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LTR-NRC-10-38

July 2, 2010

Subject: Response to NRC's Draft Safety Evaluation for Westinghouse Electric Company Topical Report WCAP-10965-P-A, Addendum 2/WCAP-10966-A, Addendum 2, "Qualification of the New Pin Power Recovery Methodology" (TAC No. ME1420) (Proprietary/Non-Proprietary)

Enclosed is Westinghouse's proprietary review of NRC's Draft Safety Evaluation for Westinghouse Electric Company Topical Report WCAP-10965-P-A, Addendum 2/WCAP-10966-A, Addendum 2, "Qualification of the New Pin Power Recovery Methodology" (TAC No. ME1420) (Proprietary/Non-Proprietary). There is proprietary information identified in the draft safety evaluation as well as comments to provide technical accuracy.

Also enclosed is:

1. One (1) copy of the Application for Withholding Proprietary Information from Public Disclosure, AW-10-2868 (Non-Proprietary), with Proprietary Information Notice and Copyright Notice.
2. One (1) copy of Affidavit (Non-Proprietary).

This submittal contains proprietary information of Westinghouse Electric Company LLC. In conformance with the requirements of 10 CFR Section 2.390, as amended, of the Commission's regulations, we are enclosing with this submittal an Application for Withholding Proprietary Information from Public Disclosure and an Affidavit. The affidavit sets forth the basis on which the information identified as proprietary may be withheld from public disclosure by the Commission.

Correspondence with respect to the proprietary aspects of this application for withholding or the Westinghouse affidavit should reference AW-10-2868 and should be addressed to J. A. Gresham, Manager, Regulatory Compliance and Plant Licensing, Westinghouse Electric Company LLC, P.O. Box 355, Pittsburgh, Pennsylvania 15230-0355.

Very truly yours,

J. A. Gresham, Manager
Regulatory Compliance and Plant Licensing

Enclosures

cc: E. Lenning, NRR
A. Mendiola, NRR
J. Donoghue, NRO

Add: E. Lenning
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T007
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AW-10-2868

July 2, 2010

APPLICATION FOR WITHHOLDING PROPRIETARY
INFORMATION FROM PUBLIC DISCLOSURE

Subject: LTR-NRC-10-38, P-Enclosure, "Response to NRC's Draft Safety Evaluation for Westinghouse Electric Company Topical Report WCAP-10965-P-A, Addendum 2/WCAP-10966-A, Addendum 2, 'Qualification of the New Pin Power Recovery Methodology' (TAC No. ME1420)" (Proprietary)

Reference: Letter from J. A. Gresham to Document Control Desk, LTR-NRC-10-38, dated July 2, 2010

The Application for Withholding Proprietary Information from Public Disclosure is submitted by Westinghouse Electric Company LLC (Westinghouse), pursuant to the provisions of paragraph (b)(1) of Section 2.390 of the Commission's regulations. It contains commercial strategic information proprietary to Westinghouse and customarily held in confidence.

The proprietary material for which withholding is being requested is identified in the proprietary version of the subject report. In conformance with 10 CFR Section 2.390, Affidavit AW-10-2868 accompanies this Application for Withholding Proprietary Information from Public Disclosure, setting forth the basis on which the identified proprietary information may be withheld from public disclosure.

Accordingly, it is respectfully requested that the subject information which is proprietary to Westinghouse be withheld from public disclosure in accordance with 10 CFR Section 2.390 of the Commission's regulations.

Correspondence with respect to the proprietary aspects of this application for withholding or the accompanying affidavit should reference AW-10-2868 and should be addressed to J. A. Gresham, Manager, Regulatory Compliance and Plant Licensing, Westinghouse Electric Company LLC, P.O. Box 355, Pittsburgh, Pennsylvania 15230-0355.

Very truly yours,

A handwritten signature in black ink, appearing to read 'J. A. Gresham', written over a horizontal line.

