From: Tabatabai, Omid

Sent: Thursday, February 13, 2020 3:13 PM

To: Bill McCollum

Cc: Timothy P. Matthews (timothy.matthews@morganlewis.com);

BellefontePEm Resource

Subject: Request for Additional Information - CAC/DOCKET/EPID:

001554/05000438/L-2018-LLM-0155

Attachments: Request for Additional Information - Final.pdf

Dear Mr. McCollum,

The NRC staff is reviewing your application to transfer Construction Permits for Bellefonte Nuclear Plant, Units 1 and 2, from Tennessee Valley Authority (TVA) to Nuclear Development, LLC (ND). Attached please find the NRC staff's request for additional information. The staff requests that your responses and additional information to be submitted to the NRC Document Processing Center no later than Monday, March 16, 2020.

If you have any questions, please feel free to contact me.

Sincerely,

Omid Tabatabai, Sr. Project Manager New Reactor Licensing Branch Office of Nuclear Reactor Regulation U.S. Nuclear Regulatory Commission (301) 415-6616 Hearing Identifier: Bellefonte_CP_NDLLC_Public

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Staff's Request for Additional Information # 1:

Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.80(b) states, in part that (1) an application for transfer of a license shall include: (i) for a construction permit or operating license under this part, as much of the information described in Section 50.33 and Section 50.34 of this part with respect to the identity and technical and financial qualifications of the proposed transferee as would be required by those sections if the application were for an initial license.

Section 50.80(c) states, in part, "...the Commission will approve an application for the transfer of a license, if the Commission determines: (1) that the proposed transferee is qualified to be the holder of the license; and (2) that transfer of the license is otherwise consistent with applicable provisions of law, regulations, and orders issued by the Commission pursuant thereto."

Section 50.40 states, in part, "in determining that a construction permit or operating license in this part...will be issued to an applicant, the Commission will be guided by the following considerations: ... (b) The applicant for construction permit,...is technically and financially qualified to engage in the proposed activities in accordance with the regulations in this chapter."

Section 50.34(a)(9) requires that applicants for a construction permit provide "the technical qualifications of the applicant to engage in the proposed activities in accordance with the regulations in this chapter," in the preliminary safety analysis report.

Section 50.34(a)(6) requires that applicants for a construction permit provide certain information regarding a facility's organization. Specifically, it states that the preliminary safety analysis report shall include "a preliminary plan for the applicant's organization, training of personnel, and conduct of operations."

By letter dated November 13, 2018 (Agencywide Documents Access and Management System (ADAMS) Accession Number ML18318A426), as supplemented by letter dated August 28, 2019 (ADAMS Accession Number ML19240A381), Nuclear Development, LLC (ND) submitted an application requesting that the U.S. Nuclear Regulatory Commission (NRC) consent to the transfer of Construction Permit Nos. CPPR-122 and CPPR-123 (the Permits) for the Bellefonte Nuclear Plant, Units 1 and 2, from the Tennessee Valley Authority to ND and issue conforming administrative amendments to the Permits to reflect the revised construction dates, as described in the application.

In its letter dated August 28, 2019, the applicant stated that ND will execute the project using three organizational elements:

- The Engineering, Procurement, and Construction (EPC) element, which will be staffed by personnel from SNC-Lavalin Nuclear (USA) (SLN), and Framatome, Inc. ("Framatome").
- The Project Oversight element, which will be staffed by personnel from Nuclear Development and independent contractors, along with seconded personnel from SLN, Framatome, MPR Associates, and High Bridge Associates.
- The Operating element, which will be staffed by personnel from the Operating Contract partner.

The applicant further stated that the Project Oversight element, or organization, would be staffed consistent with the current authorized deferred plant status at the time of the transfer of the Construction Permits to ND. This includes a qualified Chief Nuclear Officer (CNO) and Quality Assurance (QA) Manager.

