EDWARD J. MARKEY
MASSACHUSETTS

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SMALL BUSINESS AND ENTREPRENEURSHIP
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SUBCOMMITTEE ON INTERNATIONAL DEVELOPMENT AND FOREIGN ASSISTANCE, ECONOMIC AFFAIRS, INTERNATIONAL ENVIRONMENTAL PROTECTION, AND PEACE CORPS

U.S. SENATE CLIMATE CHANGE CLEARING HOUSE

# United States Senate

SUITE SR-218
RUSSELL BUILDING
WASHINGTON, DC 20510-2107
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October 30, 2013

The Honorable Allison M. Macfarlane
Chairman
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Dear Chairman Macfarlane:

I write to request a briefing on the status of the Nuclear Regulatory Commission's (NRC's) pending enforcement action against Exelon regarding the determination that Exelon "deliberately provided incomplete and inaccurate information to the NRC in Exelon's decommissioning funding status report" related to its assessments of how much funding it would need to decommission several reactors (including units at Braidwood [IL], Byron [IL], Clinton [IL], Dresden [IL], LaSalle [IL], Limerick [PA], Oyster Creek [NJ], Peach Bottom [PA], Quad Cities [IL], Salem [NJ], Three Mile Island [PA], and Zion [IL]). These apparently knowing violations of NRC regulations occurred over a period of several years. However, NRC's years-long delays in finalizing its pending enforcement action may have caused at least some of these violations no longer to be prosecutable, as the statute of limitations may have been exceeded. So that I may learn more about the reasons for these delays, I request that my office receive a briefing from the NRC's Office of Investigations and any other technical or legal staff the NRC deems appropriate.

The NRC requires its licensees to report on the status of their decommissioning funds every two years in order to ensure that operators of nuclear power plants set aside sufficient funds to pay for the dismantlement of the reactor(s) and remediation of the site.[1] If licensees fail to set aside the minimum amount of funds needed to decommission reactors, they are required to obtain the funds or some financial assurance that the funds could be obtained in the event that their reactor(s) move into decommissioning status. By regulation, the NRC has established precise formulae for calculating decommissioning funds.[2]

Exelon Corporation is one of the country's largest owners and operators of nuclear power plants and reactors, representing twenty percent of the country's nuclear capacity. Exelon operates ten power plants and seventeen reactors in Illinois, Pennsylvania, and New Jersey.[3]

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[1] http://www.nrc.gov/about-nrc/regulatory/decommissioning/finan-assur.html
[2] 10 C.F.R. §70.25(d).
[3] www.exeloncorp.com/energy/generation/nuclear.aspx.

On January 31 2013, my staff was informed by the NRC (see Attachment 1) that the NRC staff's initial evaluation of Exelon's 2009 Decommissioning Fund Status report found that "eight of Exelon's plants had an aggregate shortfall of approximately $1 billion", meaning that Exelon had underestimated the amount of money it would need to decommission these plants. Had Exelon provided accurate information to NRC, it would also have been required to secure access to $1 billion to make up for this shortfall. As a result of this initial discovery and subsequent correspondence with Exelon, the matter was referred to NRC's Office of Investigations (NRC OI), which launched an investigation on September 10, 2010[4].

According to the materials provided to my staff, NRC OI completed its investigation on November 22, 2011 (OI Investigation No. OI-3-2010-034, which was supplemented on October 9, 2012), and "substantiated that Exelon provided incomplete and inaccurate information to the NRC" in their 2005, 2007, and 2009 reports. Moreover, NRC OI also substantiated that Exelon's Director of Spent Fuel and Decommissioning and Exelon's Manager of Spent Fuel and Decommissioning "deliberately provided incomplete and inaccurate information to the NRC in Exelon's decommissioning funding status report." Importantly, the NRC OI report noted that "the Office of the General Counsel (OGC) has reviewed the OI report and agrees with this conclusion."

On November 29, 2012, an NRC Enforcement Panel was held, including representatives from the NRC Office of Nuclear Reaction Regulation (NRR), the Office of Enforcement (OE), Region I, Region III, and NRC OGC. The panel agreed to send a letter to Exelon identifying the violation and informing Exelon that escalated enforcement action was being considered. The panel also decided to issue letters to the two Exelon managers that had been determined to have deliberately provided the inaccurate information to the NRC.