J. A. Gresham, Manager
Regulatory Compliance and Plant Licensing

Enclosures

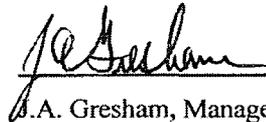
AFFIDAVIT

COMMONWEALTH OF PENNSYLVANIA:

SS

COUNTY OF ALLEGHENY:

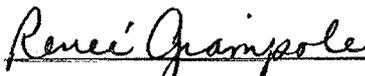
Before me, the undersigned authority, personally appeared J.A. Gresham, who, being by me duly sworn according to law, deposes and says that he is authorized to execute this Affidavit on behalf of Westinghouse Electric Company LLC (Westinghouse), and that the averments of fact set forth in this Affidavit are true and correct to the best of his knowledge, information, and belief:



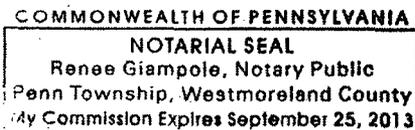
J.A. Gresham, Manager

Regulatory Compliance and Plant Licensing

Sworn to and subscribed before me
this 2nd day of July 2010



Notary Public



- (1) I am Manager, Regulatory Compliance and Plant Licensing, in Nuclear Services, Westinghouse Electric Company LLC (Westinghouse), and as such, I have been specifically delegated the function of reviewing the proprietary information sought to be withheld from public disclosure in connection with nuclear power plant licensing and rule making proceedings, and am authorized to apply for its withholding on behalf of Westinghouse.
- (2) I am making this Affidavit in conformance with the provisions of 10 CFR Section 2.390 of the Commission's regulations and in conjunction with the Westinghouse Application for Withholding Proprietary Information from Public Disclosure accompanying this Affidavit.
- (3) I have personal knowledge of the criteria and procedures utilized by Westinghouse in designating information as a trade secret, privileged or as confidential commercial or financial information.
- (4) Pursuant to the provisions of paragraph (b)(4) of Section 2.390 of the Commission's regulations, the following is furnished for consideration by the Commission in determining whether the information sought to be withheld from public disclosure should be withheld.
 - (i) The information sought to be withheld from public disclosure is owned and has been held in confidence by Westinghouse.
 - (ii) The information is of a type customarily held in confidence by Westinghouse and not customarily disclosed to the public. Westinghouse has a rational basis for determining the types of information customarily held in confidence by it and, in that connection, utilizes a system to determine when and whether to hold certain types of information in confidence. The application of that system and the substance of that system constitutes Westinghouse policy and provides the rational basis required.

Under that system, information is held in confidence if it falls in one or more of several types, the release of which might result in the loss of an existing or potential competitive advantage, as follows:

 - (a) The information reveals the distinguishing aspects of a process (or component, structure, tool, method, etc.) where prevention of its use by any of

Westinghouse's competitors without license from Westinghouse constitutes a competitive economic advantage over other companies.

- (b) It consists of supporting data, including test data, relative to a process (or component, structure, tool, method, etc.), the application of which data secures a competitive economic advantage, e.g., by optimization or improved marketability.
- (c) Its use by a competitor would reduce his expenditure of resources or improve his competitive position in the design, manufacture, shipment, installation, assurance of quality, or licensing a similar product.
- (d) It reveals cost or price information, production capacities, budget levels, or commercial strategies of Westinghouse, its customers or suppliers.
- (e) It reveals aspects of past, present, or future Westinghouse or customer funded development plans and programs of potential commercial value to Westinghouse.
- (f) It contains patentable ideas, for which patent protection may be desirable.

There are sound policy reasons behind the Westinghouse system which include the following:

- (a) The use of such information by Westinghouse gives Westinghouse a competitive advantage over its competitors. It is, therefore, withheld from disclosure to protect the Westinghouse competitive position.
- (b) It is information that is marketable in many ways. The extent to which such information is available to competitors diminishes the Westinghouse ability to sell products and services involving the use of the information.
- (c) Use by our competitor would put Westinghouse at a competitive disadvantage by reducing his expenditure of resources at our expense.

- (d) Each component of proprietary information pertinent to a particular competitive advantage is potentially as valuable as the total competitive advantage. If competitors acquire components of proprietary information, any one component may be the key to the entire puzzle, thereby depriving Westinghouse of a competitive advantage.
 - (e) Unrestricted disclosure would jeopardize the position of prominence of Westinghouse in the world market, and thereby give a market advantage to the competition of those countries.
 - (f) The Westinghouse capacity to invest corporate assets in research and development depends upon the success in obtaining and maintaining a competitive advantage.
- (iii) The information is being transmitted to the Commission in confidence and, under the provisions of 10 CFR Section 2.390; it is to be received in confidence by the Commission.
- (iv) The information sought to be protected is not available in public sources or available information has not been previously employed in the same original manner or method to the best of our knowledge and belief.
- (v) The proprietary information sought to be withheld in this submittal is that which is appropriately marked in LTR-NRC-10-38, P-Enclosure, "Response to NRC's Draft Safety Evaluation for Westinghouse Electric Company Topical Report WCAP-10965-P-A, Addendum 2/WCAP-10966-A, Addendum 2, 'Qualification of the New Pin Power Recovery Methodology' (TAC No. ME1420)" (Proprietary) for submittal to the Commission, being transmitted by Westinghouse letter, LTR-NRC-10-38, and Application for Withholding Proprietary Information from Public Disclosure, to the Document Control Desk. The proprietary information as submitted by Westinghouse is that associated with the response to the NRC's draft safety evaluation for WCAP-10965-P-A, Addendum 2/WCAP-10966-A, Addendum 2.

