April 25, 2016

MEMORANDUM TO: John McKirgan, Acting Chief
Licensing Branch 4
Division of New Reactor Licensing
Office of New Reactors

FROM: Manny Comar, Senior Project Manager ***/RA/***
Licensing Branch 4
Division of New Reactor Licensing
Office of New Reactors

SUBJECT: REGULATORY AUDIT REPORT FOR TURKEY POINT COMBINED LICENSE APPLICATION SITE-SPECIFIC HURRICANE AUTO MISSILE IMPACT ANALYSES (CAC NO. RN3161)

Enclosed is the U.S. Nuclear Regulatory Commission (NRC) staff's site-specific hurricane automobile missile impact analyses audit report for Florida Power and Light (FPL) regarding the Turkey Point Combined Operating License Application (COLA) for Units 6 and 7. The staff verified the site-specific hurricane automobile missile analyses and calculations used in support of the staff's review of the Turkey Point COLA Final Safety Evaluation Chapter 3, Section 3.5.2, "Protection from Externally Generated Missiles."

The audit was conducted over a two-week period (from March 28 – 30, 2016 and April 11 – 12, 2016) at the Westinghouse Electric Company's Headquarters in Cranberry, Pennsylvania. The staff reviewed several applicant calculation reports and closed a number of significant action items as outlined in the enclosed report. No new significant issues were identified or requests for information were needed as a result of this staff audit.

Docket Nos.: 52-040 and 52-041

Enclosure:
As stated

cc w/encl: See next page

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DATE	04/16/2016	04/16/2016	04/13/2016	04/13/2016	04/13/2016	04/13/2016	04/20/2016

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<u>Audit of Site-Specific Hurricane Auto Missile Impact Analyses</u>
<u>(Final Safety Analysis Report (FSAR) Section 3.5.2)</u>

Dates of Audit: March 28–30 and April 11-13, 2016

Audit Location: Westinghouse Cranberry Site
1000 Westinghouse Drive
Cranberry Township, PA 16066

Review Team: Manny Comar (NRC Project Manager)
Jim Xu (NRC SEB Branch Chief)
Jerry Chuang (NRC Lead Technical Reviewer)
Vaughn Thomas (NRC Technical Reviewer)
Marieliz Vera (NRC Technical Reviewer)
Tom Houston (NRC Consultant)

<u>Audit Scope</u>

The scope of the audits was to review the site-specific hurricane auto missile impact analyses performed to establish the design adequacy of seismic Category I structures for the Turkey Point Units 6 and 7 Combined License application, as well as the responses to the U.S. Nuclear Regulatory Commission (NRC) staff's request for additional information (RAI) pertaining to the FSAR Section 3.5.2.

Details in methodologies and calculations regarding the impact of the horizontal hurricane missile velocity on the Aux Building walls will be reviewed by staff and used to support the evaluation of the applicant's response to RAI 6544, Question 03.05.03-34 (TPG-GW-GLR-001, Revision 3), and associated FSAR update. In particular, the staff plans to audit details in the bases and calculations supporting the applicant's safety analysis including the following items:

1. One-way shear strength for auto-missile striking at edge and corn of the five walls are provided in Table B1 (page 26). Page 26 stated that these shear strength values were obtained from finite element analysis (FEA). The applicant is requested to provide validation of the computer code and model that they had used to obtain these shear strength values against physical test data of wall panels.

2. Basis for the calculating dynamic load factor methodology is requested. Page 25 stated that "[the dynamic load factor] DLF is calculated as effective resistance over peak force." The calculations of DLF below that statement yielded a DLF value of 0.97 for W 1, but did not involve the frequency of the wall panel. The staff does not agree with the applicant's interpretation of the DLF, and its method for calculating the DLF value, because by definition DLF is the value to be multiplied to the magnitude of a static load that would cause the wall's deflection equivalent to the deflection had that magnitude of load is applied suddenly (auto-missile in this case) to the wall. Therefore, the calculation of DLF involves the frequency of the wall. The applicant is requested to explain why its calculation of DLF did not involve the frequency of the wall 1 panel.

3. Page 9 stated that "the DLF was calculated from the ratio of the peak displacement calculated with the time history dynamic analysis versus the displacement calculated with the static analysis." The applicant is requested to (1) reconcile the different definitions and

methods of calculation for DLF on page 9 and page 25, and (2) state whether the method for calculating the DLF on page 9 is linear elastic, or inelastic, or ultimate (failure).

