



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

August 9, 2023

Christopher P. Domingos, Site Vice President  
Northern States Power Company - Minnesota  
Monticello Nuclear Generating Plant 2807  
West County Road 75  
Monticello, MN 55362

**SUBJECT: MONTICELLO NUCLEAR GENERATING PLANT, UNIT 1 – LICENSE RENEWAL  
REGULATORY AUDIT REGARDING THE ENVIRONMENTAL REVIEW OF THE  
SUBSEQUENT LICENSE RENEWAL APPLICATION (EPID NUMBER: L-2023-  
SLE-0000) (DOCUMENT NUMBER: 50-263)**

Dear Christopher Domingos:

By letter dated January 9, 2023, (Agencywide Documents Access and Management System (ADAMS) ML23009A353), Northern States Power Company submitted to the U.S. Nuclear Regulatory Commission (NRC) an application for subsequent license renewal of Renewed Facility Operating License No. DPR-22 for Monticello Nuclear Generating Plant, Unit 1 (Monticello), pursuant Section 103 of the Atomic Energy Act of 1954, as amended, and part 54 of title 10 of the *Code of Federal Regulations*, "Requirements for renewal of operating licenses for nuclear power plants."

The NRC staff has initiated the environmental review for the subsequent license renewal of Monticello. The environmental audit took place as a hybrid audit conducted during the week of July 31, 2023. The environmental audit activities were conducted in accordance with the enclosed environmental audit plan (Enclosure 1).

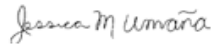
The NRC staff requested the information presented in the environmental audit needs list (Enclosure 2) be made available on the Monticello online reference portal (ADAMS ML23048A037), to the extent possible, prior to the audit. A draft schedule of planned tours and meetings is provided in Enclosure 3.

C. Domingos

- 2 -

If you have any questions on this matter, please contact Jessica Umana via email at [Jessica.Umana@nrc.gov](mailto:Jessica.Umana@nrc.gov).

Sincerely,



Signed by Umana, Jessica  
on 08/09/23

Jessica M. Umana, Environmental Project Manager  
Environmental Review License Renewal Branch  
Division of Rulemaking, Environment,  
and Financial Support  
Office of Nuclear Material Safety  
and Safeguards

Docket No. 50-263

Enclosure:  
As stated

cc w/encl: Listserv

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DATED: August 09, 2023

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PChandratil, RIII/OCA

**EMAIL:**[Max.W.Smith@xcelenergy.com](mailto:Max.W.Smith@xcelenergy.com)[paul.b.young@xcelenergy.com](mailto:paul.b.young@xcelenergy.com)[stephen.sollom@xcelenergy.com](mailto:stephen.sollom@xcelenergy.com)**ADAMS Accession No.:**

OFFICE	PM:ELRB:REFS	LA:REFS:ERMB	BC:ELRB:REFS	PM:ERLRB:REFS
NAME	JUmana	AWalker-Smith	TSmith	JUmana
DATE	08/07/23	08/08/23	08/09/23	08/09/23

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## **Audit Plan**

# **Subsequent License Renewal Environmental Review Monticello Nuclear Generating Plant, Unit 1**

**August 1 - 3, 2023**

**Division of Rulemaking, Environmental,  
and Financial Support  
Office of Nuclear Materials Safety  
and Safeguards  
U.S. Nuclear Regulatory Commission**

## **SUBSEQUENT LICENSE RENEWAL ENVIRONMENTAL AUDIT PLAN MONTICELLO NUCLEAR GENERATING PLANT, UNIT 1**

### **1. Background**

By letter dated January 9, 2023, (Agencywide Documents Access and Management System ML23009A353), Northern States Power Company submitted to the U.S. Nuclear Regulatory Commission (NRC) an application for subsequent license renewal of Renewed Facility Operating License No. DPR-22 for Monticello Nuclear Generating Plant, Unit 1 (Monticello), pursuant Section 103 of the Atomic Energy Act of 1954, as amended, and part 54 of title 10 of the *Code of Federal Regulations* (10 CFR), "Requirements for renewal of operating licenses for nuclear power plants."

The NRC staff conducted an environmental audit of the Monticello site to improve understanding, to verify information, and to identify information for docketing to support the preparation of the environmental impact statement. Specifically, the NRC staff will be identifying pertinent environmental data, reviewing the facility, and seeking clarifications regarding information provided in the environmental report (ER).

### **2. Environmental Audit Bases**

License renewal requirements for ERs are specified in 10 CFR part 51, "Postconstruction environmental reports." As specified by 10 CFR 51.53(c): *Operating license renewal stage*, "(1) Each applicant for renewal of a license to operate a nuclear power plant under part 54 of this chapter shall submit with its application a separate document entitled 'Applicant's Environmental Report—Operating License Renewal Stage.' Review guidance for the staff is provided in NUREG-1555, Supplement 1, Revision 1, 'Standard Review Plans for Environmental Reviews for Nuclear Power Plants: Supplement 1 – Operating License Renewal.'

The NRC staff is required to prepare a site-specific supplement to NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants." During the scoping process required in 10 CFR part 51, the NRC staff is required to define the proposed action, identify significant issues which must be studied in depth, and to identify those issues that can be eliminated from further study.

