# **Nuclear Development, LLC**

3 Bethesda Metro Center Suite 515 Bethesda, MD 20814

March 13, 2020

10 CFR 50.80 10 CFR 50.90

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

Subject: Response to Request for Additional Information

References:

- 1. Application for Order Approving Construction Permit Transfers and Conforming Administrative Construction Permit Amendments, November 13, 2018
- 2. Electronic Mail from O. Tabatabai, Nuclear Regulatory Commission, to W.R. McCullum, Nuclear Development, Inc., Request for Additional Information (CAC/DOCKET/EPID: 001554/05000438/L-2018-LLM-0155), February 13, 2020

Bellefonte Nuclear Plant, Units 1 and 2 Construction Permits Nos. CPPR -122 and CPPR-123 NRC Docket Nos. 50-438 and 50-439

By letter dated February 13, 2020, the U.S. Nuclear Regulatory Commission ("NRC") requested that Nuclear Development, LLC ("ND") provide responses to requests for additional information to enable the staff to make an independent assessment regarding the acceptability of the proposed construction permit transfer application.

The requested information is provided in the attached Response to Request for Additional Information ("Response"). Attachment 1 to this Response contains commercially sensitive financial information that ND has maintained confidential and has not made available to the public. Accordingly, ND requests that Attachment 1 be withheld from public disclosure pursuant to 10 CFR 2.390.

U.S. Nuclear Regulatory Commission March 13, 2020 Page 2

Please let me know if you require additional information.

Sincerely,

William R. McCollum, Jr.

Chief Executive Officer & Chief Nuclear Officer

Nuclear Development, LLC

cc: Omid Tabatabai, Senior Project Manager

U.S. Nuclear Regulatory Commission

Regional Administrator, Region II U.S. Nuclear Regulatory Commission

State Health Officer Alabama Dept. of Public Health P.O. Box 303017 Montgomery, AL 36130-3017

Mr. Timothy Rausch Chief Nuclear Officer Tennessee Valley Authority 1101 Market Street Lookout Place 3R Chattanooga, TN 37402-2801

Encl: Response to Request for Additional Information (w/ Attachments)

Attachment I – Franklin Family LLC Financial Information (Confidential)

Attachment 2 – 10 CFR 2.390 Affidavit of William R. McCollum Jr.

Attachment 3 – 10 CFR 2.390 Affidavit of Franklin L Haney

# Nuclear Development, Inc.'s Response to Request for Additional Information

This Attachment provides Nuclear Development's ("ND's") responses to the NRC's Request for Additional Information, dated February 13, 2020. The language of the NRC's request is set out below in bold italics. ND's response, where requested, follows in plain text.

## 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 (OA) Manager.

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

# **Responses to Request Additional Information # 1:**

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.

Response: Activities that affect nuclear safety are required to be controlled through the implementation of an NRC approved Quality Assurance Program (QAP) that satisfies the requirements of 10CFR50 Appendix B. This includes establishing an organization that is responsible for safety related activities to ensure nuclear safety is not compromised. The ND NQAP describes the organization that will be responsible for nuclear safety related activities through all phases of plant life. To implement the ND NQAP several organizational layers have to be provided. The EPC is required to be an ND qualified nuclear supplier with an approved OAP for the scope of quality services being procured. The EPC organization will be established as described within their approved QAP and will be performing their scope of services under their own QAP and procedures. Elements of the approved QAP are required to address the approach to identifying, resolving and escalating issues related to nuclear safety. The ND Oversight organization will be staffed by individuals working under the ND NQAP and associated procedures independent from the EPC organization or their associated QAP controls. These individuals will be trained and qualified to satisfy the commitments provided within the ND NQAP. An ND Oversight organization will be providing the technical assessment of the services being provided by the EPC. Also, required within the ND organization is the Quality Assurance organization that is independent from both the EPC and the ND Oversight organization. This organization will manage the approval basis for the EPC QAPs including supplier oversight activities. They will also be responsible for performing independent assessment of the Oversight organization's performance, including implementing the Quality Assurance Audit processes to ensure compliance with the ND NQAP. Along with the ND NQAP controls will be the development and maintenance of a Safety Conscious Work Environment and Nuclear Safety Concerns (SCWE/NSC) program to provide additional avenues to ensure nuclear safety is proactively managed.

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.

**Response:** Since technical project oversight activities are governed within the scope of the ND NQAP, the associated technical qualifications, experience and expertise would be determined based on the applicable commitments provided within the ND NQAP and associated implementing procedures. The specific roles of the technical project oversight responsibilities are required to be defined and implemented through approved administrative controls that satisfy the

ND NQAP and ultimately the criteria of 10CFR50 Appendix B. There will also be business related oversight activities that are not governed by the requirements of the ND NQAP, which require less rigorous controls and are not included within the scope of this discussion. For the technical project Oversight organization, the expertise necessary to assess the adequacy of performance will be based on associated EPC scope of work being performed and assessed. This oversight function will be describe within administrative controls, including the processes for documenting associated activities.

