design features that will likely affect the future operating costs and performance of the Seabrook Nuclear Plant.

South Carolina Public Service Commission (Case 84-122-E) - August 1984

The repair and replacement strategy adopted by Carolina Power & Light Company in response to pipe cracking at the Brunswick Nuclear Station. Quantification of replacement power costs attributable to identified instances of mismanagement.

Vermont Public Service Board (Case 4865) - May 1984

The repair and replacement strategy adopted by management in response to pipe cracking at the Vermont Yankee nuclear plant.

New York State Public Service Commission (Case 28347) - January 1984

The information that was available to Niagara Mohawk Power Corporation prior to 1982 concerning the potential for cracking in safety-related piping systems at the Nine Mile Point Unit No. 1 nuclear plant.

New York State Public Service Commission (Case 28166) - February 1983 and February 1984

Whether the January 25, 1982, steam generator tube rupture at the Ginna Nuclear Plant was caused by mismanagement.

U.S. Nuclear Regulatory Commission (Case 50-247SP) - May 1983

The economic costs and benefits of the early retirement of the Indian Point nuclear plants.

REPORTS, ARTICLES, AND PRESENTATIONS

ISO New England's Generating Unit Availability Study: Where's the Beef? A Presentation at the June 29, 2001 Restructuring Roundtable.

Clean Air and Reliable Power: Connecticut Legislative House Bill HB6365 will not Jeopardize Electric System Reliability. A Synapse Report for the Clean Air Task Force. May 2001.

Room to Breathe: Why the Massachusetts Department of Environmental Protection's Proposed Air Regulations are Compatible with Reliability. A Synapse Report for MASSPIRG and the Clean Water Fund. March 2001.

Generator Outage Increases: A Preliminary Analysis of Outage Trends in the New England Electricity Market, a Synapse Report for the Union of Concerned Scientists, January 7, 2001.

Cost, Grid Reliability Concerns on the Rise Amid Restructuring, with Charlie Harak, Boston Business Journal, August 18-24, 2000.

Report on Indian Point 2 Steam Generator Issues, Schlissel Technical Consulting, Inc., March 10, 2000.

Preliminary Expert Report in Case 96-016613, Cities of Wharton, Pasadena, et al v. Houston Lighting & Power Company, October 28, 1999.

Comments of Schlissel Technical Consulting, Inc. on the Nuclear Regulatory Commission's Draft Policy Statement on Electric Industry Economic Deregulation, February 1997.

Report to the Municipal Electric Utility Association of New York State on the Cost of Decommissioning the Fitzpatrick Nuclear Plant, August 1996.

Report to the Staff of the Arizona Corporation Commission on U.S. West Corporation's telephone cable repair and replacement programs, May, 1996.

Nuclear Power in the Competitive Environment, NRRI Quarterly Bulletin, Vol. 16, No. 3, Fall 1995.

Nuclear Power in the Competitive Environment, presentation at the 18th National Conference of Regulatory Attorneys, Scottsdale, Arizona, May 17, 1995.

The Potential Safety Consequences of Steam Generator Tube Cracking at the Byron and Braidwood Nuclear Stations, a report for the Environmental Law and Policy Center of the Midwest, 1995.

Report to the Public Policy Group Concerning Future Trojan Nuclear Plant Operating Performance and Costs, July 15, 1992.

Report to the New York State Consumer Protection Board on the Costs of the 1991 Refueling Outage of Indian Point 2, December 1991.

Preliminary Report on Excess Capacity Issues to the Public Utility Regulation Board of the City of El Paso, Texas, April 1991.

Nuclear Power Plant Construction Costs, presentation at the November, 1987, Conference of the National Association of State Utility Consumer Advocates.

Comments on the Final Report of the National Electric Reliability Study, a report for the New York State Consumer Protection Board, February 27, 1981.

OTHER SIGNIFICANT INVESTIGATIONS AND LITIGATION SUPPORT WORK

Assisted the Connecticut Office of Consumer Counsel in reviewing the auction of Connecticut Light & Power Company's power purchase agreements. August and September, 2000.

Assisted the New Jersey Division of the Ratepayer Advocate in evaluating the reasonableness of Atlantic City Electric Company's proposed sale of its fossil generating facilities. June and July, 2000.

