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March 23, 2016
TMI-16-008

10 CFR 50.75
10 CFR 50.82

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

SUBJECT:
Three Mile Island Nuclear Station, Unit 2
Docket No. 50-320, License No. DPR-73
Decommissioning Funding Status Report for the Three Mile Island Nuclear
Station, Unit 2

Pursuant to 10 CFR 50.75 and 10 CFR 50.82, GPU Nuclear, Inc. is hereby submitting the following three reports to the Nuclear Regulatory Commission (NRC) for Three Mile Island Nuclear Station, Unit 2 for the year ending December 31, 2015. Attachment 1 provides a decommissioning funding status report based on the NRC formula described in 10 CFR 50.75(c). Attachment 2 provides a decommissioning funding status report based upon a site-specific decommissioning cost estimate. Attachment 3 contains a financial assurance status report as required by 10 CFR 50.82(a)(8)(v).

There are no regulatory commitments contained in this letter. If there are any questions or if additional information is required, please contact Mr. Thomas A. Lentz, Manager - FirstEnergy Nuclear Operating Company Fleet Licensing, at (330) 315-6810.

Sincerely,

A handwritten signature in black ink, appearing to read "Gregory H. Halnon".

Gregory H. Halnon
President

Three Mile Island Nuclear Station, Unit 2
TMI-16-008
Page 2

Attachments:

1. Three Mile Island Nuclear Station, Unit 2 Decommissioning Funding Status Report – NRC Formula
2. Three Mile Island Nuclear Station, Unit 2 Decommissioning Funding Status Report – Site-Specific Decommissioning Cost Estimate
3. Three Mile Island Nuclear Station, Unit 2 Financial Assurance Status Report

cc: NRC Region I Administrator
NRC Project Manager
NRC Resident Inspector

Attachment 1
TMI-16-008

Three Mile Island Nuclear Station, Unit 2 Decommissioning Funding
Status Report – NRC Formula
Page 1 of 3

This report reflects the FirstEnergy Corp. subsidiary ownership interests in the Three Mile Island Nuclear Station, Unit 2 as of December 31, 2015.

1. The minimum decommissioning fund estimate, pursuant to 10 CFR 50.75(b) and (c) (see Schedule 1):

| | |
|--------------------------------------|----------------------|
| Metropolitan Edison Company | \$250,670,659 |
| Pennsylvania Electric Company | 125,335,330 |
| Jersey Central Power & Light Company | <u>125,335,329</u> |
| FirstEnergy Corp. Consolidated | <u>\$501,341,318</u> |

2. The amount accumulated in external trust funds as of December 31, 2015:

| | |
|--------------------------------------|----------------------|
| | After Tax |
| Metropolitan Edison Company | \$324,050,034 |
| Pennsylvania Electric Company | 173,371,413 |
| Jersey Central Power & Light Company | <u>204,368,945</u> |
| FirstEnergy Corp. Consolidated | <u>\$701,790,392</u> |

3. There are no longer any funds to be collected from the ratepayers.
4. The assumptions used regarding escalation in decommissioning cost, rates of earnings on decommissioning funds, and rates of other factors used in funding projections:

| | |
|--|-------|
| Consolidated Ownership Interest in Unit | 100% |
| Estimated Net Investment Rate | 2.00% |
| Year of Site Restoration Completion | 2053 |
| Year of Three Mile Island Nuclear Station, Unit 1 end of license | 2034 |

The decommissioning activities for Three Mile Island Nuclear Station, Unit 2 are planned to commence after the shutdown of Three Mile Island Nuclear Station, Unit 1. Three Mile Island Nuclear Station, Unit 2 transitions from a Post-Defueling Monitored Storage status to decommissioning in 2040.

5. There are no contracts upon which the owners/licensees are relying pursuant to 10 CFR 50.75(e)(1)(v).
6. There are no modifications to the licensee's current method of providing financial assurance since the last submitted report.

7. There were no amendments to the trust agreements for the above-mentioned owners of Three Mile Island Nuclear Station, Unit 2.
8. Mathematical rounding was performed during the development of the supporting calculations.