The letter recommended by the NRC Enforcement Panel was sent[5] to Exelon on January 31, 2013 of this year (Attachment 2) and also provides additional information regarding the evidence obtained by NRC OI and reviewed by NRC OI, NRC OGC and other NRC offices, particularly with respect to NRC OI's finding that Exelon's actions were "deliberate." For example, the letter indicates that Exelon had correctly estimated the amount of funds it would need to set aside for decommissioning its fleet in its reports to the NRC in 2001, 2002 and 2003. In 2005, however, evidence obtained shows that Exelon's internal calculations were done correctly, but Exelon nevertheless reported different, lower amounts of decommissioning funds to the NRC. Similar findings showed a disparity between what Exelon calculated its decommissioning funding obligations to be using NRC regulatory requirements and what Exelon then submitted to NRC in 2006, 2007 and 2009. In 2009 and 2010, NRC staff requested additional information from Exelon on its decommissioning funds, and in 2011 Exelon's report to NRC again began to correctly use NRC regulatory requirements to calculate its decommissioning funding requirements.

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[4] It is important to note that the NRC's Office of Investigations is a separate and independent from the Office of Investigator General (IG) for NRC. The NRC OI was created in 1982 after numerous reports surfaced that NRC staff had interfered with safety investigations on behalf of NRC licensees.

[5] http://www.efmr.org/files/2012/ML13008A219.pdf

Emails and other materials reviewed by NRC OI staff show that the senior Exelon executives who were responsible for developing Exelon's decommissioning funding reports to the NRC were fully aware of their regulatory requirements, but chose to submit reports that did not comply with these requirements. Interestingly, Exelon was recently found by a court[6] to have engaged in similar actions when it (through Amergen, a company with which Exelon merged) attempted to write off decommissioning costs for several nuclear reactors, despite being told by the Internal Revenue Service that such costs were not allowed to be treated in such a manner.

As of this writing, the NRC has yet to finalize any enforcement action against Exelon in this matter, despite the apparent agreement of all parties that Exelon had knowingly violated NRC regulations. Although NRC OI completed its investigation in November 2011, it took more than a year for the NRC to send its letter to Exelon, and the better part of a year has passed since then. It is likely that the statute of limitations has run for any of the violations that occurred prior to 2009.

When my staff informally asked your staff for an explanation regarding the delay in this case, she was told that this case has taken longer to conclude than a typical case, but she was not provided with a specific explanation for the delay. Consequently, I ask for you to provide my office with a briefing that includes the NRC OI and any other NRC staff you deem appropriate to include. I additionally note that I continue to await the Commission's response to one of the questions I asked you in my May 6 2013 letter which related to this issue, and I ask for that response promptly as well. Thank you very much for your attention to this important matter. If you have any questions or concerns, please have your staff contact Dr. Michal Freedhoff of my staff at 202-224-2742.

Sincerely,

Edward J. Markey

Edward J. Markey
United States Senator

Attatchments: 2

[6] http://www.uscfc.uscourts.gov/sites/default/files/BUSH.AMERGEN.100813.pdf

Attachment 1

**From:** Dacus, Eugene [mailto:Eugene.Dacus@nrc.gov]
**Sent:** Thursday, January 31, 2013 11:13 AM
**To:** Hill staff [names redacted]
**Subject:** Exelon decommissioning

All,

- The NRC has identified apparent violations of 10 CFR 50.9, "Completeness and accuracy of information" and 10 CFR 50.75, "Reporting and recordkeeping for decommissioning planning" for Exelon Generation (Exelon) related to its 2005, 2006, 2007, and 2009 decommissioning funding status (DFS) reports.

- The NRC reviews decommissioning funding status every two years (more often if there is a license transfer). The most recent report, submitted to the NRC in March 2011, did provide complete and accurate information. The next DFS report will be provided in March 2013.

- The NRC does not have any current concerns with respect to decommissioning funding assurance at any of the Exelon sites.

- The NRC concluded that Exelon deliberately provided incomplete and inaccurate information in the DFS reports.

- The NRC is considering escalated enforcement action.

**BACKGROUND**

Regulatory Requirements

10CFR 50.9(a) requires that information provided to the Commission by a licensee shall be complete and accurate in all material respects. 10 CFR 50.75 establishes requirements for indicating to the NRC how a licensee will provide reasonable assurance that funds will be available for the decommissioning process. For power reactor licensees, reasonable assurance consists of a series of steps as provided in paragraphs (b), (c), (e), and (f) of 10 CFR 50.75. 10 CFR 50.75(f)(2) requires licensees to report the status of its decommissioning funding for each reactor (or part of a reactor) that it owns at least every other year. The information in this report must include the amount of decommissioning funds estimated to be required pursuant to 10 CFR 50.75(b) and (c). 10 CFR 50.75(b)(1) requires that the report must contain a certification that financial assurance for decommissioning has been provided in an amount which may be more, *but not less* [emphasis added], than the amount stated in this section of the regulations. The licensee may certify either to the minimum amount specified in 10 CFR 50.75(c), or to a site-specific cost estimate (SSCE). The regulation references NUREG-1307 as the appropriate source for obtaining the adjustment factor for waste burial/disposition costs. This is further clarified in the NUREG that, licensees may use the formula, the coefficients, and the burial/disposition adjustment factors from NUREG-1307 in their analyses, or they may use an adjustment rate *at least equal to* [emphasis added] the amount presented in NUREG-1307.

