



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SUPPLEMENTAL INFORMATION NEEDED

CONSTRUCTION PERMIT TRANSFER, AMENDMENT REQUEST, AND

EXEMPTION REQUEST

NUCLEAR DEVELOPMENT, LLC

BELLEFONTE NUCLEAR PLANT, UNITS 1 AND 2

DOCKET NOS. 50-438 AND 50-439

Background

By letter dated November 13, 2018 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML18318A428), Nuclear Development, LLC (ND) submitted its application requesting that the U.S. Nuclear Regulatory Commission (NRC) consent to the transfer of Construction Permits (CP) CPPR-122 and CPPR-123 for the Bellefonte Nuclear Plant, Units 1 and 2 (BLN), currently held by Tennessee Valley Authority (TVA), to ND. In addition, ND requests a conforming amendment that would change the named CP holder and extend the CP expiration date, a license condition for financial qualifications, as well as an exemption pursuant to Title 10 of the Code of Federal Regulations (10 CFR) 50.12, from certain requirements related to financial qualifications for construction permits.

The NRC staff has reviewed the application and concluded that the following supplemental information is necessary to enable the staff to make an independent assessment regarding the acceptability of the proposed CP transfer, conforming amendment, and exemption.

Part 1 - Quality Assurance (QA) Acceptance Review

The staff has reviewed the application against the applicable regulatory requirements in 10 CFR 50.34, 10 CFR 50.55a, and Appendix B to 10 CFR Part 50. ND has contracted SNC-Lavalin Nuclear (SLN) to provide the QA program for BLN. The QA program provided in Enclosure 5 of the application is based on American Society of Mechanical Engineers (ASME) NQA-1-2017, "Quality Assurance Requirements for Nuclear Facility Applications." The NRC staff found Enclosure 5, "SNC-Lavalin Nuclear Quality Assurance Plan (152918-0000-00000-38QP-0001)" not to be in accordance with NRC regulatory requirements of 10 CFR 50.34, 10 CFR 50.55a, and Appendix B to 10 CFR Part 50.

Specifically, the SLN QA plan is not compliant with the above regulations in the following areas:

Enclosure

1. The NRC has not endorsed NQA-1-2017. The NRC has endorsed NQA-1-2015 per Regulatory Guide (RG) 1.28, Revision 5, "Quality Assurance Program Criteria (Design and Construction)," (ADAMS Accession No. ML17207A293) that provides an approved method to meet the regulatory requirements. ND has not reconciled the differences between NQA-1-2017 and NQA-1-2015. This issue could be addressed by providing an analysis of the gaps between NQA-1-2017 and NQA-1-2015.
2. The SLN QA Plan commits to only Part I of NQA-1-2017. RG 1.28, Revision 5 endorses NQA-1-2015, Parts I and II. NQA-1-2015, Part II contains additional quality assurance requirements for the planning and conduct of specific work activities, i.e., for construction, under a QA program developed in accordance with Part I. ND did not describe how the SLN QA plan meets the requirements of NQA-1-2015, Part II.
3. The 2013 Edition of the ASME Boiler and Pressure Vessel Code (BPVC) Section III, subsection NCA, as endorsed by 10 CFR 50.55a, does not incorporate by reference NQA-1-2017. Table NCA-7100-2 incorporates by reference NQA-1-2008/2009 addenda. ND has not reconciled the differences between NQA-1-2017 and NQA-1-2008/2009 addenda. This issue could be addressed by providing a gap analysis between NQA-1-2017 and NQA-1-2008/2009.

Part 2 – Technical Qualification Acceptance Review

In accordance with 10 CFR 50.80(c), a CP may be transferred if the Commission finds that the proposed transferee is qualified to be the holder of the license. 10 CFR 50.80(b)(1) requires an application for a CP transfer to include as much information as required by 10 CFR 50.33 and 10 CFR 50.34 with respect to identity and the financial and technical qualifications of the proposed transferee as would be required by those sections if the application were for an initial license. 10 CFR 50.34(a)(9) requires an applicant for a CP to include, "[t]he technical qualifications of the applicant to engage in the proposed activities in accordance with the regulations in this chapter," in its preliminary safety analysis report. There is also guidance in NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR Edition," Section 13.1.1, "Management and Technical Support Organization," Revision 6 (ADAMS Accession No. ML15005A449), related to license transfers and technical qualification.