This information is part of that which will enable Westinghouse to:

- (a) Perform three-dimensional explicit pin-by-pin calculations that will account for history effects associated with control rod motion.

Further this information has substantial commercial value as follows:

- (a) The information requested to be withheld reveals the distinguishing aspects of a methodology which was developed by Westinghouse.

Public disclosure of this proprietary information is likely to cause substantial harm to the competitive position of Westinghouse because it would enhance the ability of competitors to provide similar technical evaluation justifications and licensing defense services for commercial power reactors without commensurate expenses. Also, public disclosure of the information would enable others to use the information to meet NRC requirements for licensing documentation without purchasing the right to use the information.

The development of the technology described in part by the information is the result of applying the results of many years of experience in an intensive Westinghouse effort and the expenditure of a considerable sum of money.

In order for competitors of Westinghouse to duplicate this information, similar technical programs would have to be performed and a significant manpower effort, having the requisite talent and experience, would have to be expended.

Further the deponent sayeth not.

PROPRIETARY INFORMATION NOTICE

Transmitted herewith are proprietary and/or non-proprietary versions of documents furnished to the NRC in connection with requests for generic and/or plant-specific review and approval.

In order to conform to the requirements of 10 CFR 2.390 of the Commission's regulations concerning the protection of proprietary information so submitted to the NRC, the information which is proprietary in the proprietary versions is contained within brackets, and where the proprietary information has been deleted in the non-proprietary versions, only the brackets remain (the information that was contained within the brackets in the proprietary versions having been deleted). The justification for claiming the information so designated as proprietary is indicated in both versions by means of lower case letters (a) through (f) located as a superscript immediately following the brackets enclosing each item of information being identified as proprietary or in the margin opposite such information. These lower case letters refer to the types of information Westinghouse customarily holds in confidence identified in Sections (4)(ii)(a) through (4)(ii)(f) of the affidavit accompanying this transmittal pursuant to 10 CFR 2.390(b)(1).

COPYRIGHT NOTICE

The reports transmitted herewith each bear a Westinghouse copyright notice. The NRC is permitted to make the number of copies of the information contained in these reports which are necessary for its internal use in connection with generic and plant-specific reviews and approvals as well as the issuance, denial, amendment, transfer, renewal, modification, suspension, revocation, or violation of a license, permit, order, or regulation subject to the requirements of 10 CFR 2.390 regarding restrictions on public disclosure to the extent such information has been identified as proprietary by Westinghouse, copyright protection notwithstanding. With respect to the non-proprietary versions of these reports, the NRC is permitted to make the number of copies beyond those necessary for its internal use which are necessary in order to have one copy available for public viewing in the appropriate docket files in the public document room in Washington, DC and in local public document rooms as may be required by NRC regulations if the number of copies submitted is insufficient for this purpose. Copies made by the NRC must include the copyright notice in all instances and the proprietary notice if the original was identified as proprietary.

**Response to NRC's Draft Safety Evaluation for Westinghouse Electric
Company Topical Report WCAP-10965-P-A, Addendum 2/WCAP-10966-A,
Addendum 2, "Qualification of the New Pin Power Recovery Methodology"
(TAC No. ME1420) (Non-Proprietary)**

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The following Westinghouse comments are provided in response to the NRC staff's proposed draft safety evaluation (SE) for WCAP-10965-P-A, Addendum 2/WCAP-10966-A, Addendum 2. Also included is a markup of the draft SE in order to provide a line-by-line identification of text containing proprietary information and the associated bases for its designation pursuant to the criteria of 10 CFR 2.390.

Comment 1)

The fourth sentence of Section 1.0 paragraph 1 states "...wherein control rod insertion is not precluded, has..."

Westinghouse proposes this is changed to "...wherein some control rod insertion is a typical mode of operation, has..."

