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Serial: RA-21-0235

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

Subject: Brunswick Steam Electric Plant, Unit Nos. 1 and 2
Renewed Facility Operating License Nos. DPR-71 and DPR-62
Docket Nos. 50-325 and 50-324
Supplement to Exemption Request for Senior Reactor Operator License
Application

- Reference:
1. Letter from John A. Krakuszeski (Duke Energy) to Laura Dudes (U.S. Nuclear Regulatory Commission, Region II), *Application for Senior Reactor Operator License*, Duke Energy Serial Number RA-21-0229, dated July 29, 2021.
 2. Letter from John A. Krakuszeski (Duke Energy) to the U.S. Nuclear Regulatory Commission Document Control Desk, *Exemption Request for Senior Reactor Operator License Application*, Duke Energy Serial Number RA-21-0217, dated July 29, 2021.
 3. Letter from John A. Krakuszeski (Duke Energy) to Laura Dudes (U.S. Nuclear Regulatory Commission, Region II), *Application for Senior Reactor Operator License*, Duke Energy Serial Number RA-21-0247, dated August 23, 2021.

Ladies and Gentlemen:

Duke Energy Progress, LLC (Duke Energy), submitted an application, in accordance with 10 CFR 55.31, for an individual to be licensed as a senior reactor operator (SRO) at the Brunswick Steam Electric Plant (BSEP), Unit Nos. 1 and 2 (i.e., Reference 1, supplemented by Reference 3). This applicant was previously licensed at BSEP. As a result, in accordance with 10 CFR 55.47, "Waiver of examination and test requirements," Duke Energy requested a waiver of the written examination and operating test requirements. In support of this SRO license application submittal, and in accordance with 10 CFR 55.11, "Specific exemptions," Duke Energy requested an exemption from the two-year eligibility requirement of 10 CFR 55.47(a)(1) (i.e., Reference 2).

Duke Energy requests approval of the proposed exemption (i.e., Reference 2) at the earliest opportunity, and no later than December 31, 2021, in order to relieve the licensed operator staffing burdens at BSEP. The proposed exemption is requested to be effective upon issuance.

BSEP has sustained an average of approximately eight licensed operator terminations per year since 2018. Additional attrition is expected in the near-term due to high overtime demands and recent trends in operators leaving BSEP for non-nuclear opportunities. Contributing to the number of vacancies, the Initial License Training (ILT) classes in this timeframe have not met projections. Since 2018 the ILT classes combined have only added 12 new licenses.

As a result of the licensed operator staffing situation, fatigue rule waivers are expected to be needed in the coming months. In addition, off-shift licensed operators will be needed to supplement on-shift crew coverage, impacting off-shift operator functions.

Pursuit of the approval of the subject application is one of several interim actions to mitigate the current staffing burden until the next ILT class graduates in December 2022. It is in the public interest to preserve and supplement as many licensed operators as possible during this time to avoid excessive use of operator overtime and to maintain licensed operators within fatigue rule limits, without the use of waivers, to the extent possible.

The enclosure to this submittal contains a redacted version of the Reference 2 enclosure. All Personally Identifiable Information has been removed.

This document contains no regulatory commitments. Please refer any questions regarding this submittal to Mr. Mark DeWire, Manager – Nuclear Support Services, at (910) 832-6641.

Sincerely,



John A. Krakuszeski

SBY/sby

Enclosure:

Request for Exemption from 10 CFR 55.47(a)(1) - Redacted

cc:

Mr. Andrew Hon, NRC Project Manager
Mr. Gale Smith, NRC Senior Resident Inspector
Ms. Laura Dudes, NRC Regional Administrator, Region II
Mr. Gerald J. McCoy, NRC Chief, Operations Branch, Region II
Chair - North Carolina Utilities Commission

Request for Exemption from 10 CFR 55.47(a)(1)

In accordance with 10 CFR 55.11, "Specific exemptions," Duke Energy Progress, LLC (Duke Energy), requests an exemption from the requirements of 10 CFR 55.47, "Waiver of examination and test requirements," for a Senior Reactor Operator (SRO) applicant who does not meet the two-year eligibility requirement of 10 CFR 55.47(a)(1).

The requested exemption from 10 CFR 55.47(a)(1) supports waiver of the requirements for a written examination and operating test in accordance with 10 CFR 55.47.

Basis for Exemption

10 CFR 55.47 states, in part:

- (a) On application, the Commission may waive any or all of the requirements for a written examination and operating test, if it finds that the applicant --
 - (1) Has had extensive actual operating experience at a comparable facility, as determined by the Commission, within two years before the date of application;
 - (2) Has discharged his or her responsibilities competently and safely and is capable of continuing to do so; and
 - (3) Has learned the operating procedures for and is qualified to operate competently and safely the facility designated in the application.

The requested exemption is for [[]], Docket No. 55-23973. Mr. [[]] discharged his responsibilities competently and safely during his nearly 6 years and 5 months as a licensed operator at BSEP. Mr. [[]] was issued License No. OP-21982 for BSEP, Units 1 and 2, effective January 17, 2013. Subsequently, the license was upgraded to SRO License No. SOP-501215, effective September 20, 2017. Mr. [[]] voluntarily resigned and his SOP License was terminated on June 13, 2019, when he left the company. Along with his duties as a Control Room supervisor, Mr. [[]] served as an instructor for the Brunswick Initial License Training Program with a focus on Abnormal and Emergency Procedure training in the simulator until his departure in June 2019.

Mr. [[]] was rehired to fill an SRO position on June 7, 2021. During his absence, Mr. [[]] continued in the nuclear power industry and pursued certification as an SRO for the Barakah Nuclear Power Plant (BNPP) in the United Arab Emirates prior to returning to the United States. Completion of certification training would have qualified Mr. [[]] to operate the controls at BNPP in the same manner that obtaining a license in the United States would allow operation of the controls at an NRC licensed nuclear facility.

In addition, Mr. [[]] served as the Power Ascension Control Center Operations Manager during initial power ascension and testing of BNPP Unit 1. In this capacity, Mr. [[]] was responsible for oversight of repairs and evolutions needed to support power ascension testing on a critical reactor during its initial startup test program.

Since returning to BSEP on June 7, 2021, Mr. [] has completed a training process of self-study and one-on-one instruction, which included the licensed operator requalification material for all training segments since his June 2019 departure. Mr. [] then commenced attending licensed operator requalification training in July 2021 and will continue in this training program.

As part of this additional training, Mr. [] spent a total of 168 hours on shift during June and July 2021 as follows:

- 1) 36 hours as a non-licensed operator under the direction of the qualified on-duty operators performing plant walk downs and familiarization tours;
- 2) 36 hours of shift functions under the direction of a Reactor Operator in the position of Reactor Operator;
- 3) 48 hours of shift functions under the direction of a Senior Reactor Operator in the position of Control Room Supervisor; and
- 4) 48 hours of Work Control Center functions under direction of a Senior Reactor Operator.

At the completion of this additional training and on-shift time, Mr. [] took and passed the annual licensed operator requalification written, simulator operating, and Job Performance Measure exams administered on July 7, 2021.

10 CFR 55.11 states:

The Commission may, upon application by an interested person, or upon its own initiative, grant such exemptions from the requirements of the regulations in this part as it determines are authorized by law and will not endanger life or property and are otherwise in the public interest.

Section 55.11 of 10 CFR allows the NRC to grant exemptions to the regulations in 10 CFR Part 55, and the granting of the proposed exemption will not result in a violation of the Atomic Energy Act of 1954, as amended, or the Commission's regulations. Therefore, the exemption is authorized by law.

As demonstrated above, with Mr. [] experience and qualifications, granting this exemption from the two-year eligibility requirement of 10 CFR 55.47(a)(1) will not endanger life or property.

Duke Energy is requesting this exemption as part of ongoing efforts to avoid excessive use of operator overtime. As of July 2021, BSEP has a 30 percent vacancy for on-shift licensed operators. At this staffing level, it is estimated that, on average, nine to ten 12-hour overtime shifts per licensed operator per quarter will be required. It is expected that fatigue rule waivers will be required as a result. Historically, attrition rates increase under increased overtime demands, thereby exacerbating the staffing shortfall.

Duke Energy is diligently pursuing resolution of this issue by undertaking aggressive efforts to staff a large Initial License Training class comprising approximately 30 candidates. However, with a December 2022 exam date, this is a longer-term solution. In the interim, Duke Energy will

sustain extended vacancies in department staff to maintain the shifts. All remaining staff licensed operators have reactivated and are carrying overtime load beyond their normal duties. Additionally, three former licensed operators outside of Operations have reactivated for the same purpose. Duke Energy actively recruited Mr. [] to return to fill an SRO position. It is in the public interest to preserve and supplement as many licensed operators as possible during this time to avoid excessive use of operator overtime and to maintain licensed operators within fatigue rule limits, without the use of waivers, to the extent possible.

Environmental Assessment

In accordance with 10 CFR Part 51, this action is categorically excluded from the requirements of conducting an environmental assessment or environmental impact statement. Specifically, 10 CFR 51.22(c)(8) categorically exempts issuance, amendment or renewal of an operator license pursuant to 10 CFR Part 55.