



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

October 2, 2009

Mr. Charles G. Pardee
President and Chief Nuclear Officer
Exelon Nuclear
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: BRAIDWOOD STATION, UNITS 1 AND 2; BYRON STATION, UNIT NOS. 1 AND 2; CLINTON POWER STATION, UNIT NO. 1; LASALLE COUNTY STATION, UNITS 1 AND 2; - REQUEST FOR ADDITIONAL INFORMATION RE: DECOMMISSIONING FINANCIAL ASSURANCE PLANS (TAC NOS. ME0489, ME0490, ME0496, ME0497, ME0503, ME0531, AND ME0532)

Dear Mr. Pardee

By letter dated July 29, 2009 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML092220037), Exelon Generation Company, LLC (EGC) submitted its Decommissioning Funding Assurance Plan for Braidwood Station (Braidwood), Units 1 and 2, Byron Station (Byron), Units 1 and 2, Clinton Power Station, Unit No. 1 (Clinton), and LaSalle County Station (LaSalle), Units 1 and 2. The plan was requested by the Nuclear Regulatory Commission (NRC) staff following its review of the EGC's March 31, 2009, letter, (ADAMS Accession No. ML090900463), "Report on Status of Decommissioning Funding for Reactors."

The NRC staff is reviewing your submittal and has determined that additional information is required to complete the review. The specific information requested is addressed in the enclosure to this letter. During a discussion with your staff on September 28, 2009, it was agreed that you would provide a response 30 days from the date of this letter.

The NRC staff had transmitted draft questions to EGC on September 22, 2009 (ADAMS Accession No. ML092730426). Based on the discussions during the conference call, the licensee indicated that the responses to Question 1 for Clinton, and LaSalle were available in letters from EGC to the NRC dated August 27, 2009 (ADAMS Accession No. ML092400249 for Clinton, and ML092400244 for LaSalle Units 1 and 2). The NRC staff reviewed the August 27, 2009, letters and agreed that the information satisfied the NRC staff and that Question 1 could be revised to remove the portions pertaining to Clinton and LaSalle.

The NRC staff considers that timely responses to requests for additional information help ensure sufficient time is available for staff review and contribute toward the NRC's goal of

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efficient and effective use of staff resources. If circumstances result in the need to revise the requested response date, please contact me at (301) 415-1055.

Sincerely,

A handwritten signature in black ink, appearing to read "Chris Gratton". The signature is fluid and cursive, with a long horizontal stroke at the end.

Christopher Gratton, Senior Project Manager
Plant Licensing Branch III-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. STN 50-456, STN 50-457,
STN 50-454, STN 50-455, 50-461,
50-373, and 50-374

Enclosure:
Request for Additional Information

cc w/encl: Distribution via Listserv

DRAFT REQUEST FOR ADDITIONAL INFORMATION
BY THE OFFICE OF NUCLEAR REACTOR REGULATION
DECOMMISSIONING FINANCIAL ASSURANCE PLANS
2009 BIENNIAL DECOMMISSIONING REVIEW
BRAIDWOOD STATION, UNITS 1 AND 2; DOCKET NOS. 50-456 AND 50-457,
BYRON STATION UNITS 1 AND 2; DOCKET NOS. 50-454 AND 50-455,
CLINTON POWER STATION; DOCKET NO. 50-461 AND LASALLE COUNTY
STATION, UNITS 1 AND 2; DOCKET NOS. 50-373 AND 50-374

By letter dated July 29, 2009 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML092220037), Exelon Generation Company, LLC (EGC) submitted its Decommissioning Funding Assurance Plan (DFAP) for Braidwood Station (Braidwood), Units 1 and 2, Byron Station (Byron), Units 1 and 2, Clinton Power Station, Unit No. 1 (Clinton), and LaSalle County Station (LaSalle), Units 1 and 2. In order for the Nuclear Regulatory Commission (NRC) staff to complete its review of the DFAP, it requires the following additional information:

Question 1

On July 29, 2009, EGC submitted a DFAP as part of the concurrent 2009 Biennial Decommissioning Review process, which describes how and when it intends to make adjustments to financial assurance mechanisms such that any shortfalls in decommissioning funding assurance for the subject units are covered.

On page 2 of the DFAP, the EGC stated:

On March 31, 2009 (Reference 8), EGC submitted the amount of funds required for radiological decommissioning based on a site-specific SAFSTOR estimate for Braidwood Station, Units 1 and 2, and Byron Station, Units 1 and 2, as allowed by 10 CFR [Title 10 of the *Code of Federal Regulations*, Section] 50.75(e)(1)(i). The decommissioning funding assurance illustrated by these site-specific estimates was accepted by the NRC on April, 24, 2007.