Staff Review of DFS Reports

In its March 31, 2009, DFS report (ML090900463), Exelon stated that several of its sites did not meet the NRC's minimum funding requirements, but did not quantify the shortfalls. Because the staff was concerned with these shortfalls, they independently calculated the funds required to be reported using the 10 CFR 50.75(b)(1) minimum formula. The staff's initial evaluation concluded that eight of Exelon's plants had an aggregate shortfall of approximately $1 billion. The staff also interacted with Exelon

(through a July 1, 2009, conference call and an October 2, 2009, Request for Additional Information) to understand how the shortfalls were calculated by the licensee. Based on this review and interactions with Exelon on the 2009 report, the staff suspected wrongdoing on the part of the licensee and referred the concern to an Allegation Review Board (ARB). The ARB determined that there were sufficient concerns to conduct a further inquiry, and OI initiated an investigation on September 10, 2010. The ARB further recommended that the staff re-review decommissioning funding reports for the entire fleet, including previous years, to determine the full extent of the reporting problems.

Exelon did not identify any decommissioning funding shortfalls in its 2007 DFS report, so, when this report was initially submitted, the staff did not conduct an additional review to evaluate the numbers reported by the licensee. The NRC's evaluation of Exelon's 2005 DFS report determined that Exelon failed to meet the funding requirements for the six units at the Braidwood, Byron, and LaSalle County sites. The staff determined that Exelon had exceeded the 2% annual real rate of return limit of 10 CFR 50.75(e)(1)(i). Exelon covered the 2005 shortfalls in February 2007 by submitting a site-specific cost estimate to demonstrate compliance with the 2% annual real rate of return limit.

Based on the ARB's recommendation, the staff re-reviewed Exelon's 2005 and 2007 DFS reports, independently calculated the minimum reporting values, and identified that the certification amounts reported in those years were less than the formula amount required by 10 CFR 50.75(b)(1) and (c); and, for plants which certified to the site-specific cost estimate, the reported amounts failed to meet the requirements of 10 CFR 50.75. The staff also identified that the Clinton site had a shortfall that was not identified in the March 2009 report, and Exelon failed to make the required report that it had obtained a parent company guarantee (PCG) to address this shortfall.

Investigation

OI Investigation No. OI-3-2010-034 (completed on November 22, 2011, and supplemented on October 9, 2012) substantiated that Exelon provided incomplete and inaccurate information to the NRC in their 2009 DFS report. The information was inaccurate and incomplete due to acts of both commission and omission: (1) the 2009 DFS report contained inaccurate and incomplete information as submitted, and (2) Exelon omitted material information in its possession that caused affirmative statements in the 2009 DFS report to be inaccurate and incomplete. The investigation also reviewed Exelon's DFS reports from 2001, 2003, 2005, 2006, 2007 and 2009. For the 2001 and 2003 reports, Exelon did not under-report the amount of funds required for decommissioning (values were greater than or equal to the NRC minimum formula amount). However, the investigation confirmed that beginning with the 2005 DFS report, Exelon reported to the NRC certification amounts that were less than the minimum allowed by NRC requirements.

OI also reviewed potential willful aspects of the case. Based on the evidence developed, the investigation did substantiate that two senior licensee officials (Exelon's Director of Spent Fuel and Decommissioning and Exelon's Manager of Spent Fuel and Decommissioning) deliberately provided incomplete and inaccurate information to the NRC in Exelon's decommissioning funding status report. The Office of the General Counsel (OGC) has reviewed the OI report and agrees with this conclusion.

Enforcement

An NRC Enforcement Panel was held on November 29, 2012, to determine the appropriate enforcement actions to be taken against Exelon. The panel participants included representatives for the Office of Nuclear Reaction Regulation (NRR), the Office of Enforcement (OE), Region I, Region III, and OGC. The panel agreed with NRR's recommendation to: (1) issue a letter to the licensee identifying an apparent

violation of 10 CFR 50.9, indicating that escalated enforcement action is being considered, and requesting attendance at a pre-decisional enforcement conference (PEC); and (2) issue letters to the two Exelon mangers determined to have acted deliberately, identifying an apparent violation of 10 CFR 50.5 for deliberate misconduct, and offering a choice of providing a written response, attending a PEC, or participating in alternate dispute resolution (ADR).