Investigated whether the 1996-1998 outages of the three Millstone Nuclear Units were caused or extended by mismanagement. 1997 and 1998. Clients were the Connecticut Office of Consumer Counsel and the Office of the Attorney General of the Commonwealth of Massachusetts.

Investigated whether the 1995-1997 outages of the two units at the Salem Nuclear Station were caused or extended by mismanagement. 1996-1997. Client was the New Jersey Division of the Ratepayer Advocate.

Assisted the Associated Industries of Massachusetts in quantifying the stranded costs associated with utility generating plants in the New England states. May through July, 1996

Investigated whether the December 25, 1993, turbine generator failure and fire at the Fermi 2 generating plant was caused by Detroit Edison Company's mismanagement of fabrication, operation or maintenance. 1995. Client was the Attorney General of the State of Michigan.

Investigated whether the outages of the two units at the South Texas Nuclear Generating Station during the years 1990 through 1994 were caused or extended by mismanagement. Client was the Texas Office of Public Utility Counsel.

Assisted the City Public Service Board of San Antonio, Texas in litigation over Houston Lighting & Power Company's management of operations of the South Texas Nuclear Generating Station.

Investigated whether outages of the Millstone nuclear units during the years 1991 through 1994 were caused or extended by mismanagement. Client was the Office of the Attorney General of the Commonwealth of Massachusetts.

Evaluated the 1994 Decommissioning Cost Estimate for the Maine Yankee Nuclear Plant. Client was the Public Advocate of the State of Maine.

Evaluated the 1994 Decommissioning Cost Estimate for the Seabrook Nuclear Plant. Clients were investment firms that were evaluating whether to purchase the Great Bay Power Company, one of Seabrook's minority owners.

Investigated whether a proposed natural-gas fired generating facility was need to ensure adequate levels of system reliability. Examined the potential impacts of environmental regulations on the unit's expected construction cost and schedule. 1992. Client was the New Jersey Rate Counsel.

Investigated whether Public Service Company of New Mexico management had adequately disclosed to potential investors the risk that it would be unable to market its excess generating capacity. Clients were individual shareholders of Public Service Company of New Mexico.

Investigated whether the Seabrook Nuclear Plant was prudently designed and constructed. 1989. Clients were the Connecticut Office of Consumer Counsel and the Attorney General of the State of Connecticut.

Investigated whether Carolina Power & Light Company had prudently managed the design and construction of the Harris nuclear plant. 1988-1989. Clients were the North Carolina Electric Municipal Power Agency and the City of Fayetteville, North Carolina.

Investigated whether the Grand Gulf nuclear plant had been prudently designed and constructed. 1988. Client was the Arkansas Public Service Commission.

Reviewed the financial incentive program proposed by the New York State Public Service Commission to improve nuclear power plant safety. 1987. Client was the New York State Consumer Protection Board.

Reviewed the construction cost and schedule of the Hope Creek Nuclear Generating Station. 1986-1987. Client was the New Jersey Rate Counsel.

Reviewed the operating performance of the Fort St. Vrain Nuclear Plant. 1985. Client was the Colorado Office of Consumer Counsel.

WORK HISTORY

- 2000 - Present: Senior Consultant, Synapse Energy Economics, Inc.
- 1994 - 2000: President, Schlissel Technical Consulting, Inc.
- 1983 - 1994: Director, Schlissel Engineering Associates
- 1979 - 1983: Private Legal and Consulting Practice
- 1975 - 1979: Attorney, New York State Consumer Protection Board
- 1973 - 1975: Staff Attorney, Georgia Power Project

EDUCATION

1983-1985: Massachusetts Institute of Technology
Special Graduate Student in Nuclear Engineering and Project Management,

1973: Stanford Law School,
Juris Doctor

1969: Stanford University
Master of Science in Astronautical Engineering,

1968: Massachusetts Institute of Technology
Bachelor of Science in Astronautical Engineering,

PROFESSIONAL MEMBERSHIPS

- New York State Bar since 1981
- American Nuclear Society
- National Association of Corrosion Engineers
- National Academy of Forensic Engineers (Correspondent Affiliate)