In order for the NRC staff to make a finding regarding the applicant's technical qualification, the staff requests the applicant to:

- a. Explain how ND will ensure its contractor personnel in EPC organization will maintain their independence from the Oversight organization to identify, resolve, or escalate issues related to nuclear safety.
- b. Describe the technical qualifications, experience, expertise of independent contractors, and the criteria for assessing their qualifications, that will be utilized in the Project Oversight element, as well as their roles within that element of the organization.
- c. Describe the reporting relationships between the CNO, the QA Manager, and the remainder of the ND Project Organization. In addition, clarify where the CNO position would be identified on the overall project's organizational chart.
- d. Provide additional information regarding the technical qualifications, experience, and expertise of the Operating Contract partner that ND plans to engage with for the purpose of staffing the Operating element of the organization.
- e. Provide ND's preliminary plan for its operating organization, training of personnel, and conduct of operations, as required by 10 CFR 50.34(a)(6).

Staff's Request for Additional Information # 2:

The regulations in 10 CFR 50.33(f)(1) require, in part, that an applicant (except for an electric utility applicant for a license to operate a utilization facility of the type described in Section 50.21(b) or Section 50.22) provide information sufficient to demonstrate to the Commission the financial qualification of the applicant to carry out, in accordance with regulations in this chapter, the activities for which the permit or license is sought. As applicable, the following should be provided:

If the application is for a construction permit, the applicant shall submit information that demonstrates that the applicant possesses or has reasonable assurance of obtaining the funds necessary to cover estimated construction costs and related fuel cycle costs. The applicant shall submit estimates of the total construction costs of the facility and related fuel cycle costs and shall indicate the source(s) of funds to cover these costs.

On page 11 of its November 13, 2018 letter, the applicant stated that it has applied for a loan from the U.S. Federal Finance Bank through the DOE Loan Guarantee Program. Further, the applicant is negotiating the detailed loan guarantee term sheet and conditional loan commitment from the DOE Loan Programs Office. The applicant states that it expects the amount of this guarantee to cover 80% of the anticipated cost of completing construction of the Bellefonte Units. The applicant also states that it anticipates that it will arrange for equity contributions for the remaining 20% of the cost of completing construction.

The applicant also states that it intends to establish financing for the Bellefonte Units 1 and 2 construction project after obtaining the license. As a merchant applicant with less than 50% financing available at the time of license application, the applicant seeks to show its financial qualification for construction using license conditions in combination with a request for exemption from current requirements in 10 CFR 50.33(f)(1). That approach is described in the Staff Requirement Memorandum (SRM) for SECY-13-0124, "Policy Options for Merchant (Non-Electric Utility) Plant Financial Qualifications," in which the Commission approved inclusion of license conditions to assure applicants meet revised financial qualifications requirements. In the SRM, the Commission also encouraged applicants to consider utilizing an exemption process. In this case, the applicant provided: (1) a construction cost estimate for the project, (2) a Financial Capacity Plan (FCP), and (3) license conditions (as part of the FCP) that address NRC's proposed financial qualification requirements for construction. This approach requires the applicant to request an exemption per 10 CFR 50.12, "Specific exemptions," from current financial qualification requirements in 50.33(f)(1).

The applicant submitted a financial capacity plan to demonstrate its level of understanding of the size and scope of the project and provided a construction cost estimate as well as a proposed license condition to address funding for construction to be satisfied before construction begins, should it possess less than 50% of the funds needed for the license activity. Part of its financial capacity plan is reliance upon a DOE loan for 80% of required financing to show that it appears to be financially qualified to construct the Bellefonte power reactors.

The applicant stated that it intends to raise over \$10 billion through the DOE loan guarantee program. According to the applicant, around \$10.24 billion will be load/debt, therefore, around \$2.56 billion will be funded by equity stakeholders. In its application, ND described its anticipated financial capacity and its expectation to finance 80% of \$12 billion from a federal loan guarantee program.

In order for the NRC staff to make a finding regarding the applicant's financial qualification, the staff requests the applicant to provide:

- a. A status update on the applicant's negotiations with DOE regarding the DOE Loan Guarantee Program, and
- b. Information as to whether the applicant has received a commitment from DOE on its loan application, and if yes, provide more information regarding this commitment.