**Q: What incorrect information did Exelon provide to the NRC?**
*This information can be shared with external stakeholders.*
A: Exelon reported discounted amounts, which were less than the NRC regulations allow to be reported.

**Q: Is Exelon currently in compliance with NRC requirements? Do Exelon's present decommissioning fund balances appear to be adequate?**
*This information can be shared with external stakeholders.*
A: Based on the most recent decommissioning funding reports provided to the NRC in March 2011, all Exelon plants meet NRC requirements. The next decommissioning funding reports are due to the NRC on March 31, 2013.

**Q: Why didn't the NRC discover these problems earlier?**
*This information can be shared with external stakeholders.*
A: Historically, most misstatements of the NRC minimum formula have been due to numerical errors, or errors in identifying the correct cost factors to calculate the NRC minimum formula. The NRC staff followed their internal review procedures, which are primarily designed to ensure that licensees are accumulating sufficient decommissioning funding. Exelon's apparent incomplete and inaccurate reporting was not discovered until the staff performed additional analysis of funding levels due to potential funding shortfalls reported by Exelon in 2009. The subsequent NRC investigation revealed that Exelon employees apparently deliberately reported inaccurate numbers and were able to avoid detection by the NRC by increasing their discounted values over time.

**Q: Why did it take over three years to resolve this matter?**
*This information can be shared with external stakeholders.*
A: The NRC's deliberative process for this case, to date, has involved multiple steps, including an extensive investigation and internal analysis and review.

**Q: The GAO recently recommended that the NRC review decommissioning funding investments for decommissioning trust funds. Isn't this proof that the NRC should be monitoring these funds more effectively?**
*This information can be shared with external stakeholders.*
A: The NRC is considering the GAO recommendation and is applying appropriate manpower to the issue. Exelon appears to have violated NRC reporting requirements. There is no evidence that Exelon violated NRC requirements regarding trust fund investments. NRC regulations require that investments be made in accordance with the "prudent investor standard." In addition, as of 2003, the NRC prohibits non-electric utility licensees from making decommissioning trust fund investments in their own corporation or nuclear sector securities or obligations. Many licensees are subject to additional investment standards by their State Public Utility Commissions.

Eugene Dacus
Sr. Congressional Affairs Officer
U.S. Nuclear Regulatory Commission
Office: 301-415-1697
Fax: 301-415-8571

Attachment 2

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

January 31, 2013

EA-11-267

Mr. Michael J. Pacilio
Senior Vice President
Exelon Generation Company, LLC
President and Chief Nuclear Officer (CNO)
Exelon Nuclear
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: EXELON GENERATION CO., LLC – U.S. NUCLEAR REGULATORY COMMISSION (NRC) OFFICE OF INVESTIGATIONS (OI) INVESTIGATION; SUMMARY OF OI REPORT NO. 3-2010-034; NRC INSPECTION REPORT 05000456/2012012, 05000457/2012012, 05000454/2012012, 05000455/2012012, 05000461/2012012, 05000010/2012012, 05000237/2012012, 05000249/2012012, 05000373/2012012, 05000374/2012012, 05000352/2012012, 05000353/2012012, 05000219/2012012, 05000171/2012012, 05000277/2012012, 05000278/2012012, 05000254/2012012, 05000265/2012012, 05000272/2012012, 05000311/2012012, 05000289/2012012, 05000295/2012012, 05000304/2012012

Dear Mr. Pacilio:

This letter refers to the results of an investigation conducted by the U.S. Nuclear Regulatory Commission (NRC) Office of Investigations (OI). The investigation was initiated on September 10, 2010, to determine whether Exelon Generation, LLC's (Exelon) employees deliberately provided incomplete and inaccurate information in decommissioning funding status (DFS) reports submitted to the NRC. The OI investigation included interviews of Exelon managers and employees that took place at Exelon corporate offices, the review of Exelon Decommissioning Fund Status (DFS) reports for reporting years 2001, 2002, 2003, 2005, 2006, 2007, 2009, and 2011[1], and the review of internal Exelon documents for the reporting years obtained via subpoena. Enclosure 1 provides additional details of the OI investigation.

The OI investigation identified apparent violations of NRC requirements that are being considered for escalated enforcement action in accordance with the NRC Enforcement Policy. The current Enforcement Policy is located on the NRC's web site at www.nrc.gov/about-nrc/regulatory/enforcement/enforce-pol.html.