EXHIBIT DAS-2

PEOPLE OF THE STATE OF ILLINOIS' FIRST SET OF DATA REQUESTS

- 1.1. Reference page 4, lines 100-112 of ComEd Ex. 1.0, the Direct Testimony of Arlene A. Juracek.
- a. Provide copies of the analyses, assessments, evaluations, reports, and studies prepared as part of the referenced “extensive evaluation of the reliability of [the Company’s] transmission and distribution systems.”
 - b. Provide copies of the notes, minutes, summaries and reports of the meetings of senior company management personnel at which the findings or results of this extensive evaluation were presented. Also provide copies of any documents circulated or distributed at and copies of the materials used in presentations at each such meeting.
 - c. Provide copies of the notes, minutes, summaries and reports of the meetings of the Company’s Board of Directors, and all committees thereof, at which the findings or results of this extensive evaluation were presented. Also provide copies of any documents circulated or distributed at and copies of the materials used in presentations at each such meeting.
 - d. Provide the documentation in which management evaluated how much the capital expenditures on the Company’s transmission and distribution facilities had to be increased as a result of the findings or results of this extensive evaluation.
 - e. Provide the documentation in which management evaluated how much the operating and maintenance expenditures on the Company’s transmission and distribution facilities had to be increased as a result of the findings or results of this extensive evaluation.

- f. Specify by how much management has decided to increase the capital expenditures on the Company's transmission and distribution facilities as a result of the findings or results of this extensive evaluation.
 - g. Specify by how much management has decided to increase the operating and maintenance expenditures on the Company's transmission and distribution facilities as a result of the findings or results of this extensive evaluation.
 - h. Provide the documentation that supports the statement that "These are not added 'repair' costs that we incurred because of failures of the past, but the costs of putting into service, and then reliably maintaining, new facilities and systems and of implementing the new procedures that customers and the Commission demand."
 - i. Specify how much of the increased capital and operating and maintenance costs are due to increased customer load. Provide the documentation which supports this answer.
 - j. Specify how much of the increased capital and operating and maintenance costs are due to the new construction required by relocation of demand to different areas of ComEd's service territory. Provide the documentation which supports this answer.
 - k. Specify how much of the increased capital and operating and maintenance costs are due to the advent of new types of customers such as internet server "hotels" with new and different requirements. Provide the documentation which supports this answer.
- 1.2. Provide copies of the customer load forecasts prepared by or for the Company since January 1, 2000.

- 1.3. Specify the Company's budgeted and actual annual capital expenditures on its distribution system for each year since January 1, 1990.
- 1.4. Specify the Company's budgeted and actual annual operating and maintenance expenditures on its distribution system for each year since January 1, 1990.
- 1.5. Specify the Company's budgeted and actual annual capital expenditures on its transmission system for each year since January 1, 1990.
- 1.6. Specify the Company's budgeted and actual annual operating and maintenance expenditures on its transmission system for each year since January 1, 1990.
- 1.7. Provide copies of all assessments, analyses, evaluations, and studies of the reliability of the ComEd's distribution system that have been prepared by or for the Company since January 1, 1998.
- 1.8. Provide copies of all assessments, analyses, evaluations, and studies of the reliability of the ComEd's transmission system that have been prepared by or for the Company since January 1, 1998.
- 1.9. Reference page 18, lines 477-478, of ComEd Ex. 1.0. Specify all distribution and transmission system related costs that ComEd has on its own proposed to remove from test year expenses. Specify the reason(s) why ComEd has proposed to remove each such cost from test year expenses.
- 1.10. Provide copies of all assessments, analyses, evaluations, and studies which compare the reliability of the ComEd's distribution system with the reliability of the distribution system(s) of other companies that have been prepared by or for the Company since January 1, 1998 or that are in its possession.
- 1.11. Provide copies of all assessments, analyses, evaluations, and studies which compare the reliability of the ComEd's transmission system with the reliability of the transmission

system(s) of other companies that have been prepared by or for the Company since January 1, 1998 or that are in its possession.