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 organization chart.

**Response:** The proposed organization is provided within the ND NQAP, including the reporting relationship for the QA Manager, who would ultimately report up to the CNO position. The QA Manager also has a line of communication to the CNO to elevate nuclear safety concerns. Although not specifically described within the ND NQAP, the technical Oversight organizational structure would have a similar reporting structure relationship, which would ensure independence from production and enable elevating of nuclear safety concerns in a timely manner for resolution. The CNO reports to the CEO of Nuclear Development.

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.

Response: The Operating Contract Partner will be an established fleet operator, currently operating multiple commercial nuclear power plants in the US. As such, the Operating Contract Partner will have significant experience and expertise in nuclear power reactor operations, maintenance and technical support as well as expertise in support functions such as Engineering, Procurement, Training and Quality Assurance. The Operating Contract Partner will have established programs for training and qualification of personnel, plant maintenance and modification, operating, abnormal and emergency procedures and many other nuclear plant programs. The Operating Contract Partner would be required to implement ND NQAP or another NRC approved QAP submitted to the NRC for approval for operating the Bellefonte Nuclear Plants.

e. Provide ND's preliminary plan for its' operating organization, training of personnel, and conduct of operations, as required by 10CFR 50.34(a)(6).

Response: The preliminary plan for ND's operating organization and training of personnel is provided within the ND NQAP, Section 4 for the organization and Section 11 and Appendix B for indoctrination, training, qualification and certification. The ND NQAP was developed based on the NRC approved TVA Fleet QAP which currently satisfies the requirements of 10CFR50 Appendix B. The TVA Fleet QAP is being applied to operational activities at various nuclear facilities and for the Bellefonte Units 1 and 2 plant facilities during the period of deferral of the construction period. Since the ND NQAP contains the same commitment and quality assurance controls as does the current approved TVA QAP, these management controls would continue to satisfy the requirements of 10CFR50 Appendix B in the deferred plant status, construction and operational phases. Other associated license basis and regulatory requirements would be applicable at various phases of plant life. These commitments would be included in the associated license basis documents such as the Operating License and Technical Specifications, Preliminary Safety Analysis Report and Final Safety Analysis Report to support plant operations.

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Other regulatory requirements such as 10CFR50.120 would apply at various phases of the plant life cycle. The transition to each phase would have to be assessed to ensure the applicable regulatory and license basis commitments are accurately identified and translated into implementing documents controlled under the ND NQAP.

## 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.

# Response to Request for Additional Information # 2:

**Response:** Discussions between ND and the DOE are in the near final stages, with ND having submitted answers to the requests for information from DOE Loan Program Office. While ND has not yet received a conditional commitment for a loan at this time, we believe there are only a few remaining issues to be resolved and ND is confident that the remaining items can be resolved and a conditional commitment secured in the near future.

In the Commission's April 24, 2014 SRM responding to SECY-13-0124, the Commission directed the staff consider issuing exemptions until completion of a rulemaking to revise the financial qualifications requirements. (ADAMS Accession No. ML14114A358.) Consistent with the Commission direction, in 2015, the NRC Staff issued an exemption and imposed License Condition 2.D(14)(k) related to financial qualifications on issuance of the Combined Operating Licenses for South Texas Project 3 &4. (The exemption is embedded in Section 1.11S.5 of the NRC's Staff's Final Safety Evaluation Report dated September 14, 2015. ADAMS Accession No. ML15336A760.) At the time of issuance of the COLs, the applicant had not yet received the conditional commitment from the DOE loan program office necessary to complete the financing. The NRC staff issued a Regulatory Basis Document, which provides the basis for granting such an exemption, in October 2015. (ADAMS Accession No. ML15322A185.)

## 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.

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And:

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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.

# **Response to Request for Additional Information #3:**

Under the purchase and sale agreement, ND has funded the cost of maintenance and security since the auction. The amount reimbursed to TVA for plant maintenance and security while in deferred plant status has been \$875,000 per quarter. ND's expenditures to date on the Bellefonte project, which total over \$30 million, have been funded by amounts contributed to or loaned to ND by Franklin Haney and other Haney family members and family trusts. TVA provides maintenance and security services through contract vendors with minimal TVA site employees to supervise them. On closing the plant acquisition ND will ensure continuity of services. Upon closing of the DOE financing, these will become project costs. ND expects to cover these costs before financial closing from additional cash infusions available from the Haney family which has more than sufficient unencumbered funds to do so.

