SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION PROPOSED TRANSFER OF OPERATING LICENSES FOR BRAIDWOOD STATION, UNIT 1, DOCKET NO. STN 50-456 BRAIDWOOD STATION, UNIT 2, DOCKET NO. STN 50-457 BYRON STATION, UNIT 1, DOCKET NO. STN 50-454 BYRON STATION, UNIT 2, DOCKET NO. STN 50-455 DRESDEN NUCLEAR POWER STATION, UNIT 1, DOCKET NO. 50-10 DRESDEN NUCLEAR POWER STATION, UNIT 2, DOCKET NO. 50-237 DRESDEN NUCLEAR POWER STATION, UNIT 3, DOCKET NO. 50-249 LASALLE COUNTY STATION, UNIT 1, DOCKET NO. 50-373 LASALLE COUNTY STATION, UNIT 2, DOCKET NO. 50-374 QUAD CITIES NUCLEAR POWER STATION, UNIT 1, DOCKET NO. 50-254 QUAD CITIES NUCLEAR POWER STATION, UNIT 2, DOCKET NO. 50-265 ZION NUCLEAR POWER STATION, UNIT 1, DOCKET NO. 50-295 ZION NUCLEAR POWER STATION, UNIT 2, DOCKET NO. 50-304 FROM COMMONWEALTH EDISON COMPANY TO EXELON GENERATION COMPANY, LLC AND CONFORMING AMENDMENTS

1.0 INTRODUCTION

By application dated December 20, 1999, as supplemented by submittals dated January 14, March 10, March 23, March 29, and June 16, 2000 (collectively hereafter referred to as the application unless otherwise specified), Commonwealth Edison Company (ComEd, the licensee) requested that the Nuclear Regulatory Commission (NRC) consent to the transfer of

ComEd's interests in its Facility Operating Licenses to a newly formed entity, pursuant to 10 CFR 50.80. ComEd also requested approval of conforming license amendments to reflect the transfer of the licenses.

ComEd proposes to transfer the licenses to the extent held by ComEd, for the following listed plants:

Braidwood Station, Unit 1, License No. NPF-72
Braidwood Station, Unit 2, License No. NPF-77
Byron Station, Unit 1, License No. NPF-37
Byron Station, Unit 2, License No. NPF-66
Dresden Nuclear Power Station, Unit 1, License No. DPR-2
Dresden Nuclear Power Station, Unit 2, License No. DPR-19
Dresden Nuclear Power Station, Unit 3, License No. DPR-25
LaSalle County Station, Unit 1, License No. NPF-11
LaSalle County Station, Unit 2, License No. NPF-18
Quad Cities Nuclear Power Station, Unit 1, License No. DPR-29
Quad Cities Nuclear Power Station, Unit 2, License No. DPR-30
Zion Nuclear Power Station, Unit 2, License No. DPR-39
Zion Nuclear Power Station, Unit 2, License No. DPR-48

ComEd requested that the NRC consent to the transfer of the Braidwood, Byron, Dresden, LaSalle, and Zion licenses, and the Quad Cities licenses to the extent held by ComEd, to Exelon Generation Company, LLC, (Exelon Generation Company or EGC) the new generating company to be formed in connection with the merger of PECO Energy Company (PECO) and Unicom Corporation (Unicom), ComEd's current parent. As a result of these transfers, Exelon Generation Company would be authorized to possess, use and operate Braidwood, Byron, LaSalle, Quad Cities and Dresden (Units 2 and 3) under essentially the same conditions and authorizations in the existing licenses. Exelon Generation Company would be authorized to possess and maintain, but not operate, Dresden 1 and the two Zion units, all of which have ceased operation.

On September 22, 1999, PECO and Unicom entered into a merger agreement. This merger will result in the formation of a new holding company, Exelon Corporation (Exelon), which will be registered under the Public Utility Holding Company Act of 1935. As a result of the merger, the existing utility and non-utility businesses of PECO and Unicom will be organized into subsidiaries of Exelon.

In its initial December 20, 1999, application, ComEd requested that the licenses be transferred to GENCO, an unnamed, wholly-owned direct generation subsidiary of Exelon. In the June 16, 2000, letter from ComEd, the actual name of GENCO was disclosed to be Exelon Generation Company, LLC. The June 16, 2000, letter stated that the proposed corporate structure of Exelon is being revised to include an intermediate holding company over the generation subsidiary and certain other businesses. For a variety of business, tax, and regulatory reasons, PECO and ComEd have determined that it would be advantageous to establish a separate, wholly-owned subsidiary, Exelon Ventures Company (EVC), to serve as the direct parent

company of Exelon Generation Company, such that EVC will be an intermediary holding company between Exelon Generation Company and Exelon.

Exelon Generation Company will be a Pennsylvania limited liability company, which will own, operate, and market power from nuclear, fossil-fueled and hydroelectric generating units currently owned and operated by PECO and ComEd. PECO will exist as a distributor of electricity in the same franchise area it currently occupies after the proposed merger. ComEd will exist as a distributor of electricity in its same franchise area it currently occupies, following the proposed merger. A nuclear group (Exelon Generation Company-NG) will be created within Exelon Generation Company to operate the nuclear units that Exelon Generation Company will own. Exelon Generation Company-NG will not be a separate corporation, but will be a business unit within Exelon Generation Company.