- 1.12. Provide copies of all assessments, analyses, evaluations or studies, prepared by or for ComEd, that compared the SAIFI, SAIDI, and CAIDI experienced by the Company's customers during any or all of the period January 1, 1998 to date, with the SAIFI, SAIDI, and CAIDI experienced by the customers of other utilities.
- 1.13. Provide a list of all distribution system improvement programs that the Company has implemented or adopted since January 1, 1998. Provide the documentation in which the goals and expenditures for each such program were detailed. Also provide the documentation in which the success of each such program in achieving its goals was evaluated or assessed.
- 1.14. Provide the Company's budgeted or projected distribution system capital expenditures for the years 2001, 2002, 2003, 2004, and 2005.
- 1.15. Provide the Company's budgeted or projected distribution system operating and maintenance expenditures for the years 2001, 2002, 2003, 2004, and 2005.
- 1.16. Provide the Company's budgeted or projected transmission system capital expenditures for the years 2001, 2002, 2003, 2004, and 2005.
- 1.17. Provide the Company's budgeted or projected transmission system operating and maintenance expenditures for the years 2001, 2002, 2003, 2004, and 2005.
- 1.18. Provide the Company's distribution system capital budget documents for the years 2000, 2001, and 2002 or for the fiscal years that include part or all of each of these annual periods.
- 1.19. Provide the Company's distribution system operating and maintenance expenditure budget documents for the years 2000, 2001, and 2002 or for the fiscal years that include part or all of each of these annual periods.

- 1.20. Provide the Company's transmission system capital budget documents for the years 2000, 2001, and 2002 or for the fiscal years that include part or all of each of these annual periods.
- 1.21. Provide the Company's transmission system operating and maintenance expenditure budget documents for the years 2000, 2001, and 2002 or for the fiscal years that include part or all of each of these annual periods.
- 1.22. Provide the annual, quarterly, and monthly reports that reconcile and/or explain the reasons for variances between budgeted and actual distribution system capital expenditures for part or all of the period between January 1, 1998 and the present.
- 1.23. Provide the annual, quarterly, and monthly reports that reconcile and/or explain the reasons for variances between budgeted and actual distribution system operating and maintenance expenditures for part or all of the period between January 1, 1998 and the present.
- 1.24. Provide the annual, quarterly, and monthly reports that reconcile and/or explain the reasons for variances between budgeted and actual transmission system capital expenditures for part or all of the period between January 1, 1998 and the present.
- 1.25. Provide the annual, quarterly, and monthly reports that reconcile and/or explain the reasons for variances between budgeted and actual transmission system operating and maintenance expenditures for part or all of the period between January 1, 1998 and the present.
- 1.26. Provide copies of any distribution system planning studies prepared by or for the Company since January 1, 1998.
- 1.27. Provide copies of the Company's two most recent Business Plans.
- 1.28. Provide copies of the notes, minutes, and summaries of all meetings of senior Company management personnel held since January 1, 1998 at which distribution system

improvement programs have been discussed. Also provide copies of the documents circulated or distributed at and the materials used in presentations at each such meeting.

- 1.29. Provide copies of the notes, minutes, and summaries of all meetings of the Company's Board of Directors held since January 1, 1998 at which distribution system improvement programs have been discussed. Also provide copies of the documents circulated or distributed at and the materials used in presentations at each such meeting.
- 1.30. Reference ComEd Ex. 6.0, the Direct Testimony of David G. DeCampli. Provide copies of all assessments or evaluations of ComEd's distribution system that have been prepared by or for Mr. DeCampli since he assumed his current position as Vice President of Engineering and Technical Analysis for Exelon Energy Delivery.
- 1.31. Reference page 5, lines 86-88 of ComEd Ex. 6.0, the Direct Testimony of David G. DeCampli.
 - a. Provide a complete list of the distribution system projects included in the additional \$34 million of distribution plant that was placed in service between January 1, 2001 and March 31, 2001 and summarize the work performed as part of the project and the project cost that the Company is seeking to include in rate base.
 - b. Provide the following information for each of the projects listed in the Company's response to part a. of this data request with a cost equal to or greater than \$500,000.
 - (i) Specify the actual cost of the project.
 - (ii) Specify the reason(s) for which the project was undertaken.
 - (iii) Provide the documentation in which the need for the project was first identified or discussed.

- (iv) Provide the documentation in which the project was recommended or justified to management.
- (v) Provide the documentation in which management evaluated the need for and/or the cost of the recommended project.
- (vi) Specify the initial estimated cost of the project.
- (vii) Specify the reason(s) for any variance(s) between the initial and actual cost of the project.
- (viii) Provide the documentation which presented or recorded the reasons for any variances between the estimated and actual costs of the project.
- (ix) Provide the documentation for the project prepared as part of the evaluation process described at page 10, lines 189-193, of ComEd Ex. 6.0.
- (x) Provide the documentation for the project prepared as part of the review described at page 10, lines 201-204, of ComEd Ex. 6.0.

