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Cc: [tam Tran](#); [Kevin Folk](#); [Steve Koenick](#); [Mitchell Dehmer](#)
Subject: Dresden AQU-6
Date: Tuesday, January 28, 2025 12:28:00 PM

Allison,

During a clarification call held on January 24, 2025, NRC Subject Matter Experts and Constellation Project Management discussed additional information request - Aquatics 6 (AQU-6). NRC also provided further clarification via email on January 27, 2025, for the RAI AQU-6. This resulted in the revised AQU-6 as follows:

RAI AQU-06

REQUIREMENT: The NRC's regulation at 10 CFR 51.53(c)(3)(ii)(B) requires that if the applicant's plant utilizes a once-through cooling or cooling pond water intake and discharge system, the applicant shall provide a copy of current Clean Water Act (CWA) 316(b) Best Technology Available (BTA) determinations and, if applicable, a 316(a) variance in accordance with 40 CFR part 125, or equivalent State permits and supporting documentation. If the applicant cannot provide these documents, it shall assess the impact of the proposed action on fish and shellfish resources resulting from impingement mortality and entrainment and thermal discharges.

If the NPDES permitting authority has made BTA determinations for the nuclear power plant pursuant to CWA Section 316(b) in accordance with the current regulations at 40 CFR Part 122 (Ref. 55) and 40 CFR Part 125 (Ref. 56), which were promulgated in 2014 (79 FR 48300) (Ref. 57), and the plant has implemented any associated requirements or those requirements would be implemented before the license renewal period, no additional analysis is required. In such cases, provide with the ER copies of the NPDES permit, CWA Section 316(b) BTA determinations, studies and information submitted to the NPDES permitting agency pursuant to 40 CFR 122.21(r), and relevant correspondence with the permitting agency.

ISSUE: Because the Illinois Environmental Protection Agency has not yet made CWA 316(b) BTA determinations for DNPS, the NRC staff requires additional information in order to assess the impact of the proposed action on fish and shellfish resources resulting from impingement mortality and entrainment. The NRC staff also requires additional information concerning DNPS's CWA 316(a) variance in order to assess the impacts of thermal discharges on aquatic organisms.

REQUEST: Please provide copies of the following documents:

1991–2014 Long term Aquatic Monitoring Program

- a) EA Engineering, Science, and Technology, Inc., PBC (EA). 2012. Dresden Nuclear Station Aquatic Monitoring 2011, RM 270.5-273.0. Report by EA to Exelon Nuclear Company, Dresden Nuclear Station, Morris, IL.
- b) EA Engineering, Science, and Technology, Inc., PBC (EA). 2014. Dresden Nuclear Station Aquatic

Monitoring 2013, RM 270.5-273.0. Report by EA to Exelon Nuclear Company, Dresden Nuclear Station, Morris, IL.

c) EA Engineering, Science, and Technology, Inc., PBC (EA). 2015. Dresden Nuclear Station Aquatic Monitoring 2014, RM 270.5-273.0. Report by EA to Exelon Nuclear Company, Dresden Nuclear Station, Morris, IL.

Impingement and Entrainment Studies

a) EA Engineering, Science, and Technology, Inc., PBC (EA). 2015. Freshwater Mussel Survey in the Illinois River near the Dresden Nuclear Station (RM 271-272.5). Report by EA to Exelon Nuclear Company, Warrenville, IL.

b) EA Engineering, Science, and Technology, Inc., PBC (EA). 2007. Impingement Mortality Characterization Study (2005-2007) Dresden Station. Final Draft. November 2007. Report by EA to Exelon Nuclear Company, Warrenville, IL.

c) EA Engineering, Science, and Technology, Inc., PBC (EA). 2007. Entrainment Characterization Study (2005-2007) Dresden Station. Final Draft. October 2007. Report by EA to Exelon Nuclear Company, Warrenville, IL.

d) EA Engineering, Science, and Technology, Inc., PBC (EA). 2019. Impingement Characterization Report for Dresden Nuclear Power Station. Report by EA to Exelon Generation Company, Dresden Nuclear Station, Morris, IL.

e) EA Engineering, Science, and Technology, Inc., PBC (EA). 2019. Entrainment Characterization Report for Dresden Nuclear Power Station. Report by EA to Exelon Generation company, Dresden Nuclear Station, Morris, IL.

NPDES/316(b) Demonstrations

a) AECOM. 2016. 40 CFR 122.21(r) (2-8) NPDES Application Requirements for Facilities with Cooling Water Intake Structures Exelon Generation Company, LLC, Dresden Nuclear Power Station, Morris, Illinois. May.

b) AECOM. 2019. 40 CFR 122.21(r)(10) NPDES Application Requirements for Facilities with Cooling Water Intake Structures. Report by AECOM to Exelon Generation Company, LLC, Dresden Generating Station, Morris, IL.

c) AECOM. 2019. 316(b) Executive Summary. Report by AECOM to Exelon Generating Company, LLC, Dresden Generating Station, Morris, IL.

Thermal Effluent Studies

a) Dresden Nuclear Station (DNS). 2015. Draft Dresden Nuclear Station 316(a) Demonstration [executive summary only]. May 29, 2015.

Please let me know if you have any questions.

Thank you,

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