Exelon Generation Company will sell electricity to electric utility affiliates (ComEd and PECO) and will market electricity pursuant to rate tariffs accepted by the Federal Energy Regulatory Commission (FERC).

The application was filed pursuant to Section 184 of the Atomic Energy Act of 1954, as amended (AEA), and Sections 50.80 and 50.90 of Title 10 of the Code of Federal Regulations. The supplemental submittals not specifically referenced in the March 9, 2000, Federal Register notices of the request by ComEd for approval of the license transfers and conforming amendments did not expand the scope of the application as noticed in the Federal Register.

2.0 BACKGROUND

PECO

PECO is the sole owner of Peach Bottom Atomic Power Station Unit 1, a 115 Mwt experimental unit currently in SAFSTOR since 1974. (SAFSTOR is a method of decommissioning by which the nuclear facility is placed and maintained in such condition that the nuclear facility can be safely stored and subsequently decontaminated to levels that permit release for unrestricted use.) In addition, PECO holds a 42.49 percent ownership interest in Peach Bottom Atomic Power Station, Units 2 and 3, and is the licensed entity to operate or maintain all three Peach Bottom units. However, PECO may acquire an additional 7.5 percent ownership interest in each of Units 2 and 3 through a pending purchase from Conectiv, Inc.

PECO is the sole owner and operator of Limerick Generating Station, Units 1 and 2.

PECO owns 42.59 percent of Salem Generating Station, Units 1 and 2; the units are operated by Public Service Electric and Gas Company.

ComEd

ComEd is the sole owner and operator of Braidwood Station, Units 1 and 2; Byron Station, Units 1 and 2; Dresden Nuclear Power Station, Units 2 and 3; and LaSalle County Station, Units 1 and 2. ComEd is a 75 percent owner and is the operator of Quad Cities, Units 1 and 2. ComEd has three units in decommissioning status: Dresden Nuclear Power Station, Unit 1; and

Zion Nuclear Power Station, Units 1 and 2. These three units are solely owned by ComEd, which is responsible for maintaining and decommissioning these units.

According to the application, all of the nuclear units currently owned (to the extent of their ownership shares) by PECO and ComEd will be transferred to Exelon Generation Company. ¹ This safety evaluation addresses the ComEd units. The nuclear units owned by PECO are addressed in a separate evaluation.

3.0 FINANCIAL QUALIFICATIONS ANALYSIS

Pursuant to 10 CFR 50.33(f), an electric utility is not required to demonstrate its financial qualifications. Section 50.2 of 10 CFR states that an electric utility is "any entity that generates or distributes electricity and which recovers the cost of this electricity, either directly or indirectly, through rates established by the entity itself or by a separate regulatory authority." Exelon Generation Company will sell electricity to its utility affiliates and will market electricity pursuant to rate tariffs accepted by (but not established by) the Federal Energy Regulatory Commission. However, the application has not established that Exelon Generation Company will meet the definition of an electric utility as defined in 10 CFR 50.2.

While the NRC staff does not find that Exelon Generation Company qualifies as an "electric utility" under 10 CFR 50.2, the NRC staff finds, as discussed below, that Exelon Generation Company meets the financial qualifications requirements to hold the above ComEd licenses for a non-electric utility pursuant to 10 CFR 50.33(f).

Exelon Generation Company, as both a newly formed entity and non-electric utility applying to own and to operate nuclear power plants, is subject to a more detailed financial qualifications review by the NRC than an established electric utility. Specifically, Exelon Generation Company must meet the requirements of 10 CFR 50.33(f) by providing information that shows the following:

- (1) As a non-electric utility applicant for multiple operating licenses, it possesses or has reasonable assurance of obtaining the funds necessary to cover estimated operating costs for the period of the licenses. Also, it must submit estimated total annual operating costs for the first five years of facility operations and indicate the source of funds to cover these costs.
- (2) As a newly formed entity organized primarily for the purpose of operating nuclear power plants, it must show: (a) the legal and financial relationships it has or proposes to have with its stockholders or owners; (b) its financial ability to meet any contractual obligation to the entity

¹The application also states that Exelon Generation Company will acquire PECO's ownership interest in AmerGen Energy Company, LLC (AmerGen). The NRC is separately reviewing the license transfers for the nuclear power plants owned and operated by AmerGen. See application dated February 28, 2000, from G. Rainey, AmerGen.

which they have incurred or propose to incur; and (c) any information considered necessary by the Commission to enable it to determine the applicant's financial qualification.

Also, 10 CFR 50.33(k)(1) requires that Exelon Generation Company must provide information as described in 10 CFR 50.75 indicating there is reasonable assurance that funds will be available to decommission the facilities. Exelon Generation Company's proposals for decommissioning funding assurances are discussed in Section 4.0 of this Safety Evaluation.

ComEd submitted a Projected Income Statement for Exelon Generation Company operations from January 1, 2001, through December 31, 2005, which is included in Enclosures 7 and 7P of the December 20, 1999, submittal. Enclosure 7P is separately bound in a proprietary Addendum to the December 20, 1999, submittal. ComEd has requested that Enclosure 7P be withheld from public disclosure pursuant to 10 CFR 2.790, since the Enclosure 7P contains confidential commercial and financial information. The following projected prices and capacity factors represent nuclear operations only.

Exelon Generation Company PROJECTED MARKET PRICES FOR MWhr and CAPACITY FACTORS

Mid-Atlantic Region (PECO)

	<u>2001</u>	2002	2003	2004	2005
\$/MWhr Capacity Factor	[] []	[]	[]	[]	[] []
	N	lid-West Regio	on (ComEd)		
	2001	2002	2003	2004	2005
\$/MWhr Capacity Factor	[] []	[]	[] []	[] []	[]

Exelon Generation Company PROJECTED INCOME STATEMENT (\$000's)

	<u>2001</u>	2002	2003	2004	2005	
Revenues:						
Operations	[]	[]	[]	[]	[]	
Decommissioning	î î	į į	į į	î î	î î	
Other Income	Î Î	į į	į į	į į	Î Î	
Total:	ĪĪ	i i	ĪĪ	ĪĪ	īī	

Exelon Generation Company PROJECTED INCOME STATEMENT (\$000's)

	<u>20</u>	01	20	02	200	3	20	04		<u> 2005</u>
Expenses:										
Purchased Power	[]	[]	[]	[]		[]
Fuel	[Ī	Ī	Ī	Ī	j	Ī	j		[]
O & M	[Ī	Ī	j	Ī	j	Ī	j		[]
D & A	[j i	Ī	j	[j	Ī	j		[]
Administrative []	[]	[]	[]	[]	
Decommissioning					[[_			
Total:	[]	[]	[]	[]		[]
Income before Taxes:	[]	[]	[]	[]		[]
Income Taxes:]	[_]	[]	[]		Ш
Net Income (Loss):	[]	[]	[]	[]		[]

The Exelon Generation Company Projected Income Statement provides the estimated total annual operating costs for the facilities to be owned by Exelon Generation Company in a manner consistent with the NRC Standard Review Plan on Power Reactor Licensee Financial Qualifications and Decommissioning Funding Assurance (NUREG-1557, Revision 1). In addition to the nuclear plants, the Statement includes about 5,000 megawatts of capacity from non-nuclear plants. The source of funds to cover the operating expenses will be the operating revenues. The Statement shows that the anticipated revenues from sales of capacity and energy by Exelon Generation Company provide reasonable assurance of adequate funds to meet Exelon Generation Company's ongoing operating expenses. The projected revenues from the sale of electricity from the nuclear units alone are expected to provide sufficient income to cover the total operating costs of Exelon Generation Company's nuclear units.

The staff found that Exelon Generation Company's projections of operating expenses are consistent with the aggregate history of the units involved in the merger. However, the staff believes that one line item required more extensive review: projected revenues from 2001 to 2005 of the Statement. Projected revenues are the product of expected megawatt-hour sales and of Exelon Generation Company's market price assumptions as stated in the supporting schedules of the Statement. Projected revenues and net income are adequate to cover

expected expenses and provide Exelon Generation Company's parent company with favorable returns on its expected investment in Exelon Generation Company. However, in a competitive market, prices, revenue and net income levels could be significantly lower than anticipated by Exelon Generation Company during some portion(s) of the 5-year projection period and could result in less funding available for nuclear operations.

The staff's independent analysis focused on the sensitivity of the Exelon Generation Company revenue forecasts to lower market prices for the purpose of establishing a projected market price "floor" below which Exelon Generation Company would begin to have difficulty covering its nuclear operating expenses by relying on revenues. This was analyzed to determine the average annual simple growth rate for the market price which would produce virtually zero net income (or break even level) over the period from 2001 to 2005, and the growth rate was compared to the higher average annual growth rate in the market prices in Exelon Generation Company's forecast. If Exelon Generation Company was to experience this lower (or floor) level of prices for an extended period, Exelon Generation Company or its owner might decide to continue operating without profits or, at a certain point, to cease some or all nuclear operations permanently.

The base market price in the Exelon Generation Company forecast is approximately [] per megawatt-hour in the year 2001, which increases at a simple 5-year growth rate averaging about [] percent in the Mid-Atlantic Region (PECO territory). The base market price in the Exelon Generation Company forecast is approximately [] per megawatt-hour in the year 2001, which increases at a simple 5-year growth rate averaging about [] percent in the Mid-West Region (ComEd territory). [

1

The staff assessed the likelihood that these various growth rates may be for the forecast period 2001-2005. Forecasts of electric rates in competitive markets are subject to many factors that make such predictions speculative; however, the reasonableness of various growth rates may be assessed by considering various factors that would provide an indication of future electricity prices. For example, recent trends in electricity prices can provide inferences on price performance in the more competitive environment expected in the electric power industry.

Exelon Generation Company expects to be selling power primarily at market-based prices starting in the year 2001, and these prices will be a mix of competitively determined retail and wholesale prices. Also, trends in retail and wholesale electric prices vary from one region to another, so Exelon Generation Company's prices within its two market areas may not follow national trends. The North American Electric Reliability Council (NERC) projects that capacity margins will somewhat increase in the Mid-American Interconnected Network, Inc. (MAIN) from 1998 to 2007, the region where Exelon Generation Company's Mid-West operations will take place. (From NERC's Reliability Assessment 1998-2007, October 1998, page 11.) This has been incorporated into the decreasing forecast prices projected by Exelon Generation Company. However, capacity margins from 1998 to 2007 will be declining in the areas surrounding MAIN [such as the East Central Area Reliability Coordination Agreement (ECAR), the Southeast Electric Reliability Council (SERC), and the Mid-Continent Area Power Pool (MAPP)], such that there would be a potential for sales from MAIN to adjoining regions.

NERC projects that capacity margins will decrease in the Mid-Atlantic Area Council (MAAC) area from 17.1 percent to 5.1 percent during the 1998-2007 time frame. This would bolster Exelon Generation Company's forecasted market price for electricity in the MAAC region.

After reviewing several forecasts of United States electricity prices and other relative information (such as forecasts of regional capacity margins), the staff concludes that attempting to forecast the growth rate, or even the direction of change, for market-based prices in the two Exelon Generation Company market areas is too speculative to be useful for contingency analyses. Nevertheless, the staff concludes from its independent analysis that, even if prices for Exelon Generation Company power were to increase at an average annual rate lower than that anticipated by Exelon Generation Company that would not preclude Exelon Generation Company from operating and maintaining its nuclear fleet in a manner that would protect the public health and safety.

As stated earlier, the projected revenues from the sale of electricity from the nuclear units alone are expected to provide sufficient income to cover the total operating costs of Exelon Generation Company's nuclear units. In addition, there will be additional net income available from sales of electricity from 5000 MWe of capacity in the fossil-fueled and hydroelectric generating stations to be operated by Exelon Generation Company, as well as net income from power marketing and other business operations.

The staff notes that Exelon Generation Company's projected assets and revenues are sufficient to cover its share of costs that might be associated with simultaneous six-month shutdowns of several of the nuclear units it will own, based on the Exelon Generation Company Projected Income Statement and Projected Opening Balance Sheet, provided in Enclosure 7P (proprietary version), which shows that Exelon Generation Company will have total assets exceeding [], and annual revenues of approximately [].

The staff further notes that, according to the application, Exelon Generation Company is expected to have an investment-grade bond rating, which will enable it to raise additional funds as necessary.

The staff has concluded that the projected income statement shows that the anticipated revenues from sales of capacity and energy from Exelon Generation Company's fleet provides reasonable assurance of an adequate source of funds to meet Exelon Generation Company's ongoing operating expenses for all of the facilities. This evaluation is based on the assumption, made by the applicants, that all of the PECO and ComEd licenses will be transferred to Exelon Generation Company simultaneously. The staff has not reviewed Exelon Generation Company's financial qualifications to own and operate a subset of the group of reactors or any single reactor proposed in the application to be transferred to Exelon Generation Company since revenue projections are based on projected revenues from the group as a whole and have not been broken down by unit. Therefore, the staff will condition the transfer order upon all of the units requested to be transferred in the applications dated December 20, 1999, from PECO and ComEd being transferred to Exelon Generation Company simultaneously.

Based on the foregoing analysis, Exelon Generation Company has shown that it will possess, or will have reasonable assurance of obtaining, the funds necessary to cover the estimated

operating costs for the period of the facility licenses in accordance with 10 CFR 50.33(f)(2). However, in view of the NRC's concern that holding company structures can lead to a diminution of assets necessary for the safe operation and decommissioning of a licensee's nuclear power plant, the NRC practice has been to condition license transfer approvals involving holding company structures upon a requirement that the licensee not transfer significant assets from the licensee to an affiliate without first notifying the NRC. This requirement assists the NRC in assuring that a licensee will continue to maintain adequate resources to contribute to the safe operation and decommissioning of its facility. Thus, the following is to be made a condition of approval in the relevant transfer orders as well as a conforming license condition:

Exelon Generation Company shall provide to the Director of the Office of Nuclear Reactor Regulation a copy of any application, at the time it is filed, to transfer (excluding grants of security interests or liens) from Exelon Generation Company to its proposed direct or indirect parent, or to any other affiliated company, facilities for the production, transmission, or distribution of electric energy having a depreciated book value exceeding ten percent (10%) of Exelon Generation Company's consolidated net utility plant, as recorded on Exelon Generation Company's books of account.

Based on the above, the NRC finds that Exelon Generation Company, as a newly-formed entity, has provided the information required by 10 CFR 50.33(f), and has demonstrated that it is financially qualified to hold the licenses for the reactor units being transferred. As stated above, this finding is conditioned upon all of the units described in the application to be transferred to Exelon Generation Company (which description included both ComEd and PECO units) becoming owned by Exelon Generation Company contemporaneously such that the Projected Income Statement discussed earlier remains valid. This condition shall be included in orders approving the transfers.

4.0 DECOMMISSIONING FUNDING

The NRC has determined that the requirements to provide reasonable assurance of decommissioning funding and provision of an adequate amount of decommissioning funding are necessary to ensure the adequate protection of public health and safety.

10 CFR 50.33(k) requires that an application for an operating license for a utilization facility contain information indicating how reasonable assurance will be provided that funds will be available to decommission the facility.

The use of an external sinking fund is an allowable method to provide financial assurance for decommissioning funding. Specifically, 10 CFR 50.75(e)(1)(ii)(B) provides that an external sinking fund may be the exclusive mechanism relied upon for providing financial assurance for decommissioning for those licensees that are no longer rate regulated, if the licensees' source of revenue for the external sinking fund is a non-bypassable charge, and if the total amount will provide funds estimated to be needed for decommissioning. As set forth in 10 CFR 50.2, non-bypassable charges are defined as:

. . . those charges imposed over an established time period by a Government authority that affected persons or entities are required to pay to cover costs associated with the decommissioning of a nuclear power plant. Such charges include, but are not limited to, wire charges, stranded cost charges, transition charges, exit fees, other similar charges, or the securitized proceeds of a revenue stream.

In accordance with 10 CFR 50.75(b), Exelon Generation Company will maintain financial assurance for decommissioning funding that meets the requirements of 10 CFR 50.75(e), by maintaining external sinking funds for each of the units.

DECOMMISSIONING FUNDING ASSURANCE IN ILLINOIS

ComEd, as a rate-regulated electric utility, currently maintains Nuclear Decommissioning Trusts for its Braidwood Station, Byron Station, Dresden Nuclear Power Station, LaSalle County Station, Quad Cities Nuclear Power Station, and Zion Nuclear Power Station units. The Nuclear Decommissioning Trusts utilize the external sinking fund financial assurance mechanism provided in 10 CFR 50.75(e)(1)(ii). ComEd currently recovers decommissioning costs through a special tariff authorized by Section 9-201.5 (220 ILCS 5/9-201.5) and 16-114 (220 ILCS 5/16 -114) of the Illinois Public Utilities Act, and then makes periodic deposits to the funds over the generating life of the units. On March 31, 1999, ComEd submitted information to the NRC regarding the status of the Nuclear Decommissioning Trusts.

Following the proposed merger and transfer of the licenses, the nuclear decommissioning obligation for the Illinois plants will be assumed by Exelon Generation Company. The existing Nuclear Decommissioning Trusts will be dissolved pursuant to 220 ILCS 5/8 - 508.1 and the funds will be transferred to Exelon Generation Company. Exelon Generation Company as the new licensee will establish new individual Nuclear Decommissioning Trusts for each of the plants and deposit the monies received from ComEd into the appropriate trusts. Although ComEd will not be an NRC licensee, ComEd will, pursuant to 220 ILCS 5/16 - 114, retain an obligation to collect going-forward decommissioning fund contributions through the Illinois tariff mechanism, and, as a matter of contract and as necessary to fund decommissioning, will pay the amounts collected to Exelon Generation Company for deposit in the new Nuclear Decommissioning Trusts. Through these amounts paid, Exelon Generation Company will have as its source of revenues for the Nuclear Decommissioning Trusts, a "non-bypassable" charge within the meaning of 10 CFR 50.75(e)(1)(ii)(B). As evaluated in the section "Decommissioning Calculation" below, the staff concludes that this mechanism will provide sufficient assurance of decommissioning funding pursuant to 10 CFR 50.75.

DECOMMISSIONING CALCULATION

The staff verified the calculations provided by the applicant in its submittal dated March 29, 2000, in accordance with 10 CFR 50.75(f)(1), and agrees that the decommissioning trust funds associated with the ComEd ownership shares of the units referenced are funded, as of December 31, 1999, to the levels required by NRC regulations. Based on the discussion above describing the transfer of the existing funds to Exelon Generation Company decommissioning trusts, the staff concludes that Exelon Generation Company has complied with the

requirements of 10 CFR 50.75(b) with respect to the amount of decommissioning funding that it must provide for the purpose of approval of the subject license transfers. With respect to Quad Cities, the staff is basing its conclusions on Exelon Generation Company acquiring a 75 percent ownership interest in Quad Cities, Units 1 and 2. However, to ensure that the transfer of decommissioning funds will occur as stated in the application, the staff concludes the orders approving the transfer must contain the following condition which shall also be incorporated as a conforming license condition as appropriate for each license:

(1) ComEd shall transfer to Exelon Generation Company on the closing date of the license transfers the respective ComEd decommissioning trust funds in the following minimum amounts:

Braidwood Station, Unit 1	\$154,273,345
Braidwood Station, Unit 2	\$154,448,967
Byron Station, Unit 1	\$169,659,917
Byron Station, Unit 2	\$156,560,489
Dresden Nuclear Power Station, Unit 1	\$92,836,082
Dresden Nuclear Power Station, Unit 2	\$288,233,336
Dresden Nuclear Power Station, Unit 3	\$262,231,719
LaSalle County Station, Unit 1	\$226,262,522
LaSalle County Station, Unit 2	\$221,885,059
Quad Cities Nuclear Power Station, Unit 1	\$192,149,504
Quad Cities Nuclear Power Station, Unit 2	\$193,209,439
Zion Nuclear Power Station, Unit 1	\$212,081,612
Zion Nuclear Power Station, Unit 2	\$222,708,468

In addition, in light of Exelon Generation Company being an unregulated entity not subject to traditional state controls on decommissioning funding, the following conditions must also be incorporated as conditions to approving the transfer of the licenses and also be incorporated into the licenses as conforming conditions essentially as follows:

- (1) The decommissioning trust agreements for each respective unit being transferred to Exelon Generation Company, at the time the transfers are effected and thereafter, are subject to the following:
 - (a) The decommissioning trust agreement must be in a form acceptable to the NRC.
 - (b) With respect to decommissioning trust funds, investments in the securities or other obligations of Exelon Corporation or affiliates thereof, or their successors or assigns, are prohibited. Except for investments tied to market indexes or other non-nuclear sector mutual funds, investments in any entity owning one or more nuclear power plants are prohibited.
 - (c) The decommissioning trust agreements must provide that no disbursements or payments from the trust shall be made by the

trustee until the trustee has first given the Director of the Office of Nuclear Reactor Regulation 30 days prior written notice of the payment. The decommissioning trust agreements shall further provide that no disbursements or payments from the trusts shall be made if the trustee receives prior written notice of objection from the NRC.

