

John Hickman

From: patrick.simpson@exeloncorp.com
Sent: Friday, May 02, 2008 6:32 PM
To: John Hickman
Cc: Michael Dusaniwskyj
Subject: RE: Proposed Zion License Transfer
Attachments: NRC Greenfield RAI #1 Response.doc

Here is our response to the questions in the below message. Please let me know if you need anything further.

Pat Simpson

-----Original Message-----

From: John Hickman [mailto:John.Hickman@nrc.gov]
Sent: Thursday, April 24, 2008 8:10 AM
To: Simpson, Patrick R.
Cc: Michael Dusaniwskyj
Subject: Proposed Zion License Transfer

Pat,

We have some financial questions, provided below, regarding the transfer. Please let me know if any of the questions are unclear.

The staff has noted Exelon's submittal RS-08-041, dated March 28, 2008, which provided the report on status of decommissioning funding for reactors. In that report the amount of decommissioning funds estimated to be required for Zion Unit 1 is \$310.2 million and for Zion Unit 2 is \$309.9 million. These totals, which do not include the cost of dismantling non-radiological systems and structures or the cost of managing and storing spent fuel on-site, are less than the totals provided in Enclosure 6 of the January 25, 2008, application. Enclosure 6 provides an estimate of \$714.0 million, excluding spent fuel storage and site restoration.

Although spent fuel storage is excluded from both estimates, RS-08-041 also excludes dismantling non-radiological systems and structures, and Enclosure 6 of the January 25, 2008, application also excludes site restoration. Is site restoration included in RS-08-041 or just not delineated? Is dismantling non-radiological systems and structures included in the estimate provided in Enclosure 6 of the January 25, 2008, application? If so, why?

Please clarify what is included in the line item Spent Fuel Storage. Does this include construction and loading of the ISFSI, long term maintenance, and/or any other aspects?

Please address any other differences between the RS-08-041 and Enclosure 6 estimates, in particular any differences not related to the change in methodology?

Please clarify if the entire estimate of \$714.0 million provided in Enclosure 6 of the January 25, 2008, application reflects the expenses and associated funds to radiologically decontaminate the Zion Facilities to NRC standards. If not please provide a revised estimate that separates expenses and funding for NRC required decommissioning activities from other decommissioning activities.

Thanks,
John

Responses to NRC 4/24/08 Email

NRC Background

The staff has noted Exelon's submittal RS-08-041, dated March 28, 2008, which provided the report on status of decommissioning funding for reactors. In that report the amount of decommissioning funds estimated to be required for Zion Unit 1 is \$310.2 million and for Zion Unit 2 is \$309.9 million. These totals, which do not include the cost of dismantling non-radiological systems and structures or the cost of managing and storing spent fuel on-site, are less than the totals provided in Enclosure 6 of the January 25, 2008, application. Enclosure 6 provides an estimate of \$714.0 million, excluding spent fuel storage and site restoration.

NRC Question 1

Although spent fuel storage is excluded from both estimates, RS-08-041 also excludes dismantling non-radiological systems and structures, and Enclosure 6 of the January 25, 2008, application also excludes site restoration. Is site restoration included in RS-08-041 or just not delineated? Is dismantling non-radiological systems and structures included in the estimate provided in Enclosure 6 of the January 25, 2008, application? If so, why?

Exelon Response 1

The following tables will assist the NRC's understanding of the decommissioning costs estimates submitted by Exelon in RS-08-041 and Enclosure 6 of the January 25, 2008 application.

In RS-08-041, radiological-only decommissioning costs are reported as present value costs, discounted at 2% real rate of return, through the decommissioning period. These costs are based upon the 2007 TLG Services, Inc. (TLG) site-specific decommissioning cost estimate for Zion Station. Using traditional decommissioning methodologies, TLG estimated the total cost to decommission Zion at \$1.092 billion, escalated into 2008 dollars.

In Enclosure 6, decommissioning costs are reported in 2007 dollars. Therefore, in order to compare the estimates reasonably, Exelon has provided the discounted and 2008 dollar decommissioning costs, as reported in RS-08-041, in both discounted and current dollar formats in the tables below.

As the NRC has noted, site restoration costs have been included in Enclosure 6 of the January 25, 2008 application. While NRC regulations do not require these costs to be reported, the contract between Exelon and ZionSolutions requires the site to be decommissioned to "Greenfield." Site restoration costs were included as a matter of completeness only.

***Decommissioning Costs as Reported in RS-08-041
(Discounted at 2% RROR)***

	Unit 1	Unit 2	Total	Comments
Radiological	310.2	309.9	620.1	Included in filing
Spent Fuel Management	100.7	101.8	202.5	Not included in filing
Site Restoration	33.7	38.9	72.6	Not included in filing
Total	444.6	450.6	895.2	

***Decommissioning Costs as Reported in RS-08-041
(2008 Dollars)***

	Unit 1	Unit 2	Total	Comments
Radiological	363.8	374.5	738.2	Included in filing
Spent Fuel Management	122.7	123.5	246.2	Not included in filing
Site Restoration	50.0	58.1	108.1	Not included in filing
Total	536.4	556.0	1,092.5	

***Decommissioning Costs as Reported in Enclosure 6
(2007 Dollars)***

	Total	Comments
Radiological (1)	714.0	Included in filing
Spent Fuel Management	210.9	Included in filing
Site Restoration	53.2	Included in filing
Total	978.0	

- (1) This amount includes other items as reported in the "Decommissioning Cost Estimate Summary" table of Enclosure 6.

NRC Question 2

Please clarify what is included in the line item Spent Fuel Storage. Does this include construction and loading of the ISFSI, long term maintenance, and/or any other aspects?

Exelon Response 2

The line item "Spent Fuel Storage" in the "Decommissioning Cost Estimate Summary" table of Enclosure 6 includes the following general spent fuel management activities:

- *Design and construction of an Independent Spent Fuel Storage Installation (ISFSI)*
- *Acquisition of dry cask storage systems*
- *Loading and closure of systems, and placement at ISFSI*

The NRC should note the line item "Exelon Fund Retainage" in the Enclosure 6 table. Per the contract between Exelon and ZionSolutions, Exelon shall retain \$25 million from the decommissioning trust funds at time of Closing. Exelon shall maintain these funds in a separate trust, owned by Exelon and segregated from the trust assets transferred to ZionSolutions. These funds and the future earnings on these funds, will be used by Exelon for long-term care and maintenance of the ISFSI post-decommissioning.

NRC Question 3

Please address any other differences between the RS-08-041 and Enclosure 6 estimates, in particular any differences not related to the change in methodology?

Exelon Response 3

Besides the differences identified above in the estimates, there are no other differences between the RS-08-041 and Enclosure 6 submissions – other than due to the changes in methodology for assembling the estimates.

NRC Question 4

Please clarify if the entire estimate of \$714.0 million provided in Enclosure 6 of the January 25, 2008, application reflects the expenses and associated funds to radiologically decontaminate the Zion Facilities to NRC standards. If not please provide a revised estimate that separates expenses and funding for NRC required decommissioning activities from other decommissioning activities.

Exelon Response 4

Yes, the entire estimate of \$714.0 million provided in Enclosure 6 of the January 25, 2008, application reflects the expenses and associated funds to radiologically decontaminate the Zion facilities to NRC standards.