Staff's Request for Additional Information #3:

On page 8 of ND's November 13, 2018 submittal, the applicant states:

Nuclear Development possesses or has reasonable assurance of obtaining the funds necessary to cover estimated costs of possessing and maintaining the Bellefonte Units prior to resuming construction. The owners of Nuclear Development have funded the maintenance of the Bellefonte Units since November 2016, and they will continue to do so until construction financing is put in place to satisfy the license condition for commencing construction. As already noted, Mr. Haney has built a development business worth \$10 billion. Moreover, the

owners have demonstrated their ability to pay these costs given that they have already been doing so for the last two years.

The regulations in 10 CFR 50.33(f)(4) and 50.33(f)(5) state in part:

Each application for a construction permit, operating license, or combined license submitted by a newly-formed entity organized for the primary purpose of constructing and/or operating a facility must also include information showing:...Any other information considered necessary by the Commission to enable it to determine the applicant's financial qualification.

And:

The Commission may request an established entity or newly-formed entity to submit additional or more detailed information respecting its financial arrangements and status of funds if the Commission considers this information appropriate. This may include information regarding a licensee's ability to continue the conduct of the activities authorized by the license and to decommission the facility.

Additionally, Appendix C.II.2 to 10 CFR Part 50 states in part:

[A]n applicant which is a newly formed entity will normally not be in a position to submit the usual types of balance sheets and income statements reflecting the results of prior operations. The applicant should, however, include in its application a statement of its assets, liabilities, and capital structure as of the date of the application.

Please provide information (e.g., statement of assets, liabilities, and capital structure) to support your ability to financially maintain and fund facility requirements during the "deferred status" period prior to the restart of construction. This includes funding for maintenance, security, and other such expenses, up until construction financing is secured and construction begins.

Staff's Request for Additional Information # 4:

The Commission Policy Statement on Deferred Plants, 52 Federal Register 38077, outlines: (1) the NRC's regulatory provisions for deferring and preserving a deferred nuclear power plant until such time as it may be reactivated, and (2) the applicability of new regulatory staff positions to a deferred plant when it is reactivated. Section III.A.6 of the policy statement, "Information to be Submitted by Licensee When Reactivating," states, in part, that the licensee should submit a letter to the Director of NRR before plant construction is expected to resume. This letter should include, among other things, a schedule for submittal of an operating license application, including a final safety analysis report if one has not already been submitted.

Section 50.34(a)(7) states, in part, that the preliminary safety analysis report must include a description of the quality assurance program to be applied to the design, fabrication, construction, and testing of the structures, systems, and components of the facility. The regulations in 10 CFR Part 50, Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," set forth the requirements for QA programs for nuclear power plants and fuel reprocessing plants. Further, Section 50.34(b)(6)(ii) states that managerial and administrative controls to be used to assure safe operation should be included in the final safety analysis report and that the requirements for such controls are set forth, also, in Appendix B to 10 CFR Part 50.

In its letter dated November 13, 2018, Enclosure 5, "Quality Assurance Plan for Bellefonte Units 1 and 2," the applicant stated that the NQAP that will be applied to the Bellefonte Units 1 and 2 plant facilities during the period of deferral of the construction period complies with Appendix B. Additionally, the applicant stated that the NQAP and attendant procedures shall be revised significantly when regulatory approval is provided to transition the Bellefonte construction permit from deferred to active status.

In order for the NRC staff to make a finding regarding the applicant's compliance with the QA requirements, the NRC staff requests the applicant to:

- a. Clarify whether ND's NQAP (dated August 28, 2019, Attachment 2, "ND-NQA-PLN89-A, Revision 0") will apply only to activities associated with deferred plant status or if it will be used beyond the current deferred plant status for the construction and operation phases of plant life. or
- b. If the applicant plans to submit a revised NQAP before reactivation of any construction activities.