[1] 10 CFR 50.75(f)(2)requires Exelon to report at least once every 2 years after 1999, on the status of its decommissioning funding for each reactor or part of a reactor that it owns. Exelon submitted biennial reports to the NRC for the years 2001, 2003, 2005, 2007, 2009, and 2011, Exelon was involved in a license transfer in during 2002 and 2005 – 2006 and for this reason was required to submit DFS reports in March 2002 and March 2006.

The investigation determined that Exelon apparently failed to provide complete and accurate information to the NRC in the 2005, 2006, 2007, and 2009 Exelon DFS reports. Specifically, the March 31, 2005, March 31, 2006, March 31, 2007, and March 31, 2009, DFS reports state the amount reported for each reactor was determined in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 50.75(b) and the applicable formulas of 10 CFR 50.75(c). The NRC identified multiple instances in which the amount reported was a value that was less than the minimum required amount specified by 10 CFR 50.75(b) and (c)[2]. The DFS reports are material because the NRC requires licensees to report estimates of decommissioning costs that are greater but not less than estimates calculated in accordance with 50.75(b) and (c). Exelon submitted estimates that were not calculated in accordance with the regulations, yet represented and certified that the estimates were calculated in accordance with the regulations. Therefore, Exelon appears to be in violation of 10 CFR 50.9, regarding completeness and accuracy of information.

Before the NRC makes its enforcement decision, we request Exelon's participation in a pre-decisional enforcement conference (PEC). The conference will be transcribed and will be closed to public observation in accordance with the NRC Enforcement Policy because the findings are based on an NRC OI report that has not been publicly disclosed. Please contact Mr. Michael Dudek, Chief, Plant Licensing Branch 3-2, at 301-415-6500, within 10 days of the date of this letter to notify the NRC of your willingness to participate in a pre-decisional enforcement conference. In general, the NRC attempts to hold a conference within 30 days of the date of this letter.

This conference is being held to obtain information to assist the NRC in making an enforcement decision. The conference will afford Exelon the opportunity to provide its perspective on the apparent violation and any other information that Exelon believes the NRC should take into consideration before making an enforcement decision. The topics discussed during the conference may include: information to determine whether a violation occurred, information to determine the significance of a violation, information related to the identification of a violation, and information related to any corrective actions taken or planned to be taken. In presenting Exelon's corrective actions, you should be aware that the promptness and comprehensiveness of the actions will be considered in assessing any civil penalty for the apparent violations.

This issue was discussed with members of your staff during a conference call on January 24, 2013; this letter is being administratively tracked as NRC Inspection Report 05000456/2012012, 05000457/2012012, 05000454/2012012, 05000455/2012012, 05000461/2012012, 05000010/2012012, 05000237/2012012, 05000249/2012012, 05000373/2012012, 05000374/2012012, 05000352/2012012, 05000353/2012012, 05000219/2012012, 05000171/2012012, 05000277/2012012, 05000278/2012012, 05000254/2012012, 05000265/2012012, 05000272/2012012, 05000311/2012012, 05000289/2012012, 05000295/2012012, 05000304/2012012. Please be advised that the number and characterization of the apparent violations described herein may change as a result of further NRC review. You will be advised by separate correspondence of the results of our deliberations in this matter.

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[2] Although the manner in which the reported value was calculated is not the subject of this enforcement action, the instances in which the amount reported by Exelon was a value less than the minimum required amount specified by 10 CFR 50.75(b) and (c) are provided in Enclosure 2.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response concerning participation in a PEC, will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.

If you have any questions, please contact Mr. Michael Dudek, at 301-415-6500.

Sincerely,

Allen D. Howe for

Ho K. Nieh, Director
Division of Inspection & Regional Support
Office of Nuclear Reactor Regulation

Docket Nos.: 05000456, 05000457, 05000454, 05000455, 05000461, 05000010, 05000237, 05000249, 05000373, 05000374, 05000352, 05000353, 05000219, 05000171, 05000277, 05000278, 05000254, 05000265, 05000272, 05000311, 05000289, 05000295, 05000304

License Nos.: NPF-72, NPF-77, NPF-37, NPF-66, NPF-62, DPR-2, DPR-19, DPR-25, NPF-11, NPF-18, NPF-39, NPF-85, DPR-16, DPR-12, DPR-44, DPR-56, DPR-29, DPR-30, DPR-70, DPR-75, DPR-50, DPR-39, DPR-48

Enclosures: As stated

FACTUAL SUMMARY OF NRC INVESTIGATION

On September 10, 2010, the U.S. Nuclear Regulatory Commission's Office of Investigations (OI), Region III Field Office, initiated an investigation to determine whether employees of Exelon Generation LLC (Exelon), deliberately provided incomplete and inaccurate information to the NRC in its March 31, 2009, decommissioning funding status (DFS) report.