### **3. Environmental Audit Scope**

The scope of this environmental audit was to identify new and significant issues and issues which can be eliminated from further study. The NRC staff also identified environmental resources that must be described and evaluated in the Supplemental Environmental Impact Statement. Audit team members will review the documents and other requested information made available on the Monticello online reference portal identified on the environmental audit needs list (Enclosure 2) and discussed any questions and additional information needs with the applicant's subject matter experts.

### **4. Information and Other Material Necessary for the Environmental Audit**

As identified on the environmental audit needs list (Enclosure 2).

## 5. Environmental Audit Team Members and Resource Assignments

The environmental audit team members and their assignments are shown in the table below.

Discipline	Team Members
Environmental Review Supervisor	Ted Smith
Environmental Project Manager	Jessica Umana
Land Use and Visual	Caroline Hsu
Air Quality	Nancy Martinez
Meteorology and Climatology	Nancy Martinez
Noise	Nancy Martinez
Geologic Environment (Soils and Geologic Hazards)	Lloyd Desotell
Surface Water	Lloyd Desotell
Groundwater (Hydrology and Hydrogeology)	Lloyd Desotell
Terrestrial (Land Cover and Habitat)	Caroline Hsu
Aquatic	Briana Arlene
Section 7 Consultation with NMFS for ESA and EFH	Briana Arlene
Section 7 Consultation with FWS	Briana Arlene
Historic and Cultural Resources (Section 106 Consultation)	Nancy Martinez
Socioeconomics	Caroline Hsu
Human Health	Leah Parks/Beth Alferink
Postulated Accidents	Jerry Dozier
Environmental Justice	Caroline Hsu/Jeff Rikhoff
Waste Management (rad and non-rad)	Leah Parks/Beth Alferink
Cumulative Impacts	Jeff Rikhoff
Uranium Fuel Cycle	Leah Parks/Beth Alferink
Termination of Operations and Decommissioning	Beth Alferink/Leah Parks
Greenhouse Gases/Climate Change	Nancy Martinez
Replacement Power Alternatives	Jeff Rikhoff
Spent Nuclear Fuel	Leah Parks/Beth Alferink
Draft EIS Tables 4.1 and 4.2	Nancy Martinez
Severe Accident Mitigation Alternatives	Jerry Dozier, NRC/NRR

## 6. Logistics

The hybrid environmental audit was conducted from August 1 – 3, 2023. An entrance meeting was held with plant management at the beginning of the audit. The exit meeting will be held when all resource areas have held their breakout sessions.

## **7. Special Requests**

The NRC staff requested the applicant make available on the Monticello online reference portal, the information identified on the environmental audit needs list (Enclosure 2). Monticello staff who are subject matter experts in the disciplines identified on the environmental audit needs list were available for interviews and tours.

## **8. Deliverables**

An audit summary report will be issued by NRC staff within 90 days from the end of the environmental audit.

### Monticello Site-Specific Information Needs

The U.S. Nuclear Regulatory Commission (NRC) staff's site-specific information needs are described below in three categories: tours, meetings, and information needs. Information needs are identified as either resource-specific questions or document requests. The tours and meetings occurred during the environmental audit. Additionally, staff asked that you provide responses to the information needs on the electronic portal and make subject matter experts available to discuss these items with the NRC staff.

Monticello was prepared to discuss the following issues and made the following available during the environmental hybrid audit.

#### Participants: Audit Team (NRC and Contractor)

##### NRC Participants:

- Jessica Umana (In-Person)
- Jeff Rikhoff (Virtual)
- Caroline Hsu (Virtual)
- Nancy Martinez (In-Person)
- Lloyd Desotell (In-Person)
- Briana Arlene (Virtual)
- Leah Parks (In-Person)

##### Pacific Northwest National Laboratory (PNNL) Participants:

Resource Area	NRC Staff	PNNL Staff	PNNL Staff Attending In-Person / Virtual
Management	Jessica Umana	Caitlin Condon	In-Person
Ground Water and Surface Water Resources	Lloyd Desotell	Phil Meyer Becka Bence	In-Person Virtual
Terrestrial Resources	Caroline Hsu	Ann Miracle Tracy Fuentes	Virtual Virtual
Aquatic Resources	Briana Arlene	Ann Miracle Patrick Mirick	Virtual Virtual
Federally Protected Ecological Resources	Briana Arlene	Ann Miracle Patrick Mirick Tracy Fuentes	Virtual Virtual Virtual
Historic and Cultural Resources	Nancy Martinez	Lindsey Renaud	In-Person
Cumulative Impacts	Jeff Rikhoff	Dave Goodman Ann Miracle	Virtual Virtual



## **Tours**

Monticello provided subject matter experts to lead the following tours:

<b>Title or Number</b>	<b>Features Observed</b>	<b>Essential Participants</b>	<b>PNNL Participants</b>
1. General site tour (in-person)	Exterior grounds Transmission lines Historic and cultural sites Possible alternative power generation locations ISFSI Plant views from publicly accessible areas	All	
2. Plant intake and discharge tour (in-person)	Cooling water intake structure, approach channel, and observable components of the intake system, such as trash racks and traveling screens, fish return, and screen wash system. Discharge structure Accessible permitted outfall/storm drain locations Chemical treatment ponds	Lloyd Desotell Nancy Martinez Leah Parks	Philip Meyer
3. Radwaste tour (in-person)	Liquid radwaste system - discharge locations (potential future) Gaseous radwaste system - discharge locations ISFSI (from outside the security fence) Liquid storage tanks after processing Monitoring points for tritium leak LLW Storage Area (Radwaste Building)	Lloyd Desotell Leah Parks	Philip Meyer
4. Groundwater tour (in-person)	Monitoring wells, dewatering and extraction wells Site landfill Groundwater extraction storage tanks Land Application Areas Dredge spoils areas	Lloyd Desotell	Philip Meyer

