

Energy Northwest
New Nuclear LLC
345 Hills Street
Richland, WA 99352

Lisa Williams
Nuclear Development
P.O. Box 968, MD 1035
Richland, WA 99352-0968
Ph. 509-377-8148
llwilliams@energy-northwest.com

July 2, 2025
XO1-25-009

ATTN: Document Control Desk
US Nuclear Regulatory Commission
Washington, DC 20555-0001

Subject: Methodology for Determining the Acceptability of Historical Information
(Project #99902130)

This letter transmits Energy Northwest New Nuclear LLC's (ENNN) Methodology for Determining the Acceptability of Historical Information White Paper to the U.S. Nuclear Regulatory Commission (NRC) for review. The attached white paper lays out a proposed process for evaluating the acceptability of historical information as it relates to characterization of the proposed project site.

ENNN intends to submit a Construction Permit Application for up to twelve Xe-100 small modular reactors at a site adjacent to Columbia Generating Station. Data and analyses related to flooding, groundwater, and seismology performed for original site licensing and for post-Fukushima hazard reevaluations give significant comprehension of ENNN site characteristics. Section 505(c) of the ADVANCE Act requires that the NRC, to the extent practicable, use information that was part of the licensing basis of the facility located at the site. ENNN intends to make use of these measures under NRC review processes to support determining the scope of remaining site characterization activities for project license applications.

ENNN requests that the NRC review this white paper and provide feedback on the reasonableness and acceptability of applying the approach to evaluating historical information.

If you have any questions or need any additional information, please contact Nathan Clark at ndclark@energy-northwest.com or 509-377-6069.

XO1-25-009

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Sincerely,

Signed by:


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Lisa Williams

Operations, Licensing, Environmental Manager, New Nuclear Development

Enclosure – Methodology for Determining the Acceptability of Historical Information,
ENNN White Paper, Rev 0, July 2025

cc:

Greg Cullen

Ken Langdon

Eric Andrews

Ms. Denise McGovern, NRR/DANU/UAL2

Ms. Madelyn Nagel, NMSS/REFS/EPMB3

**Methodology for Determining the Acceptability of Historical Information
White Paper - Energy Northwest New Nuclear**

**Energy Northwest
New Nuclear LLC**

345 Hills Street
Richland, WA 99352

White Paper

Methodology for Determining the Acceptability of Historical Information

Revision 0

July 2025

DocuSigned by:

Don Gregoire

Prepared by:

3C7F279F0EED4B3...

Date: 7/2/2025

Signed by:

Lisa Williams

Approved by:

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Date: 7/2/2025

Methodology for Determining the Acceptability of Historical Information White Paper - Energy Northwest New Nuclear

I. PURPOSE

There are several cost and schedule benefits that could be realized by utilizing analyses from nuclear sites that were previously licensed. The purpose of this white paper is to propose criteria that can be used in assessing historical information in a manner that would be acceptable to the regulator.

II. BACKGROUND

Energy Northwest New Nuclear, LLC (ENNN) is considering the construction and operation of up to 12 Xe-100 reactors at the former Washington Nuclear Project No. 1 (WNP-1) and Washington Nuclear Project No. 4 (WNP-4) sites adjacent to the Columbia Generating Station (Columbia) in southeastern Washington State. Data and analyses related to flooding, groundwater, and seismology performed for original site licensing for all three units and for post-Fukushima hazard reevaluations for Columbia give significant comprehension of ENNN site characteristics.

Section 505(c) of the ADVANCE Act (below) requires the Commission to consider information that was part of the licensing basis of the utilization facility located at the site.

“(c) APPLICATION REVIEWS FOR PRODUCTION AND UTILIZATION FACILITIES OF AN EXISTING SITE.—In reviewing an application for an early site permit, construction permit, operating license, or combined construction permit and operating license for a production facility or utilization facility located at the site of a production facility or utilization facility licensed by the Commission, the Commission shall, to the extent practicable, use information that was part of the licensing basis of the licensed production facility or utilization facility.”

ENNN intends to make use of this provision to the extent that would be allowable under NRC review processes for the project license applications for an Early Site Permit, Construction Permit, or Operating License).

III. EVALUATION APPROACH

This paper offers proposed criteria (through a set of questions) for determining the acceptability of historical information to be used in a license applications.