On March 31, 2009, Exelon submitted its decommissioning funding status (DFS) report to the NRC (ADAMS Accession No. ML090900436). The DFS report states that the report is in accordance with 10 CFR 50.75(b), (c), (e)(1)(i), and (f)(1). The submission further stated, "All of these cost estimates are greater than the amount specified in 10 CFR 50.75(c) and are based on a period of safe storage that is specifically described in the estimates."[1] As part of its review of the 2009 Exelon DFS report, the NRC staff independently calculated the minimum amount of funds using the 10 CFR 50.75(b)(1) minimum formula. Comparing the minimum formula amounts to the amounts reported by Exelon, the staff found Exelon's reported decommissioning funding estimates for 23 plants[2] fell *below* the minimum estimates required pursuant to 10 CFR 50.75(b) and (c). The underreporting of decommissioning funding cost estimates for 2009 was of particular concern to the NRC staff because the total amount of shortfalls was significant and impacted several reactors in the Exelon fleet.

As part of the investigation, the NRC obtained internal Exelon calculations used in the preparation of DFS reports for reporting years 2001, 2002, 2003, 2005, 2006[3], 2007, 2009, and 2011 via subpoena. The internal Exelon calculations show (1) when Exelon began calculating decommissioning funding estimates using formulas not allowed pursuant to 10 CFR 50.75; (2) when the impermissible reporting of the estimates began; (3) the period during which the impermissible reporting continued; (4) how many instances of underreporting occurred due to improperly calculated and reported estimates; and (5) the total dollar amount of underreporting for years 2005, 2006, 2007, and 2009.

The evidence obtained during the investigation indicates that Exelon's DFS reports for 2001, 2002, and 2003 did not under report the amount of funds required for decommissioning. The decommissioning funding estimates reported by Exelon were equal to or greater than the NRC minimum formula for those years. The 2001, 2002, and 2003 DFS reports appear to include accurate values for the NRC minimum formula and an accurate description of the related calculations. Exelon documents associated with the 2003 DFS report indicate that site specific values less than the NRC minimum formula amount were calculated, but not reported to the NRC.

Internal Exelon calculations associated with the 2005 DFS report demonstrate that Exelon correctly calculated the NRC minimum formula amount; however, the minimum decommissioning cost estimates reported to the NRC were lower than allowed by regulations. The 2005 Exelon DFS report is the first instance of Exelon calculating and reporting decommissioning funding estimates less than the minimum estimate required pursuant to

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[1] Attachment 1, n. 1 of the 2009 Exelon DFS report states: "The amount of decommissioning funds for the operating reactors is determined in accordance with 10 CFR 50 .75(b) and the applicable formulas in 10 CFR 50.75(c) and is reported in beginning of year 2009 dollars."

[2] See Enclosure 2 for a listing of the plants.

[3] Exelon was involved in a license transfer in 2005 – 2006 and for this reason was required to submit a DFS report in March 2006.

10 CFR 50.75(c). Lower cost estimates for 23 plants[4] were reported, although Exelon states in the 2005 report "[a]ll of these cost estimates are greater than the amount specified in 10 CFR 50.75(c)."[5]

The OI investigation also identified incomplete and inaccurate reporting of funding status information in the 2006 Exelon DFS report, the 2007 Exelon DFS report, Decommissioning Funding Assurance Plan dated July 29, 2009 (ADAMS Accession No. ML092120165), and in responses to RAIs dated August 27, 2009 (ADAMS Accession No. ML092400249), October 27, 2009 (ADAMS Accession No. ML093010121), November 16, 2009 (ADAMS Accession No. ML093210130), January 11, 2010 (ADAMS Accession No. ML100120341), and March 10, 2010 (ADAMS Accession No. ML100700098).

The internal Exelon spreadsheets for 2006, prepared by an Exelon executive, demonstrate decommissioning funding amounts calculated using either the NRC formula in 10 CFC 50.75 (b) and (c) or site-specific amounts equal to or greater than the NRC minimum. However, the 2006 DFS report also reported minimum cost estimates for 11 plants[6] that were less than allowed by 10 CFR 50.75(b) and (c) (ADAMS Accession No. ML060900613).

The 2007 spreadsheets, prepared by an Exelon executive, identify columns of funding amounts calculated using the NRC formula. The spreadsheets also identify columns of cost estimates which are lower than the NRC formula. These lower estimates were provided for 23 plants[7] reported in Exelon's 2007 DFS Report (ADAMS Accession No. ML070800730).