Schedule 1
FIRSTENERGY CORP.
Calculation of Minimum Financial Assurance Amount
December 31, 2015
THREE MILE ISLAND NUCLEAR STATION, UNIT 2

Pennsylvania Regions

Labor (L) = Northeast
Energy (E) = National
Waste Burial (B) = Generic

For PWR Unit

| | Adjustment Factor | Ratio | Escalation Factor ¹ |
|-----------------------------|----------------------|-------|-----------------------------------|
| L = | 2.71 | 0.65 | 1.76 |
| E = | 1.759 | 0.13 | 0.229 |
| B = | 13.885 | 0.22 | 3.055 |
| PWR Escalation Factor = | | | 5.044 |

Base Amount for PWR between 1200 MWt and 3400 MWt = (\$75 + 0.0088P) million
(P = power level in megawatts thermal = 2772)

(\$75 + 0.0088(2772)) million = \$99,393,600

Escalated Amount for unit¹ =
99,393,600 x 5.044 = **\$501,341,318**

| <u>Owner/Licensee¹</u> | <u>Ownership</u> | |
|---|------------------|-----------------------------|
| Pennsylvania Electric Company | 25% | \$125,335,330 |
| Jersey Central Power & Light Company | 25% | \$125,335,329 |
| Metropolitan Edison Company | <u>50%</u> | <u>\$250,670,659</u> |
| FirstEnergy Corp. Consolidated | 100% | <u>\$501,341,318</u> |

Note 1: Mathematical rounding was performed during the development of the supporting calculations.

Three Mile Island Nuclear Station, Unit 2 Decommissioning Funding
Status Report – Site-Specific Decommissioning Cost Estimate
Page 1 of 4

1. Decommissioning funds estimated to be required pursuant to 10 CFR 50.75(b) and (c) are based upon a site-specific decommissioning cost study, *Decommissioning Cost Analysis for Three Mile Island Unit 2*, dated December 2014, and escalated to 2015 dollars:

| | |
|-------------------------|-----------------|
| NRC License Termination | \$1,204,022,000 |
|-------------------------|-----------------|

2. The amount accumulated in external trust funds as of December 31, 2015:

| | After Tax |
|--------------------------------------|----------------------|
| Metropolitan Edison Company | \$324,050,034 |
| Pennsylvania Electric Company | 173,371,413 |
| Jersey Central Power & Light Company | <u>204,368,945</u> |
| FirstEnergy Corp. Consolidated | <u>\$701,790,392</u> |

3. There are no longer any funds to be collected from the ratepayers.
4. The assumptions used regarding escalation in decommissioning cost, rates of earnings on decommissioning funds, and rates of other factors used in funding projections:

| | |
|--|-------|
| Consolidated Ownership Interest in Unit | 100% |
| Estimated Rate of Escalation in Decommissioning Costs | 0.00% |
| Estimated After-Tax Rate of Return | 2.00% |
| Year of Site Restoration Completion | 2053 |
| Year of Three Mile Island Nuclear Station, Unit 1 end of license | 2034 |

The decommissioning activities for Three Mile Island Nuclear Station, Unit 2 are planned to commence after the shutdown of Three Mile Island Nuclear Station, Unit 1. Three Mile Island Nuclear Station, Unit 2 transitions from a Post-Defueling Monitored Storage status to decommissioning in 2040.

All cost are based on a site-specific decommissioning cost study, *Decommissioning Cost Analysis for Three Mile Island Unit 2*, dated December 2014 (2013 dollars), then escalated to 2015 dollars using an escalation factor of 2.77% as documented in *Escalation Analysis for Three Mile Island Unit 2*, dated February 2015.

5. There are no contracts upon which the owners/licensees are relying pursuant to 10 CFR 50.75(e)(1)(v).
6. There are no modifications to the licensee's current method of providing financial assurance since the last submitted report.

7. There were no amendments to the trust agreements for the above-mentioned owners of Three Mile Island Nuclear Station, Unit 2.

8. Site-Specific Cost Analysis Assumptions

10 CFR 50.75(e)(1)(i), states, in part, that:

A licensee that has prepaid funds based on a site-specific estimate under 50.75(b)(1) of this section may take credit for projected earnings on the prepaid decommissioning trust funds, using up to a 2 percent annual real rate of return from the time of future funds' collection through the projected decommissioning period, provided that the site-specific estimate is based on a period of safe storage that is specifically described in the estimate.