Title or Number	Features Observed	Essential Participants	PNNL Participants
5. Visual Resources (virtual)	Photos of Monticello from publicly accessible areas where plant structures or operations are visible. Specifically, please provide the following: Photos of Monticello structures visible from public roads (for example County Rd 75 NE, Interstate 94, or State Highway 10). Photos of Monticello taken from publicly accessible areas of the Mississippi River. Photos of Monticello taken from any other publicly accessible area where plant structures or operations are visible, i.e., Montissippi Regional Park.	Caroline Hsu (virtual)  Jessica Umana	

### **Audit Meetings**

Monticello provided for breakout meetings with the subject matter expert(s) and/or the contractor(s) responsible for the following topics who can also discuss the corresponding information requests as described in the Questions and Documents Needs section below. These meetings will be used as needed to resolve or clarify any outstanding data needs or questions arising from the hybrid environmental audit.

The following resource areas will be covered as part of the virtual audit format:

- Ecological resources, including aquatic resources, terrestrial resources, and federally protected ecological resources.
- Cumulative Impacts
- Severe Accident Mitigation Alternatives (SAMA)
- Meteorology and Climatology
- Noise
- Replacement Power Alternatives

The following resource area will be covered as part of the in-person audit:

- Surface water hydrology including surface water withdrawals (e.g., circulating water and service water systems), effluent discharges, and water quality monitoring (can also be combined with aquatic resources)

- Historic and Cultural Resources - Discussion with Secretary of Interior qualified archaeologist that developed the Historic and Cultural Resources sections of Environmental Report
- Groundwater hydrology, with a specific focus on the plant's groundwater protection program and affected groundwater resources, location(s) of onsite landfills, pipes, and other potential sources of groundwater impacts
- Radiological environmental monitoring program (REMP), liquid (radiological and non-radiological) and gaseous effluent release programs, and waste management (radiological and non-radiological) programs
  - Discussion with plant personnel knowledgeable of radiological protection and radwaste systems (note: From past audit experience, most, if not all, of this information is discussed on the requested tours if the knowledgeable plant personnel participate in those tours. If that will be the case, NRC won't necessarily need separate breakout meetings for the discussions listed below.)
  - Radiation protection program: Overview of the program with emphasis on the as low as reasonably allowable (ALARA) program to control worker radiation exposure (annual dose goals and status). Are there any proposed changes or upgrades to the program being considered during the license renewal term?
  - Radioactive solid waste: review how the plant plans to handle low-level radioactive waste (Class A, B, and C, mixed waste, and spent nuclear fuel) during the license renewal term (onsite storage, potential expansion of storage facilities, and disposal options). Are there any proposed changes or upgrades to the program being considered during the license renewal term?
- Radioactive gaseous and liquids effluents review how the plant processes radioactive effluents to maintain radiation doses to the public to levels that are ALARA. Are there any proposed changes or upgrades to the program being considered during the license renewal term?
  - Human Health - Transmission line clearance, electric shock safety programs, and any updates on microbiological hazards since submission of the subsequent license renewal environmental report (can be combined with ecology meeting).
  - The status of projects and actions contributing to cumulative impacts.
  - Cumulative impacts – The status of projects and actions contributing to cumulative impacts.
  - General – review updates to MNGP ER Table 9.1-1 and discuss if there have been any documented unplanned or inadvertent releases or spills of radioactive materials or nonradioactive contaminants.

## **Information Needs and Document Requests**

Information needs and document requests are identified below by resource area.

### **General** (Jessica Umana, NRC/All)

The following requests are generic to more than one environmental review area. Issues from table 2.1-1 applicable to these questions are provided below along with the responsible NRC subject matter expert, as appropriate.

**GEN-1** Please provide any relevant updates to table 9.1-1. If any authorizations have expired since Northern States Power Company's Application for Subsequent Renewed Operating License, dated January 9, 2023 ((Agencywide Documents Access and Management System (ADAMS) ML23009A353), please provide the status of those permits and/or renewals.

**GEN-2** Have there been any documented unplanned releases of radioactive materials (unplanned/ inadvertent radioactive liquid or gaseous releases) since Xcel Energy's Environmental Report (ER) dated January 9, 2023 (ADAMS ML23009A356)? If so, please provide a written description of the releases and be prepared to discuss these releases in relation to the following environmental issues, which were previously dispositioned as generic (Category 1), as applicable.

- Aquatic Resources – Exposure of aquatic organisms to radionuclides (Arlene)
- Groundwater – Radionuclides released to groundwater (including unplanned or inadvertent releases to soil and subsurface) (Desotell, Meyer; defer discussion to the GW-specific requests below)
- Human Health – Radiation exposures to the public (Alferink/ Parks)
- Human Health – Radiation exposures to plant workers (Alferink/ Parks)
- Surface Water Resources – Discharge of metals in cooling system effluent (Desotell)
- Surface Water Resources – Discharge of biocides, sanitary wastes, and minor chemical spills (Desotell)
- Terrestrial Resources – Exposure of terrestrial organisms to radionuclides (Hsu)
- Uranium Fuel Cycle – Transportation (Alferink/ Parks)
- Waste Management – Low-level waste storage and disposal (Parks/ Alferink)
- Waste Management – Mixed-waste storage and disposal (Parks/ Alferink)
- Waste Management – Offsite radiological impacts of spent fuel and high-level waste disposal (Parks/ Alferink)

**GEN-3** Have there been any reportable inadvertent releases or spills of **nonradioactive contaminants** since the ER was published January 9, 2023 (ADAMS ML23009A356)? If so, please provide a written description of the releases or spills and be prepared to discuss these releases or spills in relation to the following environmental issues.

- Waste Management – Mixed-waste storage and disposal (Parks)
- Waste Management – Nonradioactive waste storage and disposal (Parks)

## Topic-specific

The following requests are specific to a single-environmental review area. If a topic is not provided below, the discussion held in response to the generic requests above are expected to fully cover that topic.

### Replacement Power Alternatives (Jeff Rikhoff)

#### *Audit Needs*

**ALT-1** On February 7, 2023, new legislation was signed into law requiring that 100 percent of electricity generated or procured for use in Minnesota must be from carbon-free resources by 2040. Please clarify how this new law would affect Xcel Energy's determination of reasonable replacement power alternatives described and evaluated in Sections 2, 7, and 8 of the ER.

**ALT-2** Similar to other the technologies described in ER Section 7.2.2, please address the bases for why natural gas was not considered a reasonable discrete replacement energy alternative.

**ALT-3** ER Section 7.2.3.1 indicates that the Natural Gas and Renewables Alternative would employ 750 MW of natural gas generation supplied by new and existing combustion turbine (CT) units.

- a) Please identify the assumed capacity factor, estimated air emissions (annual tons sulfur oxides, nitrogen oxides, carbon monoxide, particulate matter, and carbon dioxide equivalents) and estimated cooling water requirements (withdrawal and consumptive use) associated with these CT units. Include any assumptions used in calculating these values.
- b) Please clarify what amount of Monticello's 640 MW of generation each component of this alternative (i.e., new gas generation, wind, solar, existing gas generation, and purchased power) is projected to replace or offset.

**ALT-4** ER Section 7.2.3.2 indicates that the Renewables and Storage Alternative would employ 300 MW of lithium battery storage supporting ten 64 MW offsite solar facilities.

- a) Please indicate how these numerical factors are calculated to support replacement of Monticello's 640 MW net generation.
- b) Please clarify what amount of Monticello's 640 MW of generation each component of this alternative (i.e., wind, solar, battery storage, existing gas generation, and purchased power) is projected to replace or offset.

**ALT-5** ER Section 7.2.3.3 indicates that the SMR alternative would be constructed outside of Minnesota but within Xcel Energy's service area. Please confirm whether this would be confined to Xcel Energy's Midwest service areas (i.e., Michigan, North Dakota, South Dakota, and Wisconsin).

## **Meteorology and Climatology** (Nancy Martinez, NRC)

### *Audit Needs*

**MET-1** Table 3.3-10 of the ER provides annual air emissions for 2016-2020. Provide annual air emissions for 2021 and 2022.

**MET-2** Section 3.3.3.2 of the ER states that there have been no notices of violation or non-compliances associated with MNGP emissions from 2016-2020. Have any notices of violation or non-compliances associated with MNGP emissions since 2020?

**MET-3** Tables 3.3-2, 3.3-4, and 3.3-6 of the ER presents onsite meteorological data for a 30-year period of record. Clarify if the data in these tables is based on 22 years of available measurements from the onsite meteorological system due to data system issues resulting in missing data.

**MET-4** Have field tests concerning ozone and nitrogen oxides emissions generated by Monticello's in-scope transmission lines been conducted? If so please, provide a copy of these tests.

**MET-5** Provide: 1.) a copy of Monticello's air permit renewal application submitted to the Minnesota Pollution Control Agency (MPCA) and 2.) a brief discussion of the request changes in the air permit.

**MET-6** Table 3.3-11 of the ER presents MNGP annual greenhouse gas emissions. Does Monticello use sulfur hexafluoride onsite? If so, please provide an estimate of GHG emission for 2017-2021 from sulfur hexafluoride.

**MET-7** Section 3.3.3.2 of the ER states although particulate matter is generated by the cooling towers, there is no requirement to include particulate matter emissions from the cooling towers in Monticello's air permit. Table 3.3-10 of the ER reported annual air emissions and includes particulate matter. Confirm that the particulate matter emissions presented in table 3.3-10 accounts for only the air emission sources identified in Table 3.3-9 of the ER.

### *Document Needs*

**MET-8** Provide a copy of Monticello's conditional air operating permit (Permit No. 1700019-004).

**MET-9** Provide a copy of the emission reports for the last 5 years submitted to the MPCA associated with Monticello's air permit.

## **Noise** (Nancy Martinez, NRC)

**NOI-1** Section 3.4 of the ER states that the nearest residence is located approximately 0.52 miles in the southwest direction. Clarify from where (e.g., reactor building) was this distance measured from.

**NOI-2** Section 3.4 of the ER states that no noise complaints have been received related to MNGP plant activities. Have any noise complaints been received since 2021?

**NOI-3** Has Xcel Energy conducted any offsite noise studies in the vicinity of Monticello? If so, please provide a copy.