Comment 2)

The fourth sentence of Section 1.0 paragraph 1 states "...significant homogeneity changes will also affect the cumulative methodology with homogenized cross sections over the fuel assembly will not capture."

Westinghouse proposes this is changed to read "...significant homogeneity, the cumulative effect of which will not be captured in fuel pin powers using conventional pin power methodology."

Comment 3)

"PARAGON" is misspelled as "PRAGON" in the following places: Page 1 Line 39, Page 2 Line 36, and Page 3 Line 49. Westinghouse requests this spelling error is corrected.

Comment 4)

The second sentence in Section 1 paragraph 2 states "...whose solution algorithm is base on..."

Westinghouse proposes this is changed to read "...whose solution algorithm is based on..."

Comment 5)

The third sentence in Section 1 paragraph 2 states "The later code NEXUS..."

Westinghouse proposes this is changed to read "The latter code NEXUS..."

Comment 6)

The first sentence in Section 3.1 paragraph 1 states "...that corrects for the error introduced due to the homogenized cross sections in the ANC calculation with..."

Westinghouse proposes this is changed to read "...that captures the heterogeneity of the individual pins and is based on..."

Comment 7)

The first sentence of Section 3.1 paragraph 2 states “[
]”^{a,c}

Westinghouse proposes this is changed to read “[
]”^{a,c}

Comment 8)

The first sentence of Section 3.1 paragraph 2 states “[
]”^{a,c}

Westinghouse proposes this is changed to read “[
]”^{a,c}

Comment 9)

The third sentence of Section 3.1 paragraph 3 states “...as RAI in Reference 8.”

Westinghouse proposes this is changed to read “...as in RAIs in Reference 6.”

Comment 10)

In the second sentence of Section 3.2.1.1 paragraph 1, “severe” is spelled as “sever”.
Westinghouse requests this spelling error is corrected.

Comment 11)

In the fourth sentence of Section 4.0 paragraph 1, “Paragon” should read “PARAGON.”

Comment 12)

The fourth sentence of Section 4.0 paragraph 1 states “...the NEXUS code.”

Westinghouse proposes this is changed to read “...the NEXUS code system.”

Markup of draft SE text to identify proprietary information and bases

The following page mark-ups have been copied from the draft SE to provide line by line markup of the identified proprietary information and suggested text changes.

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7
8 DRAFT SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

9
10 WCAP-10965-P, ADDENDUM 2/WCAP-10966-A, ADDENDUM 2, "QUALIFICATION

11
12 OF THE NEW PIN POWER RECOVERY METHODOLOGY"

13
14 WESTINGHOUSE ELECTRIC COMPANY

15
16 PROJECT NO. 700

17
18
19 1.0 INTRODUCTION AND BACKGROUND

20
21 By letter dated June 1, 2009, the Westinghouse Electric Company (Westinghouse) submitted
22 Topical Report (TR) WCAP-10965-P-A, Addendum 2/WCAP-10966-A, Addendum 2,
23 "Qualification of the New Pin Power Recovery Methodology" (Reference 1), to the U.S. Nuclear
24 Regulatory Commission (NRC) for review and approval. The objective of the TR is to provide
25 the necessary information that will allow the use of the Westinghouse Advanced Nodal
26 Computer Code (ANC) to perform three-dimensional explicit pin-by-pin calculations that will
27 account for history effects associated with control rod motion (References 2 and 3). Traditional
28 pressurized-water reactors (PWRs) operate without significant insertion of control rod banks.
29 The advent of new PWR core designs, wherein some control rod insertion is a typical mode of
30 operation not precluded, has presented the likelihood of introducing significant heterogeneities,
31 the cumulative effect of which will not be captured in fuel pin powers using conventional pin
32 power methodology. that the conventional methodology with homogenized cross-sections over
33 the fuel assembly will not capture. Moreover, such a deficiency in capturing heterogeneity
34 changes will also affect the cumulative values of parameters such as fuel pin power. To remedy
35 these deficiencies of the conventional methodology of pin power reconstruction in ANC, the new
36 methodology is introduced that follows the history of each individual fuel pin in ANC, and
37 computes the fuel pin macroscopic cross-sections based on the fuel pin history and the local
38 spectrum.