In accordance with Regulatory Guide 1.159, Revision 2, a facility specific analysis may be used to demonstrate the adequacy of decommissioning funds, provided that:

NRC-required cost estimate for decommissioning costs, as defined in 10 CFR 50.2, is equal to or greater than the amount stated in the formulas in 10 CFR 50.75(c)(1) and (2).

The site-specific radiological decommissioning cost estimate is \$1,204,022,000 which is greater than the 10 CFR 50.75(c) cost estimate of \$501,341,318. The analysis assumes a 2 percent yearly rate of return. The analysis also assumes a period of safe storage. The cash flows were contained in a decommissioning cost estimate that was prepared for Three Mile Island Nuclear Station, Unit 2. The cash flow analysis assumes the yearly expenses are incurred at the beginning of year.

Schedule 1 provides the site-specific analysis. The analysis values are in 2015 dollars. The analysis includes the radiological costs.

9. Mathematical rounding was performed during the development of the supporting calculations.

10. References:

A. *Decommissioning Cost Analysis for Three Mile Island Unit 2*, December 2014 (Accession No. ML15086A337)

B. *Escalation Analysis for Three Mile Island Unit 2 2013 Site-Specific Decommissioning Cost Estimate*, February 2015 (Accession No. ML15086A337)

Schedule 1

FIRSTENERGY CORP.
Funding Analysis
December 31, 2015
THREE MILE ISLAND NUCLEAR STATION, UNIT 2

After-Tax

| | |
|------------------------------------|--------------|
| Estimated Net Investment Rate | 2.00% |
| Estimated Escalation Rate | 0.00% |
| Estimated After-Tax Rate of Return | <u>2.00%</u> |

| | |
|--|----------------------|
| Qualified Trust Balance on December 31, 2015 | \$701,790,392 |
| Non-Qualified Trust Balance on December 31, 2015 | - |
| Total | \$701,790,392 |

| Year | Beginning Balance | Deposits | Earnings | Withdrawal ^{1,2} | Ending Balance |
|------|-------------------|----------|------------|---------------------------|----------------|
| 2016 | 701,790,392 | - | 13,971,508 | (3,215,000) | 712,546,900 |
| 2017 | 712,546,900 | - | 14,186,798 | (3,207,000) | 723,526,698 |
| 2018 | 723,526,698 | - | 14,406,394 | (3,207,000) | 734,726,092 |
| 2019 | 734,726,092 | - | 14,630,382 | (3,207,000) | 746,149,474 |
| 2020 | 746,149,474 | - | 14,858,689 | (3,215,000) | 757,793,163 |
| 2021 | 757,793,163 | - | 15,091,723 | (3,207,000) | 769,677,886 |
| 2022 | 769,677,886 | - | 15,329,418 | (3,207,000) | 781,800,304 |
| 2023 | 781,800,304 | - | 15,571,866 | (3,207,000) | 794,165,170 |
| 2024 | 794,165,170 | - | 15,819,003 | (3,215,000) | 806,769,174 |
| 2025 | 806,769,174 | - | 16,071,243 | (3,207,000) | 819,633,417 |
| 2026 | 819,633,417 | - | 16,328,528 | (3,207,000) | 832,754,945 |
| 2027 | 832,754,945 | - | 16,590,959 | (3,207,000) | 846,138,904 |
| 2028 | 846,138,904 | - | 16,858,478 | (3,215,000) | 859,782,382 |
| 2029 | 859,782,382 | - | 17,131,508 | (3,207,000) | 873,706,890 |
| 2030 | 873,706,890 | - | 17,409,998 | (3,207,000) | 887,909,888 |
| 2031 | 887,909,888 | - | 17,694,058 | (3,207,000) | 902,396,946 |
| 2032 | 902,396,946 | - | 17,983,639 | (3,215,000) | 917,165,584 |
| 2033 | 917,165,584 | - | 18,279,172 | (3,207,000) | 932,237,756 |
| 2034 | 932,237,756 | - | 18,580,615 | (3,207,000) | 947,611,371 |
| 2035 | 947,611,371 | - | 18,888,087 | (3,207,000) | 963,292,459 |
| 2036 | 963,292,459 | - | 19,201,549 | (3,215,000) | 979,279,008 |
| 2037 | 979,279,008 | - | 19,521,440 | (3,207,000) | 995,593,448 |

