

DIRECT TESTIMONY

OF

BRUCE LARSON

ELECTRIC SECTION - ENGINEERING DEPARTMENT

ENERGY DIVISION
ILLINOIS COMMERCE COMMISSION

ILLINOIS COMMERCE COMMISSION
ON ITS OWN MOTION

-VS-

COMMONWEALTH EDISON COMPANY
DOCKET Nos. 00-0369 and 00-0394(CONSOLIDATED)

JUNE 2000

1 1. **Q. Please state your name and business address.**

2
3 A. My name is Bruce A. Larson and my business address is 527 East Capitol
4 Avenue, Springfield, Illinois.

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6 2. **Q. By whom are you employed and in what capacity?**

7 A. I am employed by the Illinois Commerce Commission as a Senior Energy Engineer
8 in the Electric Section of the Engineering Department of the Energy Division.

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10 3. **Q. Please state your educational background.**

11 A. I received a Bachelor of Science Degree in Electrical Engineering from Purdue
12 University in December 1975. I am a Registered Professional Engineer in Illinois. I
13 joined the Staff of the Illinois Commerce Commission ("Staff") most recently in
14 January 1990.

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16 4. **Q. What is the purpose of this docket?**

17 A. The Illinois Commerce Commission has opened an investigation pursuant to
18 Section 16-111(g) of the Public Utilities Act ("Act") (220 ILCS 5/16-111(g))
19 concerning Commonwealth Edison Company's ("ComEd") proposed transfer of
20 generating assets to an affiliated Exelon Genco.

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22 5. **Q. What are your duties and responsibilities associated with this docket?**

23 A. ComEd proposes to transfer its nuclear fueled generating stations, all of the
24 Purchase Power Agreements ("PPA") associated with its formerly owned fossil
25 plants, PPAs associated with purchases from Independent Power Producers,

26 ComEd's entire wholesale marketing operation and various related items to Exelon
27 Genco. Section 16-111(g)(4)(vi) of the Act provides the Commission with the
28 authority to prohibit the transaction if the transaction will render ComEd unable to
29 provide its tariffed service in a safe and reliable manner. It is my responsibility to
30 determine whether the proposed transfer of the nuclear generating stations, PPAs
31 and related assets will render ComEd unable to provide its tariffed services in a
32 safe and reliable manner.

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34 6. **Q. Please summarize the conclusions made in your direct testimony.**

35 A. I have found nothing that would lead me to conclude the proposed transaction will
36 render ComEd unable to provide its tariffed services in a safe and reliable manner.

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38 7. **Q. What method have you used to determine whether the proposed**
39 **transaction will render ComEd unable to provide its tariffed services in a**
40 **safe and reliable manner?**

41 A. To date, ComEd has operated the facilities it is transferring in a manner which
42 provides safe and reliable service to its customers. I have reviewed ComEd's
43 testimony and the terms of the Purchase Power Agreement ("PPA") to determine
44 whether the availability and operation of the transferred units and PPAs will differ in
45 any substantive way from the availability and operation of these plants under
46 management by ComEd. The PPA provides for 100% of the output of the nuclear
47 facilities through the year 2004 with an option to 2006. The transfer includes fuel
48 contracts associated with the units.

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In addition, ComEd is transferring the PPAs associated with its former fossil plants. The five PPAs are the Coal-Fired Stations PPA, the Peaking Units PPA, the Collins PPA, the State Line PPA and the Kincaid PPA. Together, the five PPAs encompass all of ComEd's fossil fuel generating stations. Also, PPAs that ComEd has made with Independent Power Producers are included in the transfer. The PPAs set forth the relationship between ComEd operations and the buyers after the sale takes place. Some of ComEd's coal contracts were included with this sale. Finally, ComEd is transferring all of its wholesale marketing assets and personnel to Exelon Genco.

8. Q. Will the PPAs substantially change how ComEd will be able to provide safe and reliable service to ComEd's customers?

A. I do not believe the PPAs will have that effect. The direct testimony of ComEd witness McDonald (ComEd Appendix E) explains how ComEd will maintain its service obligations under the PPAs. In my opinion, the following terms of the PPAs are significant to ComEd's ability to provide safe and reliable service after transfer of the nuclear units and other assets:

- Under the PPA, ComEd is entitled to an amount of generating capacity equal to its full requirements, through 2004 (PPA Sec. 3(b))
- The same management and personnel team that took over ComEd's nuclear operation will continue to operate the plants. PECO management and personnel will enhance the team.