In assessing historical information, a systematic approach will be applied that first evaluates the historical “analysis” before assessing the historical input data (i.e., inputs to the analyses). The need to assess inputs to the analyses should follow the assessment of the historical analyses. If there is a basis for revising a historical analysis, then the acceptability of inputs to the analysis should be reconsidered as well.

IV. ASSESSMENT CRITERIA

The following criteria are used in assessing acceptability of historical analysis:

- 1. Regulatory Changes** – Are the applicable regulations associated with the required information the same as during the time of the historical analysis?

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- a. If answer to 1 is YES, then conclude that no new analysis based on this criterion is needed.
- b. If answer to 1 is NO, then is there a reasonable basis to conclude that the historical analysis is acceptable to apply to the project site?

If answer to 1.b is YES, document the basis and conclude that the outcome of the older analysis is still good.

If answer to 1.b is NO, then conclude that a new analysis is needed.

2. Analysis Methodology – Is the same analytical methodology in effect today as was when the historical analysis was performed?

- a. If the answer to 2 is YES, then conclude that no new analysis based on this criterion is needed.
- b. If answer to 2 is NO, is there a reasonable basis for using older methodologies?

If answer to 2.b is YES, document the basis and conclude that the outcome of the older analysis is still good.

If answer to 2.b is NO, then conclude that a new analysis is needed.

3. Scope of Analysis – Does scope of the historical analysis fully address the project site?

- a. If answer to 3 is YES, then conclude that no new analysis based on this criterion is needed.
- b. If answer to 3 is NO, then is there a reasonable basis to conclude that the historical analysis is acceptable to apply to the project site?

If answer to 3.b is YES, document the basis and conclude that the outcome of the older analysis is still good.

If answer to 3.b is NO, then conclude that a new analysis is needed.

4. Site Changes – Is the project site today consistent with the project site that was analyzed?

- a. If answer to 4 is YES, then conclude that no new analysis based on this criterion is needed.
- b. If answer to 4 is NO, then is there a reasonable basis to conclude that the historical analysis is acceptable to apply to the project site?

If answer to 4.b is YES, document the basis and conclude that the outcome of the older analysis is still good.

If answer to 4.b is NO, then conclude that a new analysis is needed.

5. Quality Assurance – Was the historical analysis developed under an Appendix B Quality Assurance Program?

- a. If answer to 5 is YES, then conclude that no new analysis based on this criterion is needed.

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- b. If answer to 5 is NO or indeterminant, then is there a reasonable basis (e.g., the information is not required to be obtained under App B or other method of qualifying such as in NQA-1 Part IV, Subpart 4.2.3) to conclude that no new record needs to be developed?

If answer to 5.b is YES, document the basis and conclude that the outcome of the older analysis is still good.

If answer to 5.b is NO, then conclude that a new analysis is needed.

6. Copy of Record – Is a copy of the historical analysis still available today?

- a. If answer to 6 is YES, then conclude that no new analysis based on this criterion is needed.
- b. If answer to 6 is NO, then is there a reasonable basis to conclude that no new record needs to be developed?

If answer to 6.b is YES, document the basis and conclude that the outcome of the older analysis is still good.

If answer to 6.b is NO, then conclude that a new analysis is needed.

V. CONCLUSION

The use of the 6 questions provides a reasonable basis for the NRC acceptance and use of historical site information for the purposes of a license application (Construction Permit, Early Site Permit, Combined Operating License). These criteria will enable the NRC staff to implement Section 505 of the ADVANCE Act.

VI. REFERENCES

1. Accelerating Deployment of Versatile, Advanced Nuclear for Clean Energy (ADVANCE) Act of 2024.
2. EPRI Report 3002023910, Advanced Nuclear Technology: Site Selection and Evaluation Criteria for New Nuclear Energy Generation Facilities (Siting Guide)
3. EPRI Report 3002030533, Advanced Nuclear Technology: Single Site Evaluation Guide Preliminary Assessment of a Predefined Site for Deployment of a New Nuclear Energy Facility, October 2024.
4. INL/EXT-15-35805, Guidance on Evaluating Historic Technology Information for Use in Advanced Reactor Licensing, October 2015.
5. NQA-1, 2022, Quality Assurance Requirements for Nuclear Facility Applications, Part IV, Subpart 4.2.3, Guidance on Qualification of Existing Data.
6. NUREG-1298, Qualification of Existing Data for High-Level Nuclear Waste Repositories, February 1988.
7. U.S. Environmental Protection Agency Guidance for Evaluating and Documenting the Quality of Existing Scientific and Technical Information, December 2012.