**Water Resource – Surface Water** (Lloyd Desotell, NRC, Rajiv Prasad, PNNL, Kazi Tamaddun, PNNL)

*Audit Needs*

- SW-1** A March 17, 2022, letter (see Attachment E of January 2023 ER) from Xcel Energy to MPCA requested confirmation that the 1973 Clean Water Act (CWA) Section 401 certification issued by MPCA remains valid for the proposed subsequent license period. Did Xcel Energy receive a response to that letter?
- SW-2** Attachment D of January 2023 ER states that the cooling towers were replaced in 2021 and 2022 and that these new towers are equipped with drift eliminators. Please provide available information regarding the drift rates for the new towers.
- SW-3** Tables 3.6-4a and 3.6-4b in the January 2023 ER presents monthly and yearly surface water withdrawal data for 2016 -2020. Please update these tables with recent data.
- SW-4** Has Xcel Energy conducted any surveys, investigations or observations related to scour around the cooling water discharge area? If so, please provide copies of the associated reports, notes, etc.
- SW-5** As applicable, provide a summary of any notifications of violation on the National Pollutant Discharge Elimination System (NPDES) permit or other permits related effluent discharges, industrial stormwater and sanitary discharge, and soil or groundwater contamination involving spills, leaks, and other inadvertent releases (e.g., petroleum products, chemicals, or radionuclides) received since the January 2023 ER submittal.
- SW-6** Section 2.2.3.1 of the January 2023 ER states that NPDES permit MN0000868 has been administratively extended from its 9/30/2012 expiration date. Please provide any updates regarding this permit renewal.
- SW-7** Please have an SME available to discuss figure 2.2-1.
- SW-8** Section 3.6.3.1 of the January 2023 ER states that special operating conditions are applicable if Mississippi River flow at MNGP is less than 860 cfs, and further restrictions apply if river flow is less than 240 cfs. What U.S. Geologic Survey gage is used for this determination and what, if any, scaling of the gage data is conducted to determine flow at the MNGP site.
- SW-9** The ER and NPDES permits allows exceedance of temperature limits for energy emergencies like heat waves – has this ever happened or is it likely to happen in the future?

*Document Needs* – will consider RESOLVED but if need one from below will include as part of one big request for additional information (RAI) requesting documents.

**SW-10** U.S. Army Corps of Engineers Regional general permit RGP-003-MN

**SW-11** Minnesota Department of Natural Resources (MDNR) State dredging permit 1967-0743

**SW-12** MDNR Surface water appropriations permit water appropriations permit No. 66-1172

**SW-13** Stormwater Pollution Prevention Plan

**SW-14** Spill Prevention, Control, and Countermeasure Plan

**SW-15** September 2009 thermal studies conducted for extended power uprate (EPU). (see Section 3.7.7.1.3 of the January 2023 ER)

**SW-16** Annual Dredged Material Report (most recent that includes actual dredging) (see attachment A of the January 2023 ER)

**SW-17** Stormwater management annual report (see Section 3.6.1.2.2 of the January 2023 ER)

**SW-18** A recent Discharge Monitoring Report (see January 2023 ER Attachment A)

**SW-19** Sampling report submitted to MPCA regarding the July 16, 2019, reportable spill (see Section 3.6.4.2.2 of the January 2023 ER)

**SW-20** Xcel (Xcel Energy). 2008. Petition to the Minnesota Public Utilities Commission for a Certificate of Need for the Monticello Nuclear Generating Plant for Extended Power Uprate. (The link in the references doesn't work.)

**Water Resource – Groundwater** (Lloyd Desotell, NRC, Philip Meyer, PNNL, Becka Bence, PNNL)

*Audit Needs*

**GW-1** ER Section 2.2.3 states that groundwater withdrawal is covered by permit No. 67-0083, but ER Section 2.2.3.4 states that groundwater withdrawal limits are set by permit No. 66-1172. Confirm which permit covers groundwater withdrawals.

**GW-2** Confirm the aquifer from which the City of Monticello public supply wells are drawing water.

**GW-3** Clarify whether average usage for the 5 active water supply wells (other than Wells 11 and 12) is less than 1 Mgal/yr for each well or less than 1 Mgal/yr total for the 5 wells.

**GW-4** ER Section 3.6.4.2 describes tritium concentrations in MW-9A and states that all potential contributors to the elevated tritium levels were corrected in 2011. Provide data (in the form of a chart) for tritium in MW-9A. Describe the explanation for the observed H-3 groundwater activity of 8220 pCi/L occurring in MW-9A during 2021 for a leak that occurred prior to 2011 and was corrected in 2011.

**GW-5** Make available at the audit the appropriate staff to discuss the detection of and response to tritium in groundwater reported in November 2022, including:

- source and volume of the leak; how these were estimated,
- monitoring data that indicated a leak had occurred,
- locations and depths of new monitoring wells and recovery wells,
- pumping rates of recovery wells,
- any permit changes needed as a result of recovery well pumping,



- monitoring data showing progress of corrective action, including groundwater and river monitoring,
- location of holding tank that spilled on May 21, 2023; estimated tritium activity of holding tank during the spill, and
- explain the nature of the 2nd leak reported on March 23, 2023.

**GW-6** Describe the holdup pond discussed in ER Section 4.5.13.2.

- Is it lined?
- Is there any groundwater monitoring for the pond?
- Identify the location of the pond on a map.
- What is the pond's volume?

*Document Needs*

**GW-7** Provide copies of the water appropriations permit Nos. 66-1172 and 67-0083 for review.

**GW-8** Provide a copy of the Groundwater Protection Plan for review.

**GW-9** Tables 3.6-6a and 3.6-6b in the January 2023 ER presents monthly and yearly groundwater withdrawal data for 2016 -2020. Please update these tables with recent data.