EGC further stated:

...EGC is updating the site-specific cost estimate for both Braidwood Station, Units 1 and 2, and Byron Station, Units 1 and 2, in 2009. EGC expects a reduction in the site-specific SAFSTOR radiological decommissioning costs, based on the results of EGC estimates completed during this cycle.

Enclosure

EGC stated that it will submit the new site-specific SAFSTOR decommissioning cost estimates to the NRC by November 20, 2009, for Byron Units 1 and 2 and January 15, 2010, for Braidwood Units 1 and 2. EGC stated that it intends to rely on the site-specific SAFSTOR decommissioning cost estimates and subsequent updated estimates to provide adequate decommissioning funding assurance based on decommissioning trust fund values as of December 31, 2009.

10 CFR 50.75 (f)(1) states:

Each power reactor licensee shall report, on a calendar-year basis, to the NRC by March 31, 1999, and at least once every 2 years on the status of its decommissioning funding for each reactor or part of a reactor that it owns... The information in this report must include, at a minimum, the amount of decommissioning funds estimated to be required under 10 CFR 50.75(b) and (c)...

Further, 10 CFR 50.75 (b)(1) states:

For an applicant for or holder of an operating license under part 50, the report must contain a certification that financial assurance for decommissioning will be (for a license applicant), or has been (for a license holder), provided in an amount which may be more, but not less, than the amount stated in the table in paragraph (c)(1) of this section adjusted using a rate at least equal to that stated in paragraph (c)(2) of this section. (Emphasis added.)

The NRC staff requires sufficient documentary evidence, per 10 CFR 50.75, to enable the staff to make a finding of reasonable assurance that decommissioning funding assurance, based on the proposed plan, will be provided for Braidwood Units 1 and 2, Byron Units 1 and 2, consistent with NRC regulations.

Braidwood Unit 1

The *Status of Decommissioning Funding Report* submitted by EGC to the NRC on March 31, 2009, included a site-specific estimate for Braidwood Unit 1 of \$310.7 million for radiological decommissioning. EGC stated that this estimate will likely decrease when updated. EGC further stated that this amount was based on a site-specific cost estimate submitted to the NRC on December 18, 2006. However, the December 18, 2006, value for Braidwood Unit 1, as supplemented on February 27, 2007, was \$595.2 million in 2007 dollars.

- (a) As stated to EGC in the phone call with the NRC staff on July 1, 2009, the current NRC minimum decommissioning formula amount for Braidwood Unit 1 is \$405.2 million. Please submit an updated site-specific decommissioning cost estimate that meets the requirements of 10 CFR 50.75 (b)(1), which may be "more, but not less," than the current minimum decommissioning formula amount for Braidwood Unit 1.
- (b) Along with the updated site-specific cost estimate, which EGC proposes to submit by January 15, 2010, provide financial assurance in an amount that will eliminate the

decommissioning funding assurance shortfall for Braidwood Unit 1, as calculated below. Include a table of the annual estimated costs, earnings, and year end fund balances for radiological decommissioning, in current year dollars for the entire decommissioning period.

A	-	B	-	C	=	D
NRC minimum formula amount	Minus	Cash on hand	Minus	Amount of other Financial Assurance Instruments	Equals	Total Shortfall
		+				
OR		Future Contributions				
TOTAL site specific cost estimate		+				
		Earnings				

Using the values discussed in the July 1, 2009, telecon, the shortfall for Braidwood Unit 1, not accounting for a safe storage period, is calculated as shown:

$$\begin{aligned} &(\text{NRC minimum} = \$405.2\text{M}) - (\text{Cash on hand plus earnings} = \$252.3\text{M}) = \\ &(\text{Total Shortfall } \$152.9\text{M}) \end{aligned}$$

Braidwood Unit 2

The *Status of Decommissioning Funding Report* submitted by EGC to the NRC on March 31, 2009, included a site-specific estimate for Braidwood Unit 2 of \$317.4 million for radiological decommissioning. EGC stated that this estimate will likely decrease when updated. EGC further stated that this amount was based on a site-specific cost estimate submitted to the NRC on December 18, 2006. However, the December 18, 2006, value for Braidwood Unit 2, as supplemented on February 27, 2007, was \$618.3 million in 2007 dollars.