After a series of Requests for Additional Information in 2009 and 2010[8], and interviews with an Exelon executive and an Exelon manager in 2011, Exelon submitted the 2011 DFS report (ADAMS Accession No. ML110980080). The 2011 report contained minimum decommissioning funding estimates that appear to be calculated according to NRC regulations at 10 CFR 50.75(b) and (c). The internal Exelon spreadsheets for 2011 confirm that lower cost estimates, determined using a methodology not allowed by 10 CFR 50.75(b) and (c), were no longer part of Exelon's decommissioning spreadsheets. The cost estimates calculated in the 2011 spreadsheets are the same as those reported to the NRC in the 2011 DFS report. In a May 2011 OI interview, an Exelon manager stated that he prepared the 2011 Exelon DFS Report and admitted that Exelon "actually updated the methodology" used in the report.

Notations in cells in internal Exelon spreadsheets used in the preparation of DFS reports for reporting years 2001, 2002, 2003, 2005, 2006, 2007, 2009, and 2011 identify senior level Exelon employees as being responsible for the calculation of cost estimates lower than allowed by 10 CFR 50.75(b) and (c). The evidence obtained during the investigation indicates that a senior Exelon executive and an Exelon manager exercised a high level of involvement and responsibility in the preparation of the DFS reports. One individual was responsible for the actual calculations and collection of data used in the calculations of the NRC minimum formula and the site-specific estimates in the DFS reports from 2001-2007. Both individuals were

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[4] *See* Enclosure 2 for a listing of the plants.
[5] Attachment 1, n. 1 of the 2005 Exelon DFS report states: "The amount of decommissioning funds for the operating reactors is determined in accordance with 10 CFR 50.75(b) and the applicable formulas in 10 CFR 50 .75(c) and is reported in beginning of year 2005 dollars".
[6] *See* Enclosure 2 for a listing of the plants.
[7] *See* Enclosure 2 for a listing of the plants.
[8] Exelon's Decommissioning Funding Assurance Plan dated July 29, 2009, and in responses to RAIs dated August 27, 2009, October 27, 2009, November 16, 2009, January 11, 2010, and March 10, 2010.

involved with the preparation of the 2009 DFS report. In addition, internal Exelon documents, Exelon responses to Requests for Additional Information during 2009 and 2010, and investigation testimony indicate that these senior managers understood the requirements of 10 CFR 50.75 and confirm that the individuals were involved in the preparation of Exelon DFS reports at issue.

In internal Exelon email correspondence dated February 10, 2009, a senior Exelon executive stated that "the NRC requires a certain minimum decommissioning funding level, as determined by one of the acceptable methods in 10 CFR 50.75" and that Exelon is required to report this information biennially for operating plants. He further stated that "one method is using the formula in 10 CFR 50.75," and "another method is to use site specific decommissioning cost estimates, but the caveat is that the site specific estimate must be greater that the NRC formula minimum funding amount." He then stated the, "consequences of not meeting the NRC minimum funding requires: (a) a deposit in the amount necessary to make up for the shortfall, (b) a parent company guarantee backed by 6 times the face amount in net tangible assets, or (c) other funding mechanism such as a letter of credit." Further evidence showed that during a presentation to the Risk Oversight Committee on April 27, 2009, the senior Exelon executive provided information on the NRC minimum funding requirements. This presentation included information of site-specific studies and the statement that site-specific studies "may be used . . . if the site-specific amount is larger than the formula amount." During a transcribed interview on February 8, 2011, the same senior Exelon executive confirmed his understanding of the regulations when he stated, "you can either use the formula that's in NRC regulation or you can use a site-specific decommissioning . . . the restriction, as I understand it, is that the site-specific cost estimate must be greater than the NRC minimum funding amount."

The OI investigation identified that the Exelon manager was responsible for the actual calculations and collecting the data for the calculations based on the NRC minimum formula and the site-specific estimates in the 2009 DFS report. During a transcribed interview on February 8, 2011, this Exelon manager stated that if the amount of money in the trust fund did not meet the NRC minimum funding assurance requirement, then a site-specific calculation was performed. He said that either method can be used for the NRC reporting, however, he clarified that there is no NRC guidance suggesting that Exelon could report a number less than the NRC minimum requirement. When asked directly whether the regulations allow the site specific cost estimate to be reported if it's less that the amount of the NRC minimum, the Exelon manager replied, "no."