NRC review guidance document LIC-109, "Acceptance Review Procedures," Revision 2 (ADAMS Accession No. ML16144A521), states, "NRR will consider an RLA [requested licensing action] to be acceptable for review upon the NRC staff's conclusion that the application reasonably appears to contain sufficient technical information, both in scope and depth, for the NRC staff to complete the detailed technical review and render, in an appropriate time frame for the associated action, an independent assessment of the proposed action with regard to applicable regulatory requirements and the protection of public health, safety, and security." Therefore, the focus of the staff's acceptance review for technical qualifications is on whether the application reasonably contains sufficient technical information to complete a detailed review with regard to 10 CFR 50.34(a)(9).

The application includes information about ND's technical qualifications in Attachment 1 and in Enclosure 5 to Attachment 1, which is a QA plan. ND has also provided some information (e.g., resumes for the chief nuclear officer and QA manager), which appear to be of sufficient detail, or depth, about the qualifications of those individuals.

ND stated a limitation on the technical qualifications it currently possesses: “Nuclear Development is technically qualified to carry out its responsibilities as the holder of the Permits in Deferred Plant status.” “Deferred plant” is a term defined in the Commission’s Policy Statement on Deferred Plants (Volume 52, Number 198, of the *Federal Register*, pages 38077-38080, dated October 14, 1987), and it means, “a nuclear power plant at which the licensee has ceased construction or reduced activity to a maintenance level, maintains the CP in effect, and has not announced termination of the plant.” The application explains that ND plans to keep the units in “deferred plant status” for some interim time following transfer of the CPs to it and prior to it commencing construction. The application also states, “Prior to moving beyond Deferred Plant status and beginning licensed construction activities, Nuclear Development plans to enhance its Owner’s oversight organization by engaging experienced professionals and/or an experienced nuclear plant operating company with a track record for successfully managing important safety-related projects of comparable scale. Prior to reactivating construction, Nuclear Development will submit the information required by Section III.A.6 of the Deferred Plants Policy, including a “description of the management and organization responsible for construction of the plant” as required by Section III.A.6.e. If necessary and/or desirable, the NRC staff could impose a license condition requiring that resumes for the individuals intended to staff the construction organization be submitted with the notice to NRC contemplated by Section III.A.6.”

Based on the review of the application, the staff has concluded that ND has not provided sufficient information addressing its technical qualifications to perform the design and construction activities authorized by the CP. Additionally, it is not clear to the staff how the information provided in the application and a license condition could be used together to allow the staff to make the required findings under 10 CFR 50.80 and 10 CFR 50.34 that ND is technically qualified to perform the activities that the CP authorizes. To address this issue, ND may provide additional information, such as an explanation of how a license condition could be used to allow the staff to make a finding that ND is technically qualified, or ND may provide the information listed in NUREG-0800, Section 13.1.1, related to design and construction responsibilities.

Part 3 – Financial Qualifications and Related Subjects Acceptance Review

In accordance with 10 CFR 50.80(c), a CP can be transferred if the Commission finds that the proposed transferee is qualified to be the holder of the license. The regulations in 10 CFR 50.80(b)(1) requires an application for a CP transfer to include as much information as required by 10 CFR 50.33 and 10 CFR 50.34 with respect to the identity and financial and technical qualifications of the proposed transferee as would be required by those sections if the application were for an initial license.

10 CFR 50.38, “Ineligibility of certain applicants,” states that any person who is a citizen, national or agent of a foreign country, or any corporation, or other entity which the Commission knows or has reason to believe is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government, shall be ineligible to apply for and obtain a license.

The staff conducted the acceptance review using guidance in LIC-109, LIC-107, “Procedures for Handling License Transfers,” Revision 2, (ADAMS Accession No. ML17031A006), Draft Regulatory Guide DG-9004, “Financial Qualifications for Power Reactors and Non-Power Production or Utilization Facilities,” (ADAMS Accession No. ML17278A541), and NUREG-0800, “Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants,” Revision 2, (ADAMS Accession No. ML052340514). Specifically, the staff reviewed the subject

of the applicant's financial qualifications necessary for the transfer of a CP, including information required to evaluate an entity's Foreign Ownership.

LIC-109 states, "NRR will consider an RLA [requested licensing action] to be acceptable for review upon the NRC staff's conclusion that the application reasonably appears to contain sufficient technical information, both in scope and depth, for the NRC staff to complete the detailed technical review and render, in an appropriate time frame for the associated action, an independent assessment of the proposed action with regard to applicable regulatory requirements and the protection of public health, safety, and security."