4. Dimensions (length, width, and thickness), and boundary conditions of the five wall panels (1W, 2W, 3W, 4W, and 5W), which the applicant had analyzed, were only partially provided, such as the width of a wall panel, but not the length of the same wall panel. The frequency of each of these five walls was not provided, which is needed to calculate the DLF. The applicant is requested to provide the dimensions (length, width, and thickness), boundary conditions, and frequencies of these five wall panels (1W, 2W, 3W, 4W, and 5W).

5. The vertical walls deemed critical and selected for evaluations by AP1000 Design Control Document (DCD) and TP COL are not identical. The applicant is requested to provide justification on why the critical walls selected are different.

6. Page 9 states that "One-way shear does not govern in edge and corner impacts." The statement is unclear as to whether it is generically applicable, or only for some specific walls of the five walls that the applicant had analyzed. The applicant is requested to provide clarification and justification for the above statement as to why One-way shear does not govern in edge and corner impacts.

7. Page 10 states that "SF4 is out-of-plane shear along the vertical sides of the element and SF5 is out-of-plane shear along the horizontal sides of the element." The staff cannot visualize these SF4 and SF5 shears. The applicant is requested to illustrate these shears by using a diagram of an element to indicate these SF4 and SF5 shears on the six surfaces of the element, and explain the loading source and boundary conditions that would create these SF4 and SF5 shears.

8. During the November 18, 2015 telephone conference, the staff explained to the applicant that if the auto-missile strikes in the middle of a one-way spanning wall, the shear force at the two edges of the wall supports would be one-half of the striking force, and if the auto-missile strikes near the edge of a wall support, the shear force at that edge of the wall would be increased more than on-half of the striking force. The applicant stated that they understood that explanation. However, the submittal did not address this issue, and the increased shear force between the concentrated load that is one "d=24.09 inches" away from the wall support and the support was not mentioned, or calculated, at all (see page 25). The applicant is requested to calculate and provide this increased shear force and compare with the corrected one-way shear strength used the effective width of the wall support, not the entire width or length, of the wall support as stated in the previous question.

9. Figure 4 – Reaction Distribute for Two-Way Spanning Walls provides a conceptual shear stress distribution along the four edges of a wall with respect to the same concentrated load (auto-missile in this case) on a one-way spanning wall (see page 13, figure 3) to a two-way spanning wall panel (see page 14, figure 4). The shear stress distribution function, and the effective width, along the edges of wall supports for two-way spanning walls is unclear and not defined. The applicant is requested to (1) provide its definition for what constitute two-way spanning walls, and (2) plot the shear stress distribution shape and magnitude along the wall supporting edges for an equivalent static concentrated load of 660 kip resulting from the auto-missile impact acting at the middle, edge, and corner of 1W,2W,3W,4W, and 5W.

10. Page 6 states that V_{wind} is the sum of the internal and external pressures due to wind. The applicant is requested to list the internal and external pressures due to wind, and their corresponding net pressure for the five wall panels.

11. Page 6 states that "The values of V_{wind} and $V_{missile}$ are divided by the entire span in both directions for each wall…" The applicant is requested to provide an explanation on why the $V_{missile}$, which is a concentrated load, was divided by the entire wall area as if it were a uniform load like wind.

12. Page 6 states that "Walls 1W, 3W, and 5W have [ductility factors higher than 1.0, and have therefore experienced yielding under the maximum load Rm]. The applicant is requested to (1) define the maximum load Rm and state how it is calculated, (2) provide the value of ductility factors for Walls 1W, 3W, and 5W, and how they were calculated, and (3) explain whether these ductility factors are for shear or for flexure of the walls.

13. Page 6 states Vu = Rm / (2L or 2W). The applicant is requested to explain why the equation is valid.

14. Page 6 states that Walls 2W and 4W had ductility factors less than 1.0, and Vu = (V_{wind} + $V_{missile}$)/ (2L or 2W). The applicant is requested to explain why the equation is valid.

15. The DLF vale for 1W is less for the auto-missile striking in the middle than it is striking at edge or corn of the wall (see tables 3 and 5). However, for 3W, 4W, and 5W the situation is reversed. The applicant is requested to explain this apparent inconsistency.