**Terrestrial Resource** (Caroline Hsu, NRC, Tracey Fuentes, PNNL)

*Document Needs*

**TER-1** Section 2.2.5.3 of the ER states that Xcel Energy installed swan diverters on transmission lines in areas where incidents of bird collisions occurred. Please provide all trumpeter swan mortality records covering periods before and after installations of swan diverters on MNGP, as well as photos of diverters, and descriptions of swan diverter installation and maintenance.

**TER-2** Sections 2.5.6.3 and 3.7.2.6 of the ER states that Xcel Energy's Aviation Protection Plan describes policies and measures to avoid and minimize risk of avian collision with transmission lines. Section 2.5.6.3 states that Northern States Power Company – Minnesota (NSPM) maintains migratory bird special purpose utility permits from U.S. Fish and Wildlife Service (FWS). Please provide Xcel Energy's Avian Protection Plan, NSPM activities on MNGP site under the special use utility permit, and reports of other migratory bird death or injuries (2014-2023).

**TER-3** Sections 3.7.6 and 9.6 of the ER state that MNGP relies on administrative controls to ensure habitats and wildlife are protected as a result of plant operations change or ground disturbance (e.g., BMPs, herbicide application management). Please provide administrative control documents ensuring protection.

**Aquatic Resources** (Briana Arlene, NRC, Ann Miracle, PNNL, Patrick Mirin, PNNL)

*Audit Needs*

- AQ-1** Section 4.6.2.2 describes three separate occasions between 2017 and 2022 where fish kills were documented. Please provide more information regarding reporting of these fish kills to relevant state agencies. In addition, please provide the species composition of the fish kills during the week of May 14, 2022, and in January 2022, and if any other fish kills have occurred since the ER was published.
- AQ-2** Section 4.6.1.2 of the ER mentions a fish return system but does not provide any details. Please describe the structure and operation of the fish return system.
- AQ-3** Please provide photographs of the following site features and be ready to provide a virtual “tour” of these features during the ecology breakout meeting.
- Cooling system approach channel, bar racks, and traveling screens
  - Fish return system
  - Discharge structure

*Document Needs*

- AQ-4** Section 4.6.17.2 of the ER states, “Data collected between 1995–2021 do not indicate significant changes in the water quality of the cooling water discharge or any major long-term decreases in overall fish abundance and species diversity in the Mississippi River in the vicinity of the MNGP site.” To what studies or monitoring does this sentence refer? Please provide copies of these studies for NRC staff review.
- AQ-5** Section 3.7.7.1 of the ER describes a 2005-2006 Entrainment and Impingement Characterization Study and a 2017-2018 Entrainment Study. Please provide copies of these reports for NRC staff review.
- AQ-6** Section 3.7.7.1.3 references a thermal effluent discharge analysis. Please provide the 2009 thermal effluent discharge report.
- AQ-7** Provide copies of any additional reports, NPDES permit application supplements, or other submittals not explicitly requested above that Xcel Energy has made to the MPCA pursuant to requirements of Clean Water Act Section 316(b) and its implementing regulations.
- AQ-8** The NPDES permit, Chapter 5, "Steam Electric, Section 4, "Intake Screens, Subsection 4.6, requires that Xcel Energy submit to the MPCA (1) source water physical description, (2) cooling water intake structure data, and (3) cooling water system data. Please provide a copy of this submittal for the NRC staff review.

**Federally Protected Ecological Resources** (Briana Arlene, NRC, Ann Miracle, PNNL, Tracy Fuentes, PNNL)

- FPE-1** Section 3.7.8.1.1 of the ER states that suitable roosting and maternity habitat for the northern long-eared bat is present on the MNGP site. Please provide information showing the location of this habitat, describe whether or not this habitat would be affected by subsequent license renewal, and describe best management practices (BMPs) and

procedures that Xcel Energy has in place to ensure that actions, such as removing hazard trees, would not adversely affect these species, if present.

**FPE-2** The FWS published a proposed rule to list the tricolored bat (*Perimyotis subflavus*) as endangered under the Endangered Species Act on September 14, 2022 (87 FR 56381). This species range includes both Wright and Sherburne Counties. Please provide an analysis of the potential impacts of the proposed SLR on tricolored bat.

**FPE-3** The FWS lists the whooping crane (*Grus americana*) as an experimental, non-essential population in Minnesota. Please provide an analysis of the potential impacts of the proposed SLR on whooping crane.

**FPE-4** Section 3.7.8.1.2 of the ER states that suitable habitat for the monarch butterfly is likely present in undeveloped portions of the Monticello site. Monarch butterflies rely on milkweeds (*Asclepias* spp.) for ovipositing and for larval food. Adults rely on a variety of plants for nectar sources. Does Xcel Energy have any records of milkweed occurring on the Monticello site? If so, when was the last time milkweed was documented on site. Does Xcel Energy have a list of vascular plants occurring on the site? If so, when was the plant list collected?

**FPE-5** Please provide photographs of the following site features and be ready to provide a virtual “tour” of these features during the ecology breakout meeting.