Based upon the evidence developed, the OI investigation did substantiate that a senior Exelon executive and an Exelon manager appear to have deliberately provided incomplete and inaccurate information to the NRC in Exelon's 2005, 2006, 2007, and 2009 DFS reports. These actions appear to have placed Exelon in violation of 10 CFR 50.9.

## INSTANCES OF APPARENT INACCURATE REPORTING

The reported values in Exelon's DFS reports were purported to be either determined in accordance with 10 CFR 50.75(b) and the applicable formulas in 10 CFR 50.75(c), or to be based upon site-specific cost estimates for permanently shutdown reactors. An 'X' indicates that the value reported by Exelon was less than allowed by regulations[1].

| Facility | 2005 Report | 2006 Report | 2007 Report | 2009 Report |
|---|---|---|---|---|
| Braidwood, Unit 1 | X[2] | | X[2] | X[2] |
| Braidwood, Unit 2 | X[2] | | X[2] | X[2] |
| Byron, Unit 1 | X[2] | | X[2] | X[2] |
| Bryon, Unit 2 | X[2] | | X[2] | X[2] |
| Clinton | X[2] | | X[2] | X[2] |
| Dresden, Unit 1 | X[3] | | X[3] | X[3] |
| Dresden, Unit 2 | X[2] | | X[2] | X[2] |
| Dresden, Unit 3 | X[2] | | X[2] | X[2] |
| LaSalle, Unit 1 | X[2] | | X[2] | X[2] |
| LaSalle, Unit 2 | X[2] | | X[2] | X[2] |
| Limerick, Unit 1 | X[2] | | X[2] | X[2] |
| Limerick, Unit 2 | X[2] | | X[2] | X[2] |
| Oyster Creek | X[2] | X[2] | X[3] | X[3] |
| Peach Bottom, Unit 1 | X[3] | X[3] | X[3] | X[3] |
| Peach Bottom, Unit 2 | X[2] | X[2] | X[2] | X[2] |
| Peach Bottom, Unit 3 | X[2] | X[2] | X[2] | X[2] |
| Quad Cities, Unit 1 | X[2] | X[2] | X[2] | X[2] |
| Quad Cities, Unit 2 | X[2] | X[2] | X[2] | X[2] |
| Salem, Unit 1 | X[2] | X[2] | X[2] | X[2] |
| Salem, Unit 2 | X[2] | X[2] | X[2] | X[2] |
| Three Mile Island, Unit 1 | X[2] | X[2] | X[2] | X[2] |
| Zion, Unit 1 | X[3] | X[3] | X[3] | X[3] |
| Zion, Unit 2 | X[3] | X[3] | X[3] | X[3] |

[1] 10 CFR 50.75(f)(2) states, in part, that the information in this report [the decommissioning funding report] must include the amount of decommissioning funds estimated to be required pursuant to 10 CFR 50.75(b) and (c).

[2] The reported value was lower than the "NRC minimum" amount calculated by Exelon, as shown on internal Exelon spreadsheets.

[3] The reported value was lower than the actual site specific cost estimate calculated by Exelon, as shown on internal Exelon spreadsheets.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response concerning participation in a PEC, will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.

If you have any questions, please contact Mr. Michael Dudek, at 301-415-6500.

Sincerely,
/RA/

Ho K. Nieh, Director
Division of Inspection & Regional Support
Office of Nuclear Reactor Regulation

Docket Nos.: 05000456, 05000457, 05000454, 05000455, 05000461, 05000010, 05000237, 05000249, 05000373, 05000374, 05000352, 05000353, 05000219, 05000171, 05000277, 05000278, 05000254, 05000265, 05000272, 05000311, 05000289

License Nos.: NPF-72, NPF-77, NPF-37, NPF-66, NPF-62, DPR-2, DPR-19, DPR-25, NPF-11, NPF-18, NPF-39, NPF-85, DPR-16, DPR-12, DPR-44, DPR-56, DPR-29, DPR-30, DPR-70, DPR-75, DPR-50, DPR-39, DPR-48

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| DATE | 12/04/12 | 12/11/12 | 12/12/12 | 12/05/12 | 12/18/12 |
| OFFICE | OGC | NRR/DIRS: DD | NRR/DIRS: D | | |
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[1] Concurrence received via e-mail from R. Turtil on December 11, 2012
[2] Concurrence received via e-mail from M. Dudek on December 12, 2012
[3] Concurrence received via e-mail from R. Goetz on December 5, 2012
[4] Concurrence received via e-mail from N. Hilton on December 18, 2012
[5] Concurrence received via e-mail from P. Jehle on January 8, 2013

Letter to Michael J. Pacilio from Ho Nieh dated January 31, 2013

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