



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

March 1, 2021

Mr. David Rhoades  
Senior Vice President  
Exelon Generation Company, LLC  
President and Chief Nuclear Officer (CNO)  
Exelon Nuclear  
4300 Winfield Road  
Warrenville, IL 60555

SUBJECT: QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2 – EXEMPTION  
FROM SELECT REQUIREMENTS OF 10 CFR PART 26  
(EPID L-2021-LLE-0010 [COVID-19])

Dear Mr. Rhoades:

The U.S. Nuclear Regulatory Commission (NRC) has approved the requested exemption from specific requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 26, “Fitness for Duty Programs,” Section 26.205, “Work hours,” for Quad Cities Nuclear Power Station, Units 1 and 2 (Quad Cities). This action is in response to the Exelon Generation Company, LLC (Exelon, the licensee) application dated February 17, 2021 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21049A051). This application cited the March 28 and November 10, 2020, letters from Mr. Ho Nieh (ADAMS Accession Nos. ML20087P237 and ML20261H515, respectively), describing a process to request expedited review of certain exemptions from 10 CFR Part 26 during the Coronavirus Disease 2019 (COVID-19) public health emergency (PHE).

The application provided the following information:

- A statement that explains how, and for which covered groups at Quad Cities, the COVID-19 PHE impacts the licensee’s ability to meet the work-hour control requirements of 10 CFR 26.205(d)(1)-(d)(7);
- A statement that describes how the licensee would use an exemption from the 10 CFR 26.205(d)(1)-(d)(7) work-hour control requirements to manage the impact of the COVID-19 PHE on maintaining plant operational safety and security at Quad Cities;
- A list of positions for which Exelon may implement alternative work-hour controls at Quad Cities upon the NRC granting the requested exemption (from which the NRC has determined the positions for which Exelon will maintain current work-hour controls under 10 CFR 26.205(d)(1)-(d)(7));
- The date and time when Exelon will begin implementing site-specific COVID-19 PHE fatigue-management controls at Quad Cities for personnel specified in 10 CFR 26.4(a);

- A statement that Exelon's site-specific COVID-19 fatigue-management controls at Quad Cities are consistent with the constraints outlined in the March 28 and November 10, 2020, letters; and
- A statement that Exelon will establish alternative controls at Quad Cities for the management of fatigue during the period of the exemption and, at a minimum, the controls ensure that, for individuals subject to these alternative controls:
  - individuals will not work more than 16 work hours in any 24-hour period and not more than 86 work hours in any 7-day period, excluding shift turnover,
  - a minimum 10-hour break is provided between successive work periods,
  - 12-hour shifts are limited to not more than 14 consecutive days,
  - a minimum of 6 days off is provided in any 30-day period, and
  - requirements have been established for behavioral observation and self-declaration during the period of the exemption.

Therefore, the NRC finds that the technical basis for an exemption described in the March 28 and November 10, 2020, letters is applicable to the licensee's application. Furthermore, although not explicitly part of the licensee's application, the NRC reminds Exelon that, per the November 10, 2020, letter, the calculation of work hours and days off includes all work hours and days off during the applicable calculation periods, including those work hours and days off preceding initiation of the exemption period.

The NRC previously approved exemption requests for Quad Cities, with the preceding exemption periods ending on June 9, 2020 and February 15, 2021 (ADAMS Accession Nos. ML20099A499 and ML20343A027, respectively). The requested exemption will not begin within 14 days of Quad Cities' most recent exemption, thus providing the licensee with sufficient time to implement the work hour controls in 10 CFR Part 26 to manage the potential for cumulative fatigue. Therefore, the NRC did not request that Exelon provide additional information regarding the technical basis for why there will continue to be reasonable assurance that cumulative fatigue during the new exemption period will not compromise plant safety or security.

Section 26.9, "Specific exemptions," of 10 CFR allows the NRC to grant exemptions from the requirements of 10 CFR Part 26 when the NRC staff determines that granting the licensee's requested exemption is authorized by law, will not endanger life or property or the common defense and security, and is otherwise in the public interest.

The NRC determined that the requested exemption is permissible under the Atomic Energy Act of 1954, as amended, and other regulatory requirements. Therefore, the NRC finds that the requested exemption is authorized by law.

The underlying purpose of 10 CFR 26.205(d) is to prevent impairment from fatigue due to duration, frequency, or sequencing of successive shifts. Based on the evaluation provided in the NRC's March 28 and November 10, 2020, letters along with the criteria discussed above, no new accident precursors are created by using whatever licensee staff resources may be

necessary or available during the term of this exemption to respond to a plant emergency and to ensure that the plant maintains a safe and secure status. Therefore, the probability of postulated accidents is not increased. Also, the consequences of postulated accidents are not increased because there is no change in the types of accidents previously evaluated. The requested exemption would allow the use of licensee staff resources as may be necessary to maintain safe operation of the plant and to respond to a plant emergency. Therefore, the NRC finds that the requested exemption will not endanger life or property.

The requested exemption would allow the use of licensee security staff resources as may be necessary to ensure the common defense and security. Therefore, the NRC finds that the requested exemption will not endanger the common defense and security.

Due to the impacts that the COVID-19 PHE has had on the licensee's ability to comply with the work-hour controls of 10 CFR 26.205(d), the importance of maintaining the operations of Quad Cities, and the controls the licensee has established, the NRC finds that the requested exemption is in the public interest.

Granting the requested exemption from the requirements of 10 CFR 26.205 is categorically excluded under 10 CFR 51.22(c)(25), and there are no extraordinary circumstances present that would preclude reliance on this exclusion. The NRC staff determined, per 10 CFR 51.22(c)(25)(vi)(I), that the requirements from which the exemption is sought involve other requirements of an administrative, managerial, or organizational nature.

The NRC staff also determined that approval of this exemption involves no significant hazards consideration because it does not authorize any physical changes to the facility or any of its safety systems, does not authorize changes to any of the assumptions or limits used in the licensee's safety analyses, and does not introduce any new failure modes. There is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite because this exemption does not affect any effluent release limits as provided in the licensee's technical specifications or by the regulations in 10 CFR Part 20, "Standards for Protection Against Radiation." There is no significant increase in individual or cumulative public or occupational radiation exposure because this exemption does not affect the limits on the release of any radioactive material or the limits provided in 10 CFR Part 20 for radiation exposure to workers or members of the public. There is no significant construction impact because this exemption does not involve any changes to a construction permit. There is no significant increase in the potential for or consequences from radiological accidents because the exemption does not alter any of the assumptions or limits in the licensee's safety analysis. In addition, the NRC staff determined that there would be no significant impacts to biota, water resources, historic properties, cultural resources, or socioeconomic conditions in the region. Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the approval of this exemption request.

Based on the above, the NRC finds that (1) the exemption is authorized by law, (2) the exemption will not endanger life or property or the common defense and security, and (3) the exemption is otherwise in the public interest.

D. Rhoades

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This exemption is effective from March 8, 2021, until May 7, 2021.

Sincerely,

Craig G. Erlanger, Director  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-254 and 50-265

cc: Listserv

SUBJECT: QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2 – EXEMPTION  
FROM SELECT REQUIREMENTS OF 10 CFR PART 26  
(EPID L-2021-LLE-0010 [COVID-19]) DATED MARCH 1, 2021

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**ADAMS Accession No.: ML21050A182 \*via concurrence with model safety evaluation**

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DATE	2/18/2021	2/19/2021	3/30/2020	3/31/2020
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NAME	CCowdrey TBuchanan for	TJones	NSalgado	CErlanger
DATE	2/22/2021	2/25/2021	2/26/2021	3/1/2021

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