16. The value of b_o/d is required for calculating punch shear capacity (see page 5 equation (11-36). The applicant is requested to provide the value of b_o/d for the five walls panels (1W, 2W, 3W, 4W, and 5W).

17. Figure 3 – Reaction Distribution for One-Way spanning Walls provides the shear stress distribution (45-degree line form a concentrated load, such as the auto-missile) into the supporting edge of a wall, or the (effective) width for the shear strength calculation (see page 13). The staff accepts this approach. The applicant used this approach to calculate the one-way shear strength at the supporting edge of the wall for the auto-missile strikes in the mid-span of Wall 5 to be 1149 kips (see page 24). However, the applicant stated that the same one-way shear strength of 1149 kip (see page 25) is available for the case while the auto-missile strikes near the edge of the wall (d=24.09 inches away from the wall support) without realizing that the effectives width for shear strength should have been reduced. The applicant is requested to provide the justification for having used the same effective width for one-way beam shear strength calculations for the auto-missile strikes in the mid-span, and near the edge, of the wall while it should not have been the case, based on the 45 degree line of shear stress distribution as stated and shown by the applicant on page 13.

18. Providing basis for defining flexural and shear ductility factors. The applicant is requested to provide methods on how to calculate their values

19. Confirm the validity of the ultimate one-way shear strength and two-way shear strength equations.

20. Confirm the validity of the following supporting calculations:

1) TPG-1000-S2C-806, Revision 1, "FEM Analysis of Hurricane Missile Impact on AP1000 for Turkey Point Units 6 and 7"
2) TPG-1000-CCC-001, Revision 1, "Turkey Point Units 6 and 7 Nuclear Island – Hurricane Missile Impact"
3) TPG-1000-S3R-001, Revision 1, "Turkey Point Units 6 and 7 Nuclear Island – Hurricane Missile Impact"

Audit Summary

The Applicant for Turkey Point Units 6 and 7, Florida Power & Light Company (TP) and its representatives from Westinghouse Electric Corporation, LLC (Westinghouse), participated in the audit, including key technical personnel involved with the TP site specific hurricane auto missile impact analysis. A list of attendees including the U.S. Nuclear Regulatory Commission staff as well as its contractor from Information System Laboratory (ISL) is provided in Table 2.

The NRC staff made some introductory remarks regarding the audit background, scope, objectives, and agenda. Following these remarks, Westinghouse presented a brief overview of the development of the 3D nonlinear finite element model for the standard design of the auxiliary building (AB) and the supplemental hand calculations. To address questions that the staff raised during the audit, the applicant presented information to facilitate the discussion on: elastic-plastic finite element modeling for the AB subjected to hurricane wind and missile loadings; one-way shear stress distribution at the beam support for edge impacts; the dynamic load factor (DLF) and the supporting hand calculations. During the audit, the staff conducted a detailed review of selected calculations and reports. The staff focused on the following technical issues:

1. FEM Modeling and validation
2. DLF definition
3. Validity of DLF for elastic-plastic materials
4. Dimensions and boundary conditions of critical wall panels selected for evaluation
5. Selection criteria for critical wall panels
6. One-way vs two-way shear response behavior
7. Element shear force distribution
8. Comparison of shear reactions between center impact and edge impact for one-way response
9. Shear stress distribution functions for one-way and two-way spanning walls
10. Hurricane wind load calculations
11. Application of wind and missile loads
12. Flexural and shear ductility factors
13. Evaluation of shear force at the support of the wall slab
14. Evaluation of shear force at the support of the wall slab where ductility factor is less than unity
15. Evaluation of DLF
16. Critical location of edge impact
17. Definition of effective width for supporting shear during edge impact by a concentrated force
18. Methods for calculating flexural and shear ductility factors
19. Ultimate one-way and two-way shear strength equations

Detailed Review and Discussions

FEM Validation

We discussed the finite element model used by the applicant to support their application. of the items discussed included:

(i) The boundary conditions imposed on the model (**Resolved**)

We discussed the appropriateness of fixing the model boundary at the basemat level, instead of at the ground level. The issue of passive soil pressure effects on the dynamic response of the structure were discussed. The applicant agreed to look into it to assess its influence. The applicant presented the maximum displacement for an edge impact for Case 2W, showing its much smaller than the displacements induced by passive soil pressure load. Accordingly, the fixed base boundary condition used in the FEM is conservative, thus, acceptable.