- Suitable bat roosting and maternity habitat, if identified in response to FPE-1
- Areas of the site where milkweed may occur, if identified in response to FPE-4

**Historic and Cultural Resources** (Nancy Martinez, NRC, Lindsey Renaud, PNNL, Cyler Conrad, PNNL)

#### *Audit Needs*

**HCR-1** Section 3.8 of the ER states that Xcel Energy contacted the Minnesota Historical Society for informal consultation and correspondence is included in attachment C of the ER. Attachment C of the ER, however, does not have documentation related to the Minnesota Historical Society. Clarify if Xcel Energy contacted the Minnesota Historical Society and if so, provide a copy of this documentation.

**HCR-2** While preparing its application for subsequent license renewal, Xcel Energy contacted the Minnesota State Historic Preservation Office (MN SHPO) by letter dated March 17, 2022, seeking input on the potential effects from continued operation of Monticello on historic and cultural resources. By letter dated April 29, 2022, the MN SHPO recommended that 1) Xcel Energy complete an archaeological survey for areas within the Monticello site; and 2) that the Monticello facility itself be subject to an intensive survey and evaluation to determine its eligibility for listing in the National Register of Historic Places (NRHP). By letter dated September 23, 2022, NSPM committed to conduct an architectural survey and evaluation to determine the eligibility of Monticello for listing in the NRHP. The MN SHPO staff confirmed to the NRC via a teleconference that Xcel Energy has satisfactorily completed the latter recommendation regarding the Monticello facility’s NRHP eligibility.

- A.) Provide a copy of the architectural survey.
- B.) Provide copies of letters and other communication documents between Xcel Energy and the MN SHPO since the September 23, 2022, letter.
- C.) Discuss what actions have been taken to address the SHPO's recommendation that Xcel Energy complete an archaeological survey within the Monticello site.

**HCR-3** By letter dated July 3, 2023, to the NRC (ADAMSML23199A280), the MN SHPO stated that it is their understanding that Xcel is committed to conducting cultural resources evaluations for any ground disturbing activities associated with routine operations of Monticello, including archaeological surveys in areas not previously disturbed. Provide a map indicating the areas within the site where Xcel would perform these archaeological surveys and/or documentation in procedures that identify that an archaeological survey would be conducted prior to disturbing previously undisturbed areas.

**HCR-4** Section 3.8.1 of the ER mentions that the land use history discussion for MNPG was developed as part of a Phase 2A literature review and archaeological sensitivity assessment of the MNPG site. Provide a copy of the Phase 2a literature review and archaeological sensitivity assessment of the MNPG site.

**HCR-5** Section 3.8.5 of the ER identifies 12 previous surveys conducted in the vicinity of MNPG. However, the direction or location of previous surveys in relation to MNPG was not included in Section 3.8.5 of the ER. Provide a map that identifies the location of the previous surveys within the 6-mile radius of the site, the citations of the surveys, and copies of the reports for the surveys mentioned in Section 3.8.5 of the ER.

**HCR-6** Section 3.8.6 of the ER identifies that MNPG has three procedures to identify, protect, and minimize the potential impact to cultural resources within the MNPG facility: excavation permit, excavation and trenching controls, and archaeological, cultural, and historic resources procedures. Provide a copy of the 3 procedures.

**HCR-7** The ER provided copies of letters dated May 11, 2022, Xcel Energy sent to Federally recognized tribes seeking input on the potential effects from continued operation of Monticello on historic and cultural resources. Provide copies of letters and other communication documents Xcel Energy has received from Federally recognized tribes since May 11, 2022. Additionally, if any State recognized/non-Federally recognized Tribes were contacted, provide copies of these letters as well.

**HCR-8** By letter dated July 3, 2023 to the NRC (ADAMS No. ML23199A280), the MN SHPO requested documentation that describes or shows the horizontal and vertical extent of disturbed areas within the Monticello site boundary. Approximately what percentage of the 2,000-acre Monticello site has been disturbed? Provide a map detailing the level of previous and existing ground disturbance at the plant site, include the horizontal and vertical extent of these disturbed areas. As part of the response, include documentation on how this level of disturbance was determined.

**HCR-9** By letter dated April 29, 2022, to Xcel, the MN SHPO requested that Xcel Energy provide additional information regarding the scope and nature of current operations including maintenance of existing structures. By letter dated July 3, 2023, to the NRC (ADAMS ML23199A280), the MN SHPO requested that the NRC further clarify and define the scope and nature of routine plant operations and maintenance activities. Identify and discuss what activities constitute maintenance and if any result in ground disturbance.

For the activities that result in ground disturbance, identify areas that are likely to be disturbed and if these areas would be limited to previously disturbed areas or could also include undisturbed areas.

## **Human Health** (Leah Parks, Beth Alferink)

### *Audit Needs*

**HH-1** Please provide any updates concerning waterborne diseases in the vicinity of the plant since the submission of the subsequent license renewal environmental report.

**HH-2** Section 3.10.1 discusses the waterborne outbreaks as summarized in the Minnesota Department of Health Waterborne Illness Surveillance Statistics. It notes that one of the outbreaks due to *Legionella* was associated with exposure to a cooling tower. Was this exposure at the MNGP site or at another facility? If at MNGP, when did the exposure occur and what were the corrective actions put in place following the exposure?

The Minnesota Department of Health statistics only provide data through 2018, but the cooling towers were replaced on site during 2021 and 2022. Were there any occurrences of *Legionella* exposure post-2018 onsite or during the replacement of cooling towers?

**HH-3** Please provide an overview of the radiation control program with emphasis on the ALARA program to control worker radiation exposure (annual dose goals and status). Are there any proposed changes or upgrades to the program being considered during the subsequent license renewal term?