- (d) The decommissioning trust agreements must provide that the agreements cannot be modified in any material respect without 30 days prior written notification to the Director of the Office of Nuclear Reactor Regulation.
- (e) The appropriate section of the trust agreements shall state that the trustee, investment advisor, or anyone else directing the investments made in the trust shall adhere to a "prudent investor" standard, as specified in 18 CFR 35.32(a)(3) of the Federal Energy Regulatory Commission's regulations.
- (2) Exelon Generation Company shall take all necessary steps to ensure that the decommissioning trusts are maintained in accordance with the application for approval of the license transfers to Exelon Generation Company and the requirements of the orders approving the transfers, and consistent with the safety evaluation supporting the orders.

In consideration of the foregoing, the staff finds the proposed decommissioning funding arrangements acceptable.

5.0 ANTITRUST REVIEW

The Atomic Energy Act does not require or authorize antitrust reviews of post-operating license transfer applications. <u>Kansas Gas and Electric Co., et al.</u> (Wolf Creek Generating Station, Unit 1), CLI-99-19, 49 NRC 441 (1999). Therefore, since the transfer application postdates the issuance of the operating licenses for Braidwood Station, Units 1 and 2; Byron Station, Units 1 and 2; Dresden Nuclear Power Station, Units 1, 2 and 3; LaSalle County Station, Units 1 and 2; Quad Cities Nuclear Power Station, Units 1 and 2, and Zion Nuclear Power Station, Units 1 and 2, no antitrust review is required or authorized.

6.0 TECHNICAL QUALIFICATIONS

6.1 Basis and Guidance for NRC Evaluation

The staff used the following regulations and guidance in making its evaluation: 10 CFR 50.40(b), "Common Standards"; 10 CFR 50.80, "Transfer of licenses"; Standard Review Plan (SRP) NUREG-0800, Section 13.1.1, "Management and Technical Support Organization"; SRP, Sections 13.1.2-13.1.3, "Operating Organizations"; and ANSI N18.1-1971, "Selection and Training of Nuclear Power Plant Personnel"; as endorsed by Regulatory Guide 1.8, Revision 2, "Qualification and Training of Personnel for Nuclear Power Plants," April 1987.

The overall purpose of this review is to ensure that Exelon Generation Company's organization for management, technical support, and operations is sufficient for safe plant operation.

6.2 Evaluation: Management and Technical Support Organization

In its application, ComEd stated that a Nuclear Group (NG) (which will not be a separate corporate entity) will be created within Exelon Generation Company to operate the nuclear units.² Organization charts provided in the application depict the various reporting and communication relationships among the principal Exelon Generation Company corporate level executive officers and managers involved in the management of the nuclear facilities. Within the NG, individual sites will be managed by site vice presidents who will report through a regional vice president to the head of the NG.

The licensee stated that the Chief Nuclear Officer (CNO) will be head of the NG and will have the necessary authority and full responsibility for the safe operation of the nuclear facilities operated by Exelon Generation Company. The application indicated that the CNO will not have any non-nuclear ancillary responsibilities. The licensee further stated that the NG management will establish standards and programs, provide support, and exercise oversight to maintain safe and reliable operation of the nuclear units. As described in the application, personnel to be assigned responsibility within the NG corporate management structure exhibit sufficient experience to implement their responsibilities for technical support. Where specific individuals have not yet been named, the licensee has stated that the positions will be filled by individuals who possess senior nuclear management experience.

In the application, the licensee described the organization to be used to provide technical support to the plants under the responsibility of Exelon Generation Company. The licensee stated that the existing technical support organizations for all plants under the responsibility of the NG are located at the plant sites or at nuclear support offices located in Wayne, PA, Downers Grove, IL, and other locations. In its March 23, 2000, submittal, the licensee identified a corporate-level change to the proposed NG Organizational Structure contained in Enclosure 5 of the initial application. The licensee noted that the position of Corporate Nuclear Support Vice President would be replaced and the responsibilities assigned to two new corporate-level positions not previously identified. The new positions are Nuclear Services Vice President and Nuclear Technical Support Vice President. The reporting relationship of those positions to the NG President and CNO will be the same reporting relationship previously proposed for the position of Corporate Nuclear Support Vice President.

The licensee stated that after the proposed transfer, the on-site support organizations will be transferred to Exelon Generation Company and will continue to perform the technical support functions for their respective stations on behalf of Exelon Generation Company. Further, the licensee has stated that the on-site management and technical support personnel will continue

² References to "NG" and Exelon Generation Company are used interchangeably in this discussion. However, Exelon Generation Company will be the legal entity responsible for operating the facilities, and the staff's findings herein are based on NG being an integral part of Exelon Generation Company.

to conform to pertinent provisions of the Updated Final Safety Analysis Report (UFSAR), Technical Specifications, or Defueled Technical Specifications at each plant, as applicable.