1.32. Reference page 5, lines 89-91 of ComEd Ex. 6.0, the Direct Testimony of David G. DeCampli.

- a. Provide a complete list of the distribution system projects included in the additional \$126 million of distribution plant that was placed in service between April 1, 2001 and the date when the Commission will issue its Order in this proceeding and specify the work performed as part of the project and the project cost that the Company is seeking to include in rate base.
- b. Provide the following information for each of the projects listed in the Company's response to part a. of this data request with a cost equal to or greater than \$500,000.
 - (i) Specify the actual cost of the project.

- (ii) Specify the reason(s) for which the project was undertaken.
- (iii) Provide the documentation in which the need for the project was first identified or discussed.
- (iv) Provide the documentation in which the project was recommended or justified to management.
- (v) Provide the documentation in which management evaluated the need for and/or the cost of the recommended project.
- (vi) Specify the initial estimated cost of the project.
- (vii) Specify the reason(s) for any variance(s) between the initial and actual cost of the project.
- (viii) Provide the documentation which presented or recorded the reasons for any variances between the estimated and actual costs of the project.
- (ix) Provide the documentation for the project prepared as part of the evaluation process described at page 10, lines 189-193, of ComEd Ex. 6.0.
- (x) Provide the documentation for the project prepared as part of the review described at page 10, lines 201-204, of ComEd Ex. 6.0.

1.33. Reference page 8 lines 163 to 168 of ComEd Ex. 6.0.

- a. Specify which of the projects included in the \$34 million of new distribution plant which went into service between January 1 and March 31, 2001 were undertaken “to upgrade, repair, or replace obsolete or unreliable facilities.”
- b. Specify which of the projects included in the \$34 million of new distribution plant which went into service between January 1 and March 31, 2001 were undertaken to replace equipment which had deteriorated or had a declining performance trend.

- c. Specify which of the projects included in the \$34 million of new distribution plant which went into service between January 1 and March 31, 2001 were undertaken to replace equipment whose associated maintenance costs were trending toward unacceptable levels.
 - d. Specify which of the projects included in the additional \$126 million in distribution plant that the Company proposes to include in rate base were undertaken “to upgrade, repair, or replace obsolete or unreliable facilities.”
 - e. Specify which of the projects included in the additional \$126 million in distribution plant that the Company proposes to include in rate base were undertaken to replace equipment whose associated maintenance costs were trending toward unacceptable levels.
 - f. List which of the projects included in the additional \$126 million in distribution plant that the Company proposes to include in rate base were undertaken to replace equipment whose associated maintenance costs were trending toward unacceptable levels.
- 1.34. Reference page 9, lines 184-186, of ComEd Ex. 6.0. Provide copies of the assessments, evaluations, and studies prepared by or for Energy Operations since January 1, 1998 that addressed the need for plant additions and assessed the need to replace or upgrade equipment that is already in service.
- 1.35. Reference page 12, lines 248-254, of ComEd Ex. 6.0 and ComEd Ex. 5.1. Provide the following information for each of the projects listed on Exhibit 5.1:
- a. Specify the actual cost of the project.
 - b. Specify the reason(s) for which the project was undertaken.
 - c. Provide the documentation in which the need for the project was first identified or discussed.

- d. Provide the documentation in which the project was recommended or justified to management.
 - e. Provide the documentation in which management evaluated the need for and/or the cost of the recommended project.
 - f. Specify the initial estimated cost of the project.
 - g. Specify the reason(s) for any variance(s) between the initial and actual cost of the project.
 - h. Provide the documentation which presented or recorded the reasons for any variances between the estimated and actual costs of the project.
 - i. Provide the documentation for the project prepared as part of the evaluation process described at page 10, lines 189-193, of ComEd Ex. 6.0.
 - j. Provide the documentation for the project prepared as part of the review described at page 10, lines 201-204, of ComEd Ex. 6.0.
- 1.36. Reference page 13, line 274, to page 14, line 293, of ComEd Ex. 6.0.
- a. Specify the total amount of new distribution plant since 1997 that the Company is seeking to include in rate base in this proceeding.
 - b. Specify the total amount of new distribution plant since 1997 that the Company is seeking to include in rate base in this proceeding that were related to “unanticipated equipment failures.”
 - c. Provide a complete list of the projects included in this new distribution plant since 1997 that were related to “unanticipated equipment failures.”
 - d. Provide the following information for each of the projects listed in the response to part c. of this data request with a cost of \$1 million or more:
 - (i) Specify the actual cost of the project.