Financial Qualifications

In its review, the staff considered that ND, as a part of the application, indicated that since Bellefonte would be a non-rate-regulated plant (nonutility) it would "not have the benefit of traditional "cost of service" rate regulation." As such, ND has had "difficulty arranging for financing for construction prior to transfer of the construction permits." Therefore, pursuant to 10 CFR 50.12, ND has requested an exemption from the 10 CFR 50.33 financial qualifications requirements and has provided information to demonstrate it meets an alternative lower financial qualification standard of "appears to be financially qualified" as presented in 10 CFR Part 70, SECY-13-0124, "Policy Options for Merchant (Non-Electric Utility) Plant Financial Qualifications," (ADAMS Accession No. ML13057A006), and SECY-15-0123, "The Staff's Statement in Support of the Uncontested Hearing for Issuance of Combined Licenses for the South Texas Project [STP], Units 3 and 4," (ADAMS Accession No. ML15176A532).

Under the "appears to be financially qualified" standard, as presented in 10 CFR Part 70, applicants must submit an Applicant Financial Capacity Plan to demonstrate the applicant's level of understanding of the size and scope of the project, including the level of capital necessary to undertake the project, and the organizational and human resources, experience, skills, and expertise required to ultimately finance the project, when needed. Additionally, applicants must provide a construction cost estimate and propose a license condition(s) to address funding for construction to be satisfied before construction begins should it possess less than 50 percent of funds needed for the licensed activity.

In Attachment 1 to the application, Section 5, "Financial Qualifications," ND provided its Applicant Financial Capacity Plan, a construction cost estimate (Enclosure 4P to the application), and the necessary license condition. ND's Applicant Financial Capacity Plan included a description of the management team for financing and a description of anticipated funding methods and sources of funds. The plan as presented contains an example of the applicant's past experience in negotiating, securing, and managing capital for the large infrastructure Dulles Toll Road project. Based on staff's preliminary review of the application, it appears the applicant made a good faith effort to address the requirements specific to financial qualifications. Upon acceptance of the application, the staff notes that it may request that ND provide additional information regarding the applicant's experience with large infrastructure projects.

As it pertains to this licensing action, decommissioning funding assurance requirements do not apply to ND since this request is for transfer of a CP only.

ND acknowledged the requirements for financial protection in this application. As it pertains to this licensing action, transfer of a CP, insurance and indemnity are not required until such time as the CP holder (licensee) obtains a Part 50 operating license, including a general license

under Part 70 license authorizing ownership, possession and storage of special nuclear material.

Foreign Ownership, Control, or Domination (FOCD)

As required by 10 CFR 50.33(d)(3), if the applicant is a corporation, or an unincorporated association, each application shall state: (1) the state where it is incorporated or organized and the principal location where it does business, (2) the names, addresses and citizenship of its directors and its principal officers, and, (3) whether it is owned, controlled, or dominated by an alien, a foreign corporation, or foreign government, and if so, give details. Under 10 CFR 50.38, if the applicant is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government, it shall be ineligible to apply for and obtain a license.

In its application, ND provided information, including the citizenship of its key management personnel and a statement of whether it is owned, controlled, or dominated by a foreign entity.

Based on staff's preliminary review of the application, it appears the applicant made a good faith effort to address the requirements related to foreign ownership, control, or domination.

Upon acceptance of the application, the staff may request additional information about FOCD to complete its review, for example, the staff may request the addresses of directors and principal officers.

Part 4 – Other Regulatory Requirements Acceptance Review

The NRC staff notes that the CP transfer application was submitted solely by ND and not jointly with the current licensee, TVA. License transfer applications are typically submitted under oath and affirmation jointly by the current licensee and the transferee, or alternatively, by the transferee with a statement from the current licensee that it supports the application. The regulation in 10 CFR 50.80(b)(2), states in part, "The Commission may require any person who submits an application for license pursuant to the provisions of this section to file a written consent from the existing licensee or a certified copy of an order or judgment of a court of competent jurisdiction attesting to the person's right (subject to the licensing requirements of the Act and these regulations) to possession of the facility or site involved." Please provide information regarding ND's right to possess the Bellefonte site. This information should include written consent from the existing licensee (TVA) or a certified copy of an order or judgment of a court of competent jurisdiction attesting to ND's right to possession of the Bellefonte site as described in 10 CFR 50.80(b)(2).