The application indicates that the functions, responsibilities, and reporting relationships of the off-site organizations to the sites will remain clear and unambiguous. The licensee has also stated that supplemental support for each site will be available from the corporate level Nuclear Services and Nuclear Technical Support organizations. The corporate level staff will be located at the NG headquarters and also at regional offices to ensure the timeliness of support. Based on the statements made by the licensee, the staff has concluded "Support Functions" identified on the organizational chart, shown in Enclosure 5 of the December 20, 1999, submittal as amended by the information provided in the submittal of March 23, 2000, includes off-site corporate-level technical support. Therefore, the organizational charts supporting the proposed transfer indicate that, in addition to access to support resources through the corporate-level Nuclear Technical Support organization, the regional vice presidents will also have direct control of corporate-level support functions.

The licensee has described the proposed Exelon Generation Company organization for managing and its means for providing technical support to the staff at the nuclear facilities involved in the license transfer. The corporate level management and technical support structure will be free of ambiguous assignments of primary responsibility. The breadth and level of experience and availability of personnel will be sufficient to implement the responsibility for technical support for operation of the nuclear facilities. The staff has concluded that Exelon Generation Company will meet the criteria described in SRP Section 13.1.1, "Management and Technical Support Organization," will have an acceptable organization and adequate resources to provide off-site technical support for the operation of the facilities under both normal and off-normal conditions and, therefore, the management and technical support organizations will be acceptable for all of the facilities covered by the application.

6.3 Operating Organization

In the application, the licensee stated that nuclear employees located on-site at the various nuclear facilities will become employees of Exelon Generation Company and will continue to support nuclear operations at the various sites. The application further stated that the existing on-site organizational structures, assignments of primary responsibilities, and reporting chains are not being changed as a result of the proposed license transfers.

The licensee also stated that the technical qualifications of Exelon Generation Company to carry out its licensed responsibilities will meet or exceed the technical qualifications of the licensee's current organization as described in the UFSAR for each of the facilities involved. The licensee expects that additional experienced personnel may join the site organizations during the period leading up to and after the license transfer. Prior to the license transfers, decisions regarding such changes will be made by the current licensee. Following the license transfer, such decisions will be made by Exelon Generation Company. The licensee has stated that any new personnel will meet all of the existing qualification requirements in accordance with the licenses and technical specifications for the individual facilities.

The initial operating organizations for all of the affected facilities were determined to be acceptable by the initial licensing reviews or any subsequent reviews. Subsequent safety-related changes to the operating organizations were required to have been evaluated with an appropriate methodology. The staff is aware of no deficiencies in any of the subject operating organizations. Based on the retention of the existing on-site nuclear organizations and essentially all existing employees, the staff concludes that the organizational structure at each site will continue to meet the criteria described in SRP Section 13.1.2-13.1.3, "Operating Organization." The operating organizations, therefore, will continue to provide for the integrated management of operation, maintenance, and decommissioning activities at: Braidwood, Units 1 and 2; Byron, Units 1 and 2; Dresden, Units 1, 2 and 3; LaSalle, Units 1 and 2; Quad Cites, Units 1 and 2; and Zion, Units 1 and 2, and, therefore, are acceptable.

6.4 Conclusions

The licensee has described the proposed organization and personnel qualifications for the management of, and means for providing technical support to, the plant staff for the operation of the nuclear facilities under the responsibility of the Exelon Generation Company after the transfer of the Facility Operating Licenses from ComEd to Exelon Generation Company. The staff has reviewed Exelon Generation Company's proposed organization for managing and its means for providing technical support to the various facilities after the license transfers and concludes that Exelon Generation Company will have an acceptable organization and adequate resources to provide off-site technical support for the operation of the Exelon Generation Company nuclear facilities under both normal and off-normal conditions. The licensee has also described the assignment of plant operating responsibilities, the reporting chains, and the qualification requirements for members of the plant staff. The staff concludes that the proposed operating organizations meet the relevant requirements of 10 CFR 50.40(b) and 10 CFR 50.80 and, therefore, are acceptable. Accordingly, the staff finds that Exelon Generation Company will be technically qualified to hold the licenses proposed to be transferred.

7.0 FOREIGN OWNERSHIP, CONTROL, OR DOMINATION

Sections 103d and 104d of the Atomic Energy Act prohibit the Commission from issuing a license for a nuclear power plant to "any corporation or other entity if the Commission knows or has reason to believe it is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government." The Commission's regulations at 10 CFR 50.38 contain virtually identical language to implement this prohibition.

In its application, ComEd stated that Exelon Corporation (Exelon) will be a U.S. corporation formed under the laws of Pennsylvania. Exelon Corporation's headquarters and principal place of business will be located in Chicago, Illinois. Exelon's stock will initially be held by the current shareholders of PECO and Unicom, and will continue to be widely held and traded on the New York Stock Exchange.

In its supplement dated June 16, 2000, ComEd stated that Exelon Generation Company will be wholly-owned by Exelon Ventures Company (EVC), a wholly-owned subsidiary of Exelon Corporation. The licensee stated that, "EVC will be a Pennsylvania corporation... The directors and officers of EVC will all be citizens of the United States and will be drawn from the directors

and senior officers of Exelon Corporation. EVC will not be owned, dominated, or controlled by foreign interests."