39
40 The efficacy of the new methodology for pin power recovery with the ANC code is critically
41 dependent on the capabilities and results of the codes PARAGON (Reference 4) and NEXUS
42 (Reference 5). The former is a Westinghouse lattice code; a stand-alone neutron transport
43 code whose solution algorithm is based on the collision probability method. In addition to
44 serving as a stand-alone lattice physics code, it is also, as in the case of the new methodology
45 for pin power recovery in ANC, a cross section generation tool. The latter code NEXUS
46 parameterizes cross sections calculated by the lattice code for input to ANC. It is this capability
47 that is a key to the new methodology for pin power reconstruction.
48
49
50

ENCLOSURE

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4 2.0 REGULATORY EVALUATION
5

6 Section 50.34 of Title 10 of the *Code of Federal Regulations* requires applicants to provide
7 safety analysis reports to the NRC detailing the performance of structures, systems, and
8 components provided for the prevention or mitigation of potential accidents. Westinghouse is
9 seeking a review and approval of the WCAP-10965-P, Addendum 2, TR in order to replace the
10 existing methodology of pin power reconstruction in ANC with the new pin power recovery
11 methodology.
12

13 3.0 TECHNICAL EVALUATION
14

15 3.1 Summary of the WCAP-10965-P, Addendum 2, "Qualification of the New Pin Power
16 Recovery Methodology" Topical Report
17

18 The conventional methodology for reconstruction of the k-th pin power consists of the
19 summation over energy groups of the product of three terms: the energy release per fission
20 times the macroscopic fission cross section for the g-th energy group homogenized over the fuel
21 assembly; the value of the g-th group flux at the k-th pin location of the smooth assembly flux;
22 and a g-th group pin factor that captures the heterogeneity of the individual pins and is based on
23 corrects for the error introduced due to the homogenized cross sections in the ANC calculation
24 with pre-calculated fine-mesh PARAGON assembly calculations. Due to the assembly-wide
25 homogenization of the cross sections, this methodology is limited in predicting the depletion
26 history of the individual fuel pin, especially in strongly heterogeneous compositions associated
27 with the repeated insertion of control rods.
28

29 To overcome some of these shortcomings of the conventional methodology, the new
30 methodology [
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40]^{a,c} The NRC staff requested the analytic expressions for computing
41 []^{a,c} based on the values of PARAGON lattice calculations and the
42 NEXUS cross section parameterization as RAIs in Reference 68. Westinghouse responded by
43 describing the [
44]^{a,c}
45

46 3.2 Qualification of the New Pin Power Recovery Methodology
47

48 The qualification of the new pin power reconstruction methodology, as implemented in ANC,
49 has been demonstrated by comparing pin powers computed for a single assembly to those of
50 higher-order calculations with the pin-by-pin transport theory lattice code PARAGON at identical

1 operating conditions. These conditions encompass a wide range of control rod insertion and
2 withdrawal scenarios that envelope anticipated core operating histories. For these calculations
3 the 17X17 Westinghouse fuel assembly with 4.95 w/o ^{235}U is assumed, and burnups to a fuel
4 rod average of 62 GWD/MTU.

5
6 In addition to these single assembly calculations, a comparison is made of computed pin
7 powers for unrodded full-core PWR simulations using ANC with the conventional and the new
8 pin power recovery methodologies.

9 10 3.2.1.1 Single Assembly Model Calculations with Non-Burnable Absorber

11
12 The ANC computed pin power based on the new pin power recovery methodology has been
13 qualified in the context of a standard 17X17 Westinghouse fuel assembly without a burnable
14 absorber over a range of fuel enrichments up to 4.95 w/o ^{235}U and burnup histories up to 70
15 GWD/MTU. Four control rod histories were simulated for the ANC testing, with the new pin
16 power recovery methodology, under severe heterogeneity changes in the fuel assembly. The
17 reconstructed pin-by-pins power ANC results were compared to the PARAGON calculated
18 pin-by-pin power results. Comparisons were made of the corner pin power, of the pin (5,4)
19 power, of the limiting pin power, and the average pin power. The agreement is excellent and
20 typically within []^{a,c}, and usually within []^{a,c} at high burnups.

21 22 3.2.1.2 Single-Assembly Model Calculations with Burnable Absorber

23
24 The ANC computed pin power based on the new pin power recovery methodology has been
25 also qualified with regard to Burnable Absorbers with simulations under several control rod
26 insertion scenarios. These BAs included Integral Fuel Burnable Absorbers, Wet Annular
27 Burnable Absorbers and gadolinia pins. The results again show that the limiting pin discrepancy
28 between the ANC nodal calculations with the new pin power recovery methodology versus
29 PARAGON pin-by-pin power results is within []^{a,c} for most of the burnup range,
30 and remains mostly within []^{a,c} at high burnups.