- 72 • Under the PPA, ComEd can direct, and Exelon Genco must provide all FERC
73 ancillary services as well as black start service and meet all applicable
74 standards of Mid-American Interconnected Network, National Electric Reliability
75 Council and any Independent System Operator. (PPA Sec. 3(c)(d))
- 76 • ComEd will continue as control area operator (PPA Sec. 4(c)).
- 77 • Each year, ComEd shall deliver to Exelon Genco an Annual Load Plan which
78 sets forth ComEd's expected requirements for the year. (PPA Sec. 4(a))
79 Exelon Genco must provide ComEd's full requirements regardless of the load
80 plan. (PPA. Sec. 4(c)).
- 81 • The PPAs require Exelon Genco to schedule outages pursuant to "Prudent
82 Utility Practice", which is defined in the PPA (PPA Sec. 8)
- 83 • Exelon Genco cannot sell or assign any of the assets during the term of the
84 PPA without the consent of ComEd (PPA, Sec. 12(c)).

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86 9. **Q. Does ComEd's testimony indicate whether it will be able to provide safe**
87 **and reliable service after cancellation of the PPA?**

88 A. Yes, it does. In direct testimony (ComEd Appendix E), ComEd explains how
89 various regulatory, and contractual requirements will ensure continued reliability
90 upon cancellation of the PPAs. The main points of the testimony are as follows:

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- 92 • The terms of the PPA for full requirements run through 2004, which will give
93 ComEd adequate time to make system improvements or arrange for additional
94 generation. The partial requirement period runs through 2006.

- 95 • ComEd retains its contractual rights to the output of Kincaid and State Line
96 Stations through 2014.
- 97 • By 2005, there may be an Independent System Operator or transmission
98 company which will have responsibility for operating and maintaining the
99 regional transmission system.
- 100 • Significant new generating capacity is planned and under construction in
101 ComEd's control area. See Attachment 1 to my testimony.

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103 **10. Q. If an ISO or Transmission Company is not in place by the time the PPAs is**
104 **cancelled, do you believe this would cause ComEd's reliability to suffer?**

105 A. No. It would only mean that ComEd, not the ISO or transmission company, would
106 be responsible, as ComEd is now, for assuring safe operation of the transmission
107 system in ComEd's control area.

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109 **11. Q. In summary, do you believe the transfer of ComEd's nuclear generating**
110 **stations, fossil plant PPAs, and related assets will render ComEd unable to**
111 **provide its tariffed service in a safe and reliable manner?**

112 A. No. During the full requirements term of the PPA, ComEd's resources from the
113 PPA, combined with new capacity in ComEd's territory, is sufficient to provide
114 reliable service. After the expiration of the PPAs, an open competitive market will
115 maintain reliability at levels that customers demand. If that market does not
116 develop, then re-regulation will maintain reliability. The transfer ComEd seeks will
117 not impact the development of a competitive market.

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119 **12. Q. Has ComEd provided a Load and Resource Statement?**

120 A. Yes. It is Appendix K to the asset transfer notice. It shows that ComEd's existing
121 plants and PPA's, combined with construction of many new plants in ComEd's
122 control area, are sufficient to provide reliable service.

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124 **13. Q. Have you reviewed ComEd's supplemental testimony that responds to the**
125 **questions posed by the Chairman of the Commission?**

126 A. Yes I have. The Chairman posed two sets of questions. The first set pertained to
127 the provision of reliable service which I will address. The second set pertained to
128 finance and will be addressed by the Financial Analysis Division. The first set of
129 questions is: [w]ill Commonwealth Edison have the ability to provide a reliable
130 source of electricity to its retail customers who opt to take service under the power
131 purchase option ("PPO") required by Section 16-110(b) if the transactions
132 described in the Section 16-111(g)(vi) notice ("Notice") are completed? Will there
133 be a reliable source of electricity if there is no material change in the Neutral Fact
134 Finder ("NFF")-determined market value for customers who shift to the PPO
135 between now and Summer 2000, as well as for customers who shift to the PPO in
136 future summers (again, assuming no material change in the NFF-determined
137 market value of power and energy)?

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139 **14.Q. What is the relationship between the NFF, PPO and ComEd's ability to**
140 **provide reliable service?**

141 A. Because of perceived problems with the market value set by the NFF, many
142 customers that have opted for suppliers other than ComEd are expected to return
143 to ComEd for the summer of 2000. The mechanism used to return to ComEd is
144 called PPO assignment.

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146 15. Q. **Has ComEd addressed this problem?**

147 A. ComEd has addressed the problem. They have done so by using the forecasted
148 load for their entire service area, with no customers switching to new suppliers, as
149 the load they must serve. ComEd has supplied supplemental testimony in support
150 of its position. That testimony, together with the load and resource statement
151 requested above, demonstrate that ComEd will be able to reliably serve its load.

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153 16. Q. **Does this complete your direct testimony?**

154 A. Yes, it does.

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Units Completed *Total for 1999 1146 MW*

Elwood Energy:

By Peoples Energy and Dominion Resources. 600 MW in operation July 1999. Location: Near Joliet.

Dynegy: Rocky Road

250 MW in operation. East Dundee, "A" List location but at 138kV.

Illinois Power

176 MW at Tiltan Sub. (Old GM plant near Danville) In operation. Relieves loading of Sidney 345/138 transformer

Soyland Power

120 MW In operation. Near Aisey IL.

New Units in 2000 *Total of 3708 MW*

Elwood Energy

Additional 600 MW.

Indeck:

300 MW Rockford industrial site appears likely in 2000. Pursuing other sites that are less certain.

Dynegy: Rocky Road

Additional 100 MW. East Dundee

KN Energy: Air Permit Application Withdrawn

500 MW by 2000. Near Island Lake, IL.

ENRON

668 MW Near Manhattan, IL. (NW Will County)

668 MW Near Plano IL. (NW Kendall County)

Ameren

206 MW Near Gibson City, IL

176 MW Near Pinckneyville, IL

180 MW at Joppa plant site.

Unicom

60 MW. North Chicago, IL

Southwestern Electric Coop

45 MW. Greenville, IL

AES/CILCO

25 MW Diesels. Peoria and Lincoln, IL

Reliant Energy

340 MW Under construction. Shelby County.

340 MW Williamson County.

New Units in 2001 *Total of 1509 MW*

Cal Energy and MidAmerican Cordova Energy Center

500 MW plant. Combined cycle. Near Quad Cities nuclear plant.

AmerenCIPS

300 MW Increase Repowering Grand Tower Station

AES/CILCO Cogen

45 MW. Steam to Caterpillar

Rolls Royce

Lockport abandoned refinery. No MW figures.

Duke Energy Lee Generating Station

664 MW Near Dixon IL.

New Units in 2002 or Later *Over 10400 MW*

Reliant

840 MW. Aurora, IL

Carlton Inc.

330 - 400 MW. Zion, IL

Skygen Energy

800 MW. Zion, IL

Mission Energy

500 MW in Chicago by 2004.

Reliant

500 MW McHenry County. Intersection of Routes 146 and 47. Zoning Board made negative recommendation to County Board.

LS Power

1100 MW near Dixon, IL. Combined Cycle.

1100 MW Wildy Rd. SE Kendal County. Combined Cycle.

Ameren

Additional 354MW CT Summer 2002. Near Pinckneyville, IL

Reliant Energy and Wood River Refining:

634 MW with the refinery as a steam user. St. Louis metro east location.

Wisvest and City of Chicago

200-300 MW. Summer 2002. Southside of Chicago

First Power

Cogen Plant. 300 MW Chicago Calumet Area.

Standard Power and Light

400 MW DuPage Airport. No date.

ABB Energy Ventures Grande Prairie Energy

550 MW Combined Cycle. Bartlett, DuPage Co.

Coastal Power Fox River Fox River Station

345 MW Big Rock, Kane Co.

Constellation

175 MW West Chicago LLC, DuPage Co.

300 MW University Park LLC, Will Co.

300 MW Summer 2002. Beecher City in Shelby Co.

Power Energy Partners Crete Energy Park

393 MW Crete, Will Co.

Dominion Energy Lincoln Generation

688 MW Kincaid, Christian Co.

Kinder Morgan Aux Sable Power Plant

176 MW Morris, Grundy Co.

Entergy Power Flora Station

588 MW Flora, Clay Co.

EnerStar

400 - 500 MW. Near Tuscola, IL

PLANTS LOCATED IN WISCONSIN

Southern Company

300 MW CT. Near Fond du Lac, WI. For WEPCo. Summer 2000. On schedule.

Polsky Energy RockGen Energy

450 MW CT. Cambridge WI. (20 miles east of Madison) For Alliant West (WP&L) Summer 2001.
Experiencing siting related delays.

U.S. Generating

1,048 MW Combined Cycle. South of Kenosha WI. Merchant Plant. Summer 2002. Siting delays.