- (ii) Specify the reason(s) for which the project was undertaken.
- (iii) Provide the documentation in which the need for the project was first identified or discussed.
- (iv) Provide the documentation in which the project was recommended or justified to management.
- (v) Provide the documentation in which management evaluated the need for and/or the cost of the recommended project.
- (vi) Specify the initial estimated cost of the project.
- (vii) Specify the reason(s) for any variance(s) between the initial and actual cost of the project.
- (viii) Provide the documentation which presented or recorded the reasons for any variances between the estimated and actual costs of the project.
- (ix) Provide the documentation for the project prepared as part of the evaluation process described at page 10, lines 189-193, of ComEd Ex. 6.0.
- (x) Provide the documentation for the project prepared as part of the review described at page 10, lines 201-204, of ComEd Ex. 6.0.

1.37. Reference page 15, lines 311-314 of ComEd Ex. 6.0. Provide the following information for the major projects listed in Exhibit 6.1.

- a. Specify the actual cost of the project.
- b. Specify the reason(s) for which the project was undertaken.
- c. Provide the documentation in which the need for the project was first identified or discussed.

- d. Provide the documentation in which the project was recommended or justified to management.
 - e. Provide the documentation in which management evaluated the need for and/or the cost of the recommended project.
 - f. Specify the initial estimated cost of the project.
 - g. Specify the reason(s) for any variance(s) between the initial and actual cost of the project.
 - h. Provide the documentation which presented or recorded the reasons for any variances between the estimated and actual costs of the project.
 - i. Provide the documentation for the project prepared as part of the evaluation process described at page 10, lines 189-193, of ComEd Ex. 6.0.
 - j. Provide the documentation for the project prepared as part of the review described at page 10, lines 201-204, of ComEd Ex. 6.0.
- 1.38. Reference page 21, lines 438-445 of ComEd Ex. 6.0. Provide the annual O&M expenditures for the years 1992 through 2000 for each of the five categories of O&M expenses that are listed. Also provide the projected expenses for each category for the years 2001 through 2005 and for the test year in this proceeding.
- 1.39. Reference page 21, lines 438-445 of ComEd Ex. 6.0. Specify the amounts paid for distribution labor costs for each of the years 1992 through 2000 for each of the five categories of O&M expenses that are listed. Also provide the projected expenses for each category for the years 2001 through 2005 and for the test year in this proceeding.
- 1.40. Reference page 21, lines 438-445 of ComEd Ex. 6.0. Specify the amounts paid for overtime distribution labor costs for each of the years 1992 through 2000 each of the five categories of O&M expenses that are listed. Also provide the projected overtime labor

expenses for each category for the years 2001 through 2005 and for the test year in this proceeding.

- 1.41. Provide all investigative and implementation reports prepared by or for the Company following the summer 1999 reliability problems. Also provide copies of the subsequent progress reports.
- 1.42. Reference page 21, lines 439-441, of ComEd Ex. 6.0.
 - a. Specify the amounts for expenses incurred in restoration of distribution services as a result of storms and adverse weather budgeted for each of the years since 1990.
 - b. Specify the actual expenses incurred in restoration of distribution services as a result of storms and adverse weather budgeted for each of the years since 1990.
 - c. Provide copies of any reports that reconcile or explain the reasons for any variances between the budgeted and actual expenses incurred in restoration of distribution services as a result of storms and adverse weather budgeted for each of the years since 1990.
 - d. Specify the amounts for expenses related to maintaining the distribution system budgeted for each of the years since 1990.
 - e. Specify the actual expenses expended related to maintaining the distribution system during each of the years since 1990.
 - f. Provide copies of any reports that reconcile or explain the reasons for any variances between the budgeted and actual expenditures related to maintaining the distribution system for each of the years since 1990.
 - g. Provide copies of the forecasted or projected expenditures for maintaining the distribution system for each of the years 2001 through 2005 and for the test year in this proceeding.