31 32 3.2.2 Pressurized-Water Reactor Core Power Calculations for Unrodded Cores

33
34 A direct comparison of the ANC computed results between the new and the conventional pin
35 power recovery methodologies was made in the context of traditional unrodded PWR core
36 simulations. For this purpose, a model for a traditional 4-loop plant without control rod insertion
37 was generated and the pin powers computed based on the new pin power recovery
38 methodology. These were compared to calculations of the pin powers of the same core model
39 using the conventional pin power recovery methodology. The comparisons showed differences
40 of []^{a,c} for core peaking factors F_Q , $F_{\Delta H}$ and F_Z over the cycle, and thereby
41 demonstrated good consistency between the two methodologies. Moreover, the new
42 methodology predicted systematically slightly lower peaks for the peripheral assemblies, as
43 would be expected. This is consistent with the single assembly results that demonstrated the
44 ability of the new pin power recovery methodology to take into account the effect of the pin
45 burnup tilt in the peripheral assemblies.

46 47 4.0 LIMITATIONS AND CONDITIONS

48
49 Westinghouse has provided a series of simulations to demonstrate the performance of the ANC
50 code with the new pin power recovery methodology for control rod histories that exacerbate

1 heterogeneous environments. These calculations confirm that the new pin power methodology
2 is accurate for both unrodded and rodded pin power predictions. Pin power histories computed
3 with the ANC code, as presented in this safety evaluation, are dependent on the results of the
4 NRC approved codes PARAGON (Reference 4) and NEXUS (Reference 5). Thus, the use of
5 ANC with the new pin power recovery methodology described in the WCAP-10965-P-A,
6 Addendum 2, TR in licensing applications requires the concomitant application of the NRC
7 approved lattice code PARAGON and the NRC approved cross section
8 parameterization and reconstruction methodology of the NEXUS code system.

10 5.0 CONCLUSION

11
12 The NRC staff has reviewed the TR submitted by Westinghouse and determined that
13 WCAP-10965-P, Addendum 2, is an adequate enhancement to replace the pin power recovery
14 methodologies of NRC-approved methodologies WCAP-10965-P-A, (Reference 2), and where
15 appropriate of WCAP-10965-P-A, Addendum 1, (Reference 3).

17 6.0 REFERENCES

- 19 1. Letter from Gresham, J. A. (Westinghouse) to U.S. Nuclear Regulatory Commission,
20 "Submittal of WCAP-10965-P-A, Addendum 2/WCAP-10966-A, Addendum 2,
21 'Qualification of the New Pin Power Recovery Methodology'," June 1, 2009. (ADAMS
22 Accession No. ML091560106)
- 24 2. WCAP-10965-P-A, "ANC – A Westinghouse Advanced Nodal Computer Code,"
25 Westinghouse Electric Company, September 1986.
- 27 3. WCAP-10965-P-A, Addendum 1, "ANC – A Westinghouse Advanced Nodal Computer
28 Code: Enhancements to ANC Rod Power Recovery," Westinghouse Electric Company,
29 April 1989.
- 31 4. WCAP-16045-P-A/WCAP-16045-NP-A, "Qualification of the Two-Dimensional Transport
32 Code PARAGON," August 2004. (ADAMS Accession No. ML042250311)
- 34 5. WCAP-16045-P-A, Addendum 1-A/WCAP-16045-NP-A, Addendum 1-A, "Qualification
35 of the NEXUS Nuclear Data Methodology," September 2007. (ADAMS Accession No.
36 ML072570325)
- 38 6. Letter from U.S. Nuclear Regulatory Commission to J. A. Gresham (Westinghouse),
39 "Request for Additional Information Re: Westinghouse Electric Company Topical Report
40 WCAP-10965-P, Addendum 2, 'Qualification of the New Pin Power Recovery Method',"
41 November 9, 2009. (ADAMS Accession No. ML093070458)
- 43 7. Letter Gresham, J. A. (Westinghouse) to U.S. Nuclear Regulatory Commission,
44 "Response to the NRC's Request for Additional Information RE: Westinghouse Electric
45 Company Topical Report WCAP-10965-P, Addendum 2, 'Qualification of the New Pin
46 Power Recovery Method'," December 2, 2009.

48 Principle Contributors: Yuri Orechwa (NRR/DSS/SNPB)

49
50 Date: