

RS-21-018

EA-12-049
EA-12-051
EA-13-109

February 23, 2021

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

Byron Station, Units 1 and 2
Renewed Facility Operating License Nos. NPF-37 and NPF-66
NRC Docket Nos. STN 50-454 and STN 50-455

Dresden Nuclear Power Station, Units 2 and 3
Renewed Facility Operating License Nos. DPR-19 and DPR-25
NRC Docket Nos. 50-237 and 50-249

Subject: Request for Rescission of NRC Orders EA-12-049, EA-12-051, and EA-13-109

- References:
- 1) Order EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis-External Events," dated March 12, 2012 (ML12054A735)
 - 2) Order EA-12-051, "Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation," dated March 12, 2012 (ML12056A044)
 - 3) Order EA-13-109, "Order Modifying Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation Under Severe Accident Conditions," dated June 6, 2013 (ML13143A321)
 - 4) Letter from L. Lund (U.S. Nuclear Regulatory Commission (NRC)) to B. C. Hanson (Exelon Generation Company, LLC (EGC)), "Byron Station, Units 1 and 2 – Documentation of Completion of Required Actions Taken in Response to the Lessons Learned from the Fukushima Dai-Ichi Accident," dated May 1, 2018 (ML18094A754)
 - 5) Letter from R. J. Bernardo (NRC) to B. C. Hanson (EGC), "Dresden Nuclear Power Station, Units 2 and 3 – Documentation of Completion of Required Actions Taken in Response to the Lessons Learned from the Fukushima Dai-Ichi Accident," dated November 17, 2020 (ML20300A235)
 - 6) Letter from J. Bradley Fewell (Exelon Generation Company, LLC) to U.S. Nuclear Regulatory Commission, "Certification of Permanent Cessation of

Power Operations for Byron Station, Units 1 and 2," dated September 2, 2020 (NRC Accession No. ML20246G613)

- 7) Letter from J. Bradley Fewell (Exelon Generation Company, LLC) to U.S. Nuclear Regulatory Commission, "Certification of Permanent Cessation of Power Operations for Dresden Nuclear Power Station, Units 2 and 3," dated September 2, 2020 (NRC Accession No. ML20246G627)

The NRC issued Orders EA-12-049 (Reference 1), EA-12-051 (Reference 2) to all power reactor licensees, and EA-13-109 (Reference 3) to boiling water reactor (BWR) power reactor licensees with Mark I and II containments in response to the lessons learned from the Fukushima Dai-Ichi Accident. Subsequently, through the rulemaking process, the NRC promulgated a new regulation, 10 CFR 50.155, "Mitigation of Beyond Design-Basis Events," to make the requirements of References 1 and 2 generically applicable. 10 CFR 50.155 became effective on September 9, 2019, with either a two- or three-year implementation period depending upon which Orders a licensee had previously received. 10 CFR 50.155 also has provisions to withdraw References 1 and 2 on September 9, 2022, which is the latest date a licensee can implement the requirements of 10 CFR 50.155. Byron Station, Units 1 and 2 (Byron) is obligated to comply with References 1 and 2. Dresden Nuclear Power Station, Units 2 and 3 (Dresden) is obligated to comply with References 1, 2, and 3. Byron and Dresden are in full compliance with References 1, 2, and 3 as documented in References 4 and 5, respectively. Byron and Dresden have completed all actions required to implement 10 CFR 50.155 as of December 31, 2020.

Section IV of the Orders (References 1, 2, and 3) stipulates that the NRC's Director of the Office of Nuclear Reactor Regulation may, in writing, relax or rescind any of the conditions of the Orders upon demonstration by the licensee of good cause. The following paragraphs provide EGC's demonstration of good cause.

EGC requests the NRC to rescind Orders EA-12-049 (Reference 1) and EA-12-051 (Reference 2) for Byron and Dresden in that they are duplicative of 10 CFR 50.155.

EGC has notified the NRC in accordance with 10 CFR 50.82(a)(1)(i) of the planned permanent shutdowns of Byron and Dresden in References 6 and 7, respectively. Byron is planned to be permanently shutdown no later than the end of September 2021 and Dresden is planned to be permanently shutdown no later than the end of November 2021. Following shutdown, each unit's reactor vessel is intended to be permanently defueled.

The applicability of the requirements contained in 10 CFR 50.155 changes depending upon plant decommissioning status. For example, once the certifications described in 10 CFR 50.82(a)(1) have been submitted, licensees need only comply with the mitigation strategies, training, and documentation of changes associated with spent fuel pool cooling; equipment needed to maintain or restore core cooling and containment are no longer required. In the case of Byron and Dresden, maintaining compliance with References 1 and 2 when equivalent requirements of 10 CFR 50.155 are not applicable creates unnecessary regulatory burden following the certification of the permanent removal of fuel from the reactor vessels in accordance with 10 CFR 50.82(a)(1)(ii). The permanent removal of fuel from the reactor

vessels is expected to occur well in advance of September 9, 2022, when the subject Orders would automatically be withdrawn. EGC requests References 1 and 2 be rescinded for Byron and Dresden effective once the NRC is notified in accordance with 10 CFR 50.82(a)(1)(ii) that fuel has been permanently removed from the reactor vessels. Following rescission of References 1 and 2, EGC will continue to be required to comply with 10 CFR 50.155. As such, for Byron and Dresden, References 1 and 2 can be rescinded as they are no longer needed to ensure adequate protection of public health and safety.

In addition, EGC requests the NRC to rescind Order EA-13-109 (Reference 3) for Dresden effective once the NRC is notified in accordance with 10 CFR 50.82(a)(1)(ii) that fuel has been permanently removed from the reactor vessels. Once the reactor vessel in each unit has been permanently defueled, no source of energy will exist within the containment to require the availability of the equipment mandated by Reference 3. Maintaining compliance with Reference 3 would be an unnecessary regulatory burden in that circumstance. As such, Reference 3 can be rescinded as it is no longer needed for Dresden to ensure adequate protection of public health and safety.

Exelon requests rescission of the subject NRC Orders for Byron and Dresden by August 27, 2021, in order to support future decommissioning efforts and preparations for and the timely transition of Byron and Dresden to a permanently shutdown and defueled condition. Exelon requests that the rescission of these orders become effective following submittal of the certifications required by 10 CFR 50.82(a)(1) that Byron, Units 1 and 2, and Dresden, Units 2 and 3, have been permanently shutdown and defueled.

There are no regulatory commitments contained within this submittal. Should you have any questions concerning this submittal, please contact Mitchel Mathews at (630) 657-2819.

Respectfully,



Patrick R. Simpson
Sr. Manager – Licensing
Exelon Generation Company, LLC

cc: NRC Director - Office of Nuclear Reactor Regulation
NRC Regional Administrator – NRC Region III
NRC Project Manager, NRR – Dresden, Units 2 and 3
NRC Senior Resident Inspector – Dresden
NRC Project Manager, NRR – Byron
NRC Senior Resident Inspector – Byron
Director, NRC Division of Fuel Management, NMSS
Illinois Emergency Management Agency – Division of Nuclear Safety