**HH-4** Please have Monticello subject matter experts available to discuss the electrical safety program along with related Occupational Safety and Health Administration regulations as implemented at the site under the industrial safety program. Plan to discuss the safety specific policies for work conducted at electrical transmission locations as noted in 2.2.5.1, 2.2.5.5, and 3.10.2 and a walk-through of the workplace hazards identification process and jobsite analysis noting how change evaluations would identify electric shock hazards or potential human error to eliminate risk during work on the in-scope transmission lines.

### *Document Needs*

**HH-5** Info need: Section 3.10.2 discusses a 2021 study performed for MNGP to determine compliance with the current National Electrical Safety Code (NESC) guidance. Please provide a copy of the study and analysis findings to include the conclusion of no clearance issues and that NESC clearance requirements are met as stated in the ER.

## **Waste Management (rad and non-rad)** (Leah Parks, Beth Alferink)

### *Audit Needs*

**WM-1** Section 3.6.4.2.2 of the ER discusses a carbon tetrachloride release and subsequent actions taken including the site becoming a voluntary responsible party under Superfund Program. The ER states Well 10 was sealed at the end of 2020 and an affidavit on the property was filed stating that no water supply wells will be installed in the area of Well 10 in the future. Are there further actions that need to be taken and is the site still under Superfund Program? Will there be other institutional controls on the site?

- WM-2** As part of the effluent control systems, plan to discuss the provisions made to sample and analyze fluids before discharge as discussed in 2.2.6.1. In addition, plan to discuss how the plant processes radioactive effluents to maintain radiation doses to the public to levels that are ALARA. Are there any proposed changes or upgrades to the program being considered during the license renewal term?
- WM-3** Section 2.2.6.5 notes that MNGP is a very small quantity (VSQG) generator that generates mixed waste and describes an accumulation area for mixed waste storage (the high-level storage area in the radwaste building). Are any other wastes besides mixed waste stored in this location? What are the plans and procedures associated with long-term storage of mixed waste?
- WM-4** Section 2.2.6.6 discusses low-level radioactive waste and states that there is currently no waste greater than Class C stored. What are the plans to store or ship low-level waste (e.g., are there minimum quantity shipment plans or procedures for decision making)? In addition, plan to discuss how the plant plans to handle low-level radioactive waste (Class A, B, and C, mixed waste, and spent nuclear fuel) during the license renewal term (onsite storage, potential expansion of storage facilities, and disposal options). Are there any proposed changes or upgrades to the program being considered during the license renewal term? What are the plans to store or ship waste to Energy Solutions in Clive, Oakridge, TN, or Erwin, TN (i.e., are there minimum quantity shipment plans and procedures or other drivers for decision making?)
- WM-5** MNGP is subject to the reporting provisions of 40 CFR part 110 as it relates to the discharge of oil in such quantities as may be harmful pursuant to Section 311(b)(4) of the Federal Water Pollution Control Act. Any discharges of oil in such quantities that may be harmful to the public health or welfare, or the environment must be reported to Environmental Protection Agency's National Response Center. In section 9.5.3.6 of the ER, the applicant discusses reportable spills and states that for the 5-year period of 2016-2021, there were no reportable spills/no releases. If there have been any reportable spills/releases which would trigger this notification requirement since the ER was written, please provide a description of any spills/releases.
- WM-6** MNGP is subject to the reporting provision under Minnesota Statute 115.061. This reporting provision requires that discharges which may cause pollution of the state waters must be immediately reported to the MPCA and the Minnesota duty officer. The ER describes one release at MNGP that triggered the notification requirement from 2016-2021. On July 16, 2019, approximately 300 gallons of water leaked into a building. Most of the water was contained within the building by a berm but approximately one-half gallon of water reached a floor drain that returns to the Mississippi River through NPDES permitted Outfall SD001. Though notified, the MPCA did not provide any comment or requirements concerning the incident, and no recordable spills or violations were reported in the NPDES permit compliance summary issued by the MPCA for the reporting period of October 1, 2018, to September 30, 2019. If there have been any reportable spills which would trigger this notification requirement since the ER was written, please provide a description of any spills/releases.

### *Document Needs*

- WM-7** Licensees are required to consider pollution prevention measures as dictated by the Pollution Prevention Act (Public Law 101 5084) and the Resource Conservation and Recovery Act of 1976, as amended (RCRA) (Public Law 94 580). RCRA governs the disposal of solid waste. In addition, in accordance with the RCRA Section 3002(b) and 40 CFR 262.27, a small or large quantity generator must certify that a waste minimization program is in place to reduce the volume and toxicity of the waste generated to the degree determined to be economically practical. Section 9.5.13 of the ER states that MNGP is meeting this requirement because procedural measures are in place to minimize hazardous waste generated to the maximum extent practical. Provide procedures related to the radioactive and nonradioactive Waste Management Program, Waste Minimization Program, and Stormwater Pollution Prevention Plan.
- WM-8** Drawings and photos that are highlighted/marked showing the flow paths for releases for both radiological and non-radiological waste paths. Please have Monticello subject matter experts available to discuss the effluent flow paths focused on the recent tritium releases. (Discussion can be in coordination with the Water Resources portion of the audit).
- WM-9** Provide the log of approved waste vendors used to manage and dispose of hazardous and non-hazardous waste as discussed in Section 2.2.6.3 of the ER.