Schedule 1 (Continued)

| Year | Beginning Balance | Deposits | Earnings | Withdrawal ^{1,2} | Ending Balance |
|------|-------------------|----------|------------|---------------------------|----------------|
| 2038 | 995,593,448 | - | 19,847,729 | (3,207,000) | 1,012,234,177 |
| 2039 | 1,012,234,177 | - | 20,180,544 | (3,207,000) | 1,029,207,721 |
| 2040 | 1,029,207,721 | - | 19,469,854 | (55,715,000) | 992,962,575 |
| 2041 | 992,962,575 | - | 18,023,231 | (91,801,000) | 919,184,806 |
| 2042 | 919,184,806 | - | 16,043,496 | (117,010,000) | 818,218,303 |
| 2043 | 818,218,303 | - | 14,024,166 | (117,010,000) | 715,232,469 |
| 2044 | 715,232,469 | - | 11,958,049 | (117,330,000) | 609,860,518 |
| 2045 | 609,860,518 | - | 9,857,010 | (117,010,000) | 502,707,528 |
| 2046 | 502,707,528 | - | 7,989,051 | (103,255,000) | 407,441,579 |
| 2047 | 407,441,579 | - | 6,605,532 | (77,165,000) | 336,882,111 |
| 2048 | 336,882,111 | - | 5,190,122 | (77,376,000) | 264,696,233 |
| 2049 | 264,696,233 | - | 3,750,625 | (77,165,000) | 191,281,857 |
| 2050 | 191,281,857 | - | 2,282,337 | (77,165,000) | 116,399,195 |
| 2051 | 116,399,195 | - | 835,224 | (74,638,000) | 42,596,418 |
| 2052 | 42,596,418 | - | 425,408 | (21,326,000) | 21,695,827 |
| 2053 | 21,695,827 | - | 373,117 | (3,040,000) | 19,028,943 |
| | | | | | |
| | | | | (1,204,022,000) | |

Notes:

1. Withdrawal are assumed to be made at the beginning of the period.
2. There were no funds withdrawn from the decommissioning trust fund for years 2013, 2014, and 2015.

Three Mile Island Nuclear Station, Unit 2 Financial Assurance Status Report
Page 1 of 1

1. Formal decommissioning has not started at the Three Mile Island Nuclear Station, Unit 2. A special disbursement of decommissioning trust funds occurred in 2005 for \$416,400.00. Notification of this use of decommissioning funds was made to the NRC by letter dated February 1, 2005 (Accession No. ML050380143). No funds were spent on decommissioning activities in 2015.
2. Decommissioning funds estimated to be required are based upon a site-specific decommissioning cost study, *Decommissioning Cost Analysis for Three Mile Island Unit 2*, dated December 2014, and escalated to 2015 dollars:

| | |
|-------------------------|-----------------|
| NRC License Termination | \$1,204,022,000 |
|-------------------------|-----------------|

As noted on Attachment 2, Schedule 1, *FirstEnergy Corp. Funding Analysis dated December 31, 2015*.

3. The amount accumulated in external trust funds as of December 31, 2015:

| | After Tax |
|--------------------------------------|----------------------|
| Metropolitan Edison Company | \$324,050,034 |
| Pennsylvania Electric Company | 173,371,413 |
| Jersey Central Power & Light Company | <u>204,368,945</u> |
| FirstEnergy Corp. Consolidated | <u>\$701,790,392</u> |

4. There are no longer any funds to be collected from the ratepayers.
5. There are no modifications to the licensee's current method of providing financial assurance since the last submitted report.
6. There were no amendments to the trust agreements for the above-mentioned owners of Three Mile Island Nuclear Station, Unit 2.
7. Mathematical rounding was performed during the development of the supporting calculations.
8. References:
 - A. *Decommissioning Cost Analysis for Three Mile Island Unit 2*, December 2014
 - B. *Escalation Analysis for Three Mile Island Unit 2 2013 Site-Specific Decommissioning Cost Estimate*, February 2015