For example, Attachment 1 is a broker's statement dated February 29, 2020, showing the excess cash and cash equivalents held by Haney Family LLC, the Haney family-owned entity that owns the family's interest in the Dulles Greenway toll road. As this statement shows, this entity alone has cash and cash equivalents far in excess of forseeable plant maintenance and security costs. While many of the Haney family's infrastructure projects involve project debt, none of such debt is recourse to the family members or trusts relied on for advancing deferred plant costs, and thus there are no third party debt claims against the available cash and cash equivalents.

Attachment 1 contains confidential financial information of the Haney Family LLC that has been shared with ND in confidence. ND therefore requests that this Attachment 1 be withheld from public disclosure pursuant to 10 CFR 2.390.

#### 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.

#### **Response to Request for Additional Information #4:**

The ND NQAP was developed based on the NRC approved TVA Fleet QAP which currently satisfies the requirements of 10CFR50 Appendix B. The TVA Fleet QAP is being applied to safety related construction activities at those operating nuclear facilities and for the Bellefonte Units 1 and 2 plant facilities during the period of deferral of the construction period. Since the ND NQAP contains the same commitment and quality assurance controls as does the current approved TVA QAP, these management controls would continue to satisfy the requirements of 10CFR50 Appendix B in the deferred plant status, construction and operational phases. It is recognized that changes to the ND NQAP will be required through all phases of the plant life. Any proposed changes to the ND NOAP would have to be assessed in accordance with 10CFR50.54(a) to determine if prior NRC approval would be required. The program controls for initiating changes to the ND NQAP would ensure that those changes would only be implemented after NRC approval has been received. Based on the 10CFR50.54(a) evaluation, those changes that are not considered reductions in commitments to the previously approved QAP, do not require prior NRC approval. These changes would be submitted periodically to the NRC as required by 10CFR50.54.a and 10CFR50.71(e). Although the ND NQAP is also established to support the operational phase of plant life since it was based on the TVA QAP, its application to that phase would be determined based on the operational strategy. This would require alignment with the strategy of the Operator Contract Partner as described within the response to Question 1.e.

# **ATTACHMENT 1**

# CONFIDENTIAL INFORMATION SUBMITTED UNDER 10 CFR 2.390

#### **ATTACHMENT 2**

# 10 CFR 2.390 Affidavit of William R. McCollum, Jr.

- I, William R. McCollum, Jr., Chief Executive Officer & Chief Nuclear Officer, Nuclear Development, LLC do hereby affirm and state:
  - 1. I am authorized to execute this affidavit on behalf of Nuclear Development, LLC ("ND");
  - 2. ND requests that Attachment 1, which is labeled "CONFIDENTIAL INFORMATION SUBMITTED UNDER 10 CFR 2.390", be withheld from public disclosure under the provisions of 10 CFR 2.390(a)(4).
  - 3. Attachment 1 contains confidential financial information, the disclosure of which would adversely affect ND.
  - 4. This information has been held in confidence by ND. To the extent that ND has shared this information with others, they have done so on a confidential basis.
  - 5. ND customarily keep such information in confidence, and there is a rational basis for holding such information in confidence. The information is not available from public sources and could not be gathered readily from other publicly available information.
  - 6. Public disclosure of this information would cause substantial harm to the business interests of ND.

William R. McCollum, Jr.

Subscribed and sworn before me,

Exp: July 28, 2024

a Notary Public

this 13th day of March, 2020.

NOTARY
PUBLIC
McDowell
County
Vorth Caroling

#### **ATTACHMENT 3**

## 10 CFR 2.390 Affidavit of Franklin L. Haney

- I, Franklin L. Haney, sole Manager of Haney Family LLC do hereby affirm and state:
  - 1. I am authorized to execute this affidavit on behalf of Haney Family LLC.
  - 2. Haney Family LLC requests that Attachment 1, which is labeled "CONFIDENTIAL INFORMATION SUBMITTED UNDER 10 CFR 2.390", be withheld from public disclosure under the provisions of 10 CFR 2.390(a)(4).
  - 3. Attachment 1 contains confidential financial information, the disclosure of which would adversely affect Haney Family LLC.
  - 4. This information has been held in confidence by Haney Family LLC. To the extent that Haney Family LLC has shared this information with others, they have done so on a confidential basis.
  - 5. Haney Family LLC customarily keep such information in confidence, and there is a rational basis for holding such information in confidence. The information is not available from public sources and could not be gathered readily from other publicly available information.
  - 6. Public disclosure of this information would cause substantial harm to the business interests of Haney Family LLC.

Franklin L. Haney

Subscribed and sworn before me,

a Notary Publica

this 13th day of March, 2020.

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