- (a) As stated to EGC in the phone call with the NRC on July 1, 2009, the current NRC minimum decommissioning formula amount for Braidwood Unit 2 is \$405.2 million. Please submit an updated site-specific decommissioning cost estimate that meets the requirements of 10 CFR 50.75 (b)(1), which may be "more, but not less," than the current minimum decommissioning formula amount for Braidwood Unit 2.
- (b) Along with the updated site-specific cost estimate that EGC proposes to submit by January 15, 2010, provide financial assurance in an amount that will eliminate the decommissioning funding assurance shortfall for Braidwood Unit 2, as shown in the preceding table. Include a table of the annual estimated costs, earnings, and year end

fund balances for radiological decommissioning, in current year dollars for the entire decommissioning period.

Byron Unit 1

The *Status of Decommissioning Funding Report* submitted by EGC to the NRC on March 31, 2009, included a site-specific estimate for Byron Unit 1 of \$310.3 million for radiological decommissioning. EGC stated that this estimate will likely decrease when updated. EGC further stated that this amount was based on a site-specific cost estimate submitted to the NRC on December 18, 2006. However, the December 18, 2006, value for Byron Station Unit 1, as supplemented on February 27, 2007, was \$593.2 million in 2007 dollars.

- (a) As stated to EGC in the phone call with the NRC on July 1, 2009, the current NRC minimum decommissioning formula amount for Byron Unit 1 is \$405.2 million. Please submit an updated site-specific decommissioning cost estimate that meets the requirements of 10 CFR 50.75 (b)(1), which may be "more, but not less," than the current minimum decommissioning formula amount for Byron Unit 1.
- (b) Along with the updated site-specific cost estimate which EGC proposes to submit by November 20, 2009, provide financial assurance in an amount that will eliminate the decommissioning funding assurance shortfall for Byron Unit 1, as shown in the preceding table. Include a table of the annual estimated costs, earnings, and year end fund balances for radiological decommissioning, in current year dollars for the entire decommissioning period.

Byron Unit 2

The *Status of Decommissioning Funding Report* submitted by EGC to the NRC on March 31, 2009, included a site-specific estimate for Byron Unit 2 of \$313.9 million for radiological decommissioning. EGC states that this estimate will likely decrease when updated. EGC further stated that this amount was based on a site-specific cost estimate submitted to the NRC on December 18, 2006. However, the December 18, 2006, value for Byron Unit 2, as supplemented on February 27, 2007, was \$602.7 million in 2007 dollars.

- (a) As stated to EGC in the phone call with the NRC on July 1, 2009, the current NRC minimum decommissioning formula amount for Byron Station Unit 2 is \$405.2 million. Please submit an updated site-specific decommissioning cost estimate that meets the requirements of 10 CFR 50.75 (b)(1), which may be "more, but not less," than the current minimum decommissioning formula amount for Byron Station Unit 2.
- (b) Along with the updated site-specific cost estimate that EGC proposes to submit by November 20, 2009, provide financial assurance in an amount that will eliminate the decommissioning funding assurance shortfall for Byron Unit 2, as shown in the preceding table. Include a table of the annual estimated costs, earnings, and year end fund balances for radiological decommissioning, in current year dollars for the entire decommissioning period.

Question 2

As part of the proposed DFAP included in its letter dated July 29, 2009, EGC stated the following:

If the site-specific cost estimates for Braidwood Station, Units 1 and 2, and Byron Station, Units 1 and 2, coupled with trust fund values, do not illustrate adequate decommissioning funding assurance, EGC will establish additional decommissioning funding assurance using a guarantee method, as allowed by NRC regulations, on or before April 1, 2010...As stated above, the initial amount of any additional decommissioning funding assurance will be calculated as of December 31, 2009.

- (a) Clarify that the amounts any proposed parent company guarantees for any plants with decommissioning shortfalls would be determined based on the difference between the greater of the NRC minimum formula amount or site-specific estimate, and the actual trust fund balance as of December 31, 2009, plus any earnings credits, plus the value of any additional financial assurance mechanisms, as of the date of expected termination of operations. The amount of the shortfall is determined by the formula shown in the discussion of Braidwood Unit 1. Note that the regulations in 10 CFR 50.75(e)(1) do not provide for any discounted net present value calculations to determine the amount of the potential guarantee.

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efficient and effective use of staff resources. If circumstances result in the need to revise the requested response date, please contact me at (301) 415-1055.

Sincerely,

/RA/

Christopher Gratton, Senior Project Manager
Plant Licensing Branch III-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. STN 50-456, STN 50-457,
STN 50-454, STN 50-455, 50-461,
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Request for Additional Information

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