In its application, ComEd stated that Exelon Generation Company will be a U.S. corporation that will be organized under the laws of the Commonwealth of Pennsylvania. Exelon Generation Company's principal place of business will be in the Commonwealth of Pennsylvania. As a limited liability company, Exelon Generation Company will have a management committee as opposed to a Board of Directors. The Chairman of the management committee and the other members of the management committee will be drawn from the current senior management of ComEd, PECO, and Unicom. The application states that Exelon Generation Company will not be owned, dominated, or controlled by foreign interests. The NRC staff does not know or have reason to believe otherwise.

8.0 NUCLEAR INSURANCE AND INDEMNITY

The provisions of the Price-Anderson Act (Section 170 of the AEA) and the Commission's regulations at 10 CFR Part 140 require that Exelon Generation Company be added to the current indemnity agreement for Braidwood, Units 1 and 2, Byron, Units 1 and 2, Dresden, Units 1, 2, and 3, LaSalle, Units 1 and 2, Quad Cities, Units 1 and 2, and Zion, Units 1 and 2. In accordance with the Price-Anderson Act, Exelon Generation Company will also be required to provide primary insurance and participate in the secondary retrospective insurance pool. Exelon Generation Company will also be required to maintain property insurance as specified in 10 CFR 50.54(w). The information provided in the application concerning financial qualifications demonstrates that Exelon Generation Company will be able to pay a maximum aggregate annual assessment of \$10 million per unit annual insurance premium, in accordance with 10 CFR 140.21(e)-(f).

Consistent with NRC practice, the staff will require Exelon Generation Company to provide satisfactory documentary evidence that Exelon Generation Company has obtained the appropriate amount of insurance required of licensees under 10 CFR Part 140 of the Commission's regulations, prior to the issuance of the amended licenses reflecting Exelon Generation Company as the operating licensee and possessor of the facilities. Because the issuance of the amended licenses is directly tied to the consummation of the proposed transfers, the orders approving the transfers will be conditioned essentially as follows:

Before the completion of the transfer of the facilities to it, Exelon Generation Company shall provide the Director, Office of Nuclear Reactor Regulation, satisfactory documentary evidence that it has obtained the appropriate amount of insurance required of licensees under 10 CFR Part 140 of the Commission's regulations.

9.0 CONFORMING AMENDMENT

Introduction

ComEd has requested approval of proposed conforming amendments to the operating licenses for Braidwood, Byron, Dresden, LaSalle, Quad Cities, and Zion. The requested changes simply

replace references to ComEd in the operating licenses with references to Exelon Generation Company or to "the licensee" to reflect the proposed license transfers. In addition, a footnote is added to each license to reference the approval of the transfer of the license. Also, the LaSalle Technical Specifications will be changed to replace a reference from ComEd to Exelon Generation Company. The Braidwood and Byron Technical Specifications will be revised to replace the generic position title "A corporate officer" with the specific position title "The Chief Nuclear Officer" to reflect the new licensee organization. No physical or operating changes to the facilities are requested. Supplemental information received that was not the subject of the initial Federal Register notices did not affect the applicability of the Commission's generic no significant hazards consideration determination set forth in 10 CFR 2.1315.

Discussion

The changes to be made to the operating licenses and Technical Specifications do no more than accurately reflect the approved transfer actions, which are subject to certain conditions set forth in the orders approving the transfers, and that were identified and discussed earlier in this safety evaluation. The amendments involve no safety questions and are administrative in nature. The staff inserted specific references to "Exelon Generation Company, LLC" in place of "the licensee" as proposed by ComEd in certain sections of the licenses, for additional clarity. Accordingly, the proposed amendments are acceptable.

State Consultation

In accordance with the Commission's regulations, the Illinois State official was notified of the proposed issuance of the amendments. The State official had no comments.

Conclusion With Respect to the Conforming Amendments

The Commission has concluded, based on the considerations discussed above, that (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

10.0 ENVIRONMENTAL CONSIDERATION

The subject application is for approval of a transfer of operating licenses issued by the NRC and approval of conforming amendments. Accordingly, the actions involved meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(21). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with approval of the application.

11.0 CONCLUSION

In view of the foregoing discussion, the NRC staff concludes that Exelon Generation Company is financially and technically qualified to own, operate, and decommission Braidwood, Units 1

and 2; Byron, Units 1 and 2; LaSalle, Units 1 and 2; Dresden, Units 2 and 3; and Quad Cities, Units 1 and 2 (with respect to ownership, to the extent now owned by ComEd), and to own and decommission Dresden, Unit 1, and Zion, Units 1 and 2. Also, the staff concludes the transfer would involve no problematic antitrust or foreign ownership considerations.

Thus, the staff has determined that Exelon Generation Company is qualified to be the holder of the licenses as now held by ComEd for the above plants, and that the transfers of the Licenses to Exelon Generation Company is otherwise consistent with applicable provisions of law, regulations, and orders issued by the Commission pursuant thereto, with the conditions described elsewhere in this safety evaluation.

Principal Contributor: M. A. Dusaniwskyj

Dated: August 3, 2000