(ii) Shear stress distribution function (**Resolved**)

The NRC staff requested FEM output on the distribution of shear stress adjacent to the loaded region. The applicant agreed to provide plots of shear stress distributions along the support for edge and corner impacts. The applicant presented a plot on shear stress distribution for the case 2W at the section d/2 away from the beam support. Although the peak of 144 psi exceeds the allowable 112.77 psi, the average stress over the effective length of 19 ft amounts to only 58 psi <112.77 psi. Thus, this issue is resolved.

(iii) Test cases using the FEM Program (**Resolved**)

The applicant discussed the use of SC beam testing performed at Purdue University to benchmark the FEM they developed including element selection. The NRC staff, however, considered this benchmark test as dissimilar to the slab (walls) under consideration for the Auxiliary Building. The Staff provided a paper documenting results of a test program for concrete slabs similar to the case of concentrated loads on walls. The staff recommended a test case of the ABAQUS FEM against the test data presented in the paper be performed to demonstrate that the FEM element used is adequate to represent the behavior observed in slabs. The reason for the staff recommendations is as follows:

> The wall response caused by corner and edge impacts from the design hurricane auto missile are developed using the ABAQUS computer code that incorporates shell elements capable of modeling the discrete reinforcing pattern within the finite element formulation. These analyses are intended to provide a description of the load transfer from the impacting time history force to the wall and supporting structure.
>
> As part of the benchmarking process, the applicant compared the predicted response of tests performed on beam elements to analytical results computed using ABAQUS and the elements (and associated options) that were used in the

evaluation of the edge and corner impacts described above. It is not clear to the staff that the behavior of the elements, which were shown to predict beam behavior of the test results well, would conservatively/adequately represent the behavior of slabs loaded by a concentrated force near support points.

Test data developed at Delft University (ref. Lantsoght, E. 2013) for conditions very similar to the wall configuration of the Auxiliary Building have recently been made available. Since the stress state in slabs are generally different than those seen in beams and there is a question as to whether the element will predict accurate or conservative responses, there is a need to perform a validation check of the FEM model and selected element to confirm that the observed behavior seen in the tests are well represented.

The applicant agreed to demonstrate the applicability of the selected element type to represent the behavior of concentrated forces applied to walls near their supports by comparing analyses results to test data for a selected test specimen from Reference 3. The test specimen selected is S11 with a load placed at the center of the slab dimension b (mid edge impact) shown in Figure 2 of Ref. 3. The a/d value, dimensions and materials should be consistent with Table 2 for test S11. Required results are the comparison of analytical ultimate load to test value.

Additionally, the distribution of shear (kip) across the beam near the support (~d/2 from face of support) shall be provided and compared to the distribution of shear predicted from a linear elastic model of the system. These distributions will be consistent with the time of the ultimate load. A comparison of stress of the integrated over the b dimension between the elastic and non-linear models will be provided. Ultimate load will be associated with the point where additional displacement of the slab does not correspond to a significant increase in applied load. A COV of +/- 30% in the comparison of analytical results to test data is consistent with the COV indicated in the test literature and will be used to assess acceptability of results.

The tests of interest are described in the following references:

1. Lantsoght, E., Van der Veen, C., Walraven J, “Shear in one-way slabs under concentrated load close to support”, ACI Structural Journal, 110-S24
2. Lantsoght, E “Shear in one-way slabs under concentrated load close to support”, PhD Dissertation, Technische Universiteit Delft, June 14, 2013
3. Lantsoght, E., “Shear tests of reinforced concrete slabs and slab strips under concentrated loads,” 9th fib International PhD Symposium in Civil Engineering, July 2012

The applicant performed the following:

A. Compared the analytical results to test ultimate load

   a. Results showed a comparison of approximately 9% and much stiffer behavior than test results. Incorporating stiffer element in the FEM model will result in conservative estimates of dynamic forces.

b. Plots of analytical results for shear stress distribution along the section distance d away from the I-beam support shows a discontinuous slope near both ends (an artifact) due to the glued contact assumption. The applicant volunteered to perform the FEM analysis using contact conditions more representative of the test set up. The results for the analysis incorporating updated support conditions, show differences in ultimate load that are insignificant (292.6 vs. 292.7 Kips). Moreover, the FEM using glued contact provides more constraint, resulting in conservative estimates at element stiffness and resulting dynamic forces. Therefore, it is acceptable.

B. Integrated shear stress over effective width, b

The staff discussed the issue on whether the shear stress demands at the beam reaction should be evaluated over the entire span or over an effective width, "b". Although the applicant interpreted the code as spread uniformly over the entire span, the staff adopted the position that "effective width" b is based on a different code interpretation consistent with that adopted by the AP1000 DCD. Nevertheless, the applicant did present a plot that showed that, in the case of edge impact for 2W wall, shear stresses over the effective width of 19 ft were 58 psi, still below the Code allowable of 112 psi, although the peak shear stress is at 142 psi, more than the allowable. Code allowables are based on nominal (average) stresses over a defined critical section. Therefore, this issue is resolved.

Q2. The applicant indicated that the DLF is not being used to develop the design forces for the affected walls. The applicant further stated that the computed DLF is only used to justify the value of Dynamic Increase Factor (DIF), to be use. If the DLF is less than 1.2, DIF is equal to 1.0; and if the DLF is higher than 1.2, the DIF is equal to 1.1. (Per RG 1.142). Only 2W, 4W and 5W fit this condition. The applicant updated RAI 6544 – TPG-GW-GLR-002 accordingly. Therefore, this issue is resolved.

Q3. This issue is closed because the applicant agreed to remove Table 5, "DLFs of Critical Exterior Walls," in its response to staff RAI (RAI 6544 – TPG-GW-GLR-002). The applicant provided a draft markup of the RAI response that reflects the change.

Q4. This issue is closed because the applicant explained the dimensions, the boundary conditions, and the frequencies of the walls in its calculation (TPG-1000-CCC-001, Rev 1).

Q5. The applicant agreed to include the 2 additional walls (4W and 5W) as described in APP-GW-GLR-133. In the update to RAI 6544 – TPG-GW-GLR-002, the 2 additional walls are labeled as 6W and 7W for clarity. Wall 6W was analyzed in the Finite Element Analysis (FEA). The applicant provided the draft results of the impact at both the edge and corner of Wall 6W and demonstrated that Wall 6W is capable of withstanding the impact load. For Wall 7W, no analysis was performed because the wall demands were considered to be bounded by the other walls. The applicant updated the text, table and figures in the RAI response to reflect the change (Figure 1, Table B-1). The staff reviewed the draft response and found it to be acceptable because the applicant adequately addressed the staff concern related to the analysis of the two additional walls.

Q6. For the statement on page 11 of 30 of RAI 6544 – TPG-GW-GLR-002, "One-way shear does not govern in edge and corner impacts," the applicant agreed to remove the statement and reference Appendix B of the RAI response where the calculation on the one-way shear was performed. The staff reviewed the draft markup of the RAI response and found it to be acceptable because the RAI response adequately captures the change.

Q7. The applicant confirmed that a beam support element was included in the model. The plot used the line to represent beam elements; but the off-set between the beam and slab was taken into account in the computations. So this issue is resolved.

Q8. Table B-1 of the Report, Column 4 for one-way beam action by hand calculation used DLF = 1, inconsistent with the ACI code spec based on using an "equivalent static" approach. The applicant revised Table B-1, TPG-GW-GLR-002 to show consistent comparisons between the spreadsheet (hand) calculations and the FEA results. Columns were added with the Corner sum FEA, the Edge sum FEA and the 1-way spreadsheet results. The Corner sum FEA and the Edge sum FEA are the sum of shear around the impact perimeter. The spreadsheet column is annotated as the hand calculation column. The staff reviewed the comparison of the hand calculation and the FEA results, and the comparison appeared to be reasonable to the staff. Thus, this issue is resolved.

Q9. The applicant demonstrated the damage indices to not impact the shear behavior of the impacted wall by comparing the linear and nonlinear shear stress distributions for the case of one-way response edge impact at the 2W and 6W walls. The comparisons showed that the differences were less than 0.8%, meaning that the impacts are essentially elastic and shear ductility is less than unity. Accordingly, the parameters damage indices and the shear ductility do not have any influences on the dynamic impact analysis. Therefore, this issue is resolved.

Q10 The Wind load V_{wind} Evaluation issue is resolved because the applicant agreed to use the Importance Factor of 1.15 used by the DCD in the wind pressure equation as specified in ASCE 7-05. As a result, the applicant agreed to update its calculations (TPG-1000-CCC-001) to reflect the change for walls in RAI 6544 – TPG-GW-GLR-002 in addition to walls 4W and 5W in APP-GW-GLR-133. Therefore, this issue is resolved.

Q11. The applicant demonstrated the the $V_{missile}$ can be divided by the entire wall area by using the one-way beam action. Thus, this issue is resolved based on the specification in Section 11.12.1.1 of ACI 349-01. Additionally, the independent assessment of demand by the NRC staff described in Q1 further supports the applicants conclusion of adequacy of the walls.

Q12. The applicant successfully defined the maximum load Rm and how it was calculated. Section 5.1.8, "Allowable Ductility with Flexure – Automobile Missile," Table 5-6, "Ductility of Walls due to Automobile Impact," of the applicant's calculation TPG-1000-CCC-001 adequately address the flexure ductility of the walls. The applicant confirmed the shear ductility factor and the elastic regime using test case results from Q1. The issue is resolved because of elastic behavior shown in Q9.

Q13. This issue is resolved because the applicant explained that the equation ($V_u = R_m$/ (2L or 2W)) is applicable when the load is applied at the center of the beam based on the simply-supported beam theory.

Q14. The applicant stated that DLF is not used in its analysis for walls 2W and 4W, thus the equation (Vu = (V_{wind} + $V_{missile}$)/ (2L or 2W)) is always valid, independent of ductility factor. As a result, this issue is resolved.

Q15. The applicant stated that DLF is not used in its analysis. Therefore, this issue is resolved.

Q16. This issue is resolved because Table 5-4, "Wall Properties," of the applicant's calculation (TPG-1000-CCC-001) did provide the values of the b_0/d used to calculate the punching shear capacity for the walls.

Q17. Shear stress calculations using effective width: The applicant provided a plot of the shear stress distribution along the beam width for the edge impact at 2W. Although the peak of 142 psi exceeds the allowable 112.77 psi, the averaged stress over the effective width amounts to only 58 psi as discussed in the summary for Q1. Thus, this issue is resolved.

Q18. The applicant provided the basis for the shear ductility factors by showing the stress state; for shear demonstrating that the behavior remains in the elastic range using the test case results from Q1. The shear ductility issue is resolved because of the elastic behavior shown in Q9.

Q19. The applicant determined the ultimate one-way and two-way shear capacity and showed the stress state using test case results from Q1. This issue is resolved because of the elastic behavior shown in Q9.

Q20. The staff reviewed and confirmed the applicant's calculations in Table 1 of this report.

Conclusion

At the audit exit meeting, NRC staff informed the applicant that the audit was productive; and that the support by both the applicant and Westinghouse led to a successful resolution of the staff's technical questions. All questions requested of the applicant during the audit are resolved with the exception of the following:

1. Applicant to update the FSAR to include the latest changes as a result of the audit. This issue is being tracked as a Confirmatory Item pending the applicant's update to the next revision of the FSAR.

2. Applicant to provide the final copy of the revised RAI response (RAI 6544 – TPG-GW-GLR-002).

Westinghouse Reports Developed for FSAR Section 3.5.2 (Including Supporting Calculations)

Doc Type	Document No. (TPG SDN)	Revision	Title	Audit Primary or supporting calc.	Supporting (Input) Calcs/Docs	Notes
Calc	GW-GLR-001	3	Supplement to eRAI-6544	supporting		Input to FSAR 3.5.3 calcs
Calc	1000-S2C-806	1	FEM Analysis of Hurricane Missile Impact on AP1000 for Turkey Point Units 6&7	supporting		
Calc	1000-CCC-001	1	Turkey Point Units 6&7 Nuclear Island-Hurricane Missile Impact	supporting		Input to multiple FSAR 3.5.3 calcs
Calc	21000-S3R-001	1	Turkey Point Units 6&7 Nuclear Island- Hurricane Missile Impact analysis	supporting		

Turkey Point 3 Hurricane Missile NRC Audit – March 28-30 and April 11-13, 2016
Westinghouse Offices, Cranberry Township, PA

Participants

Last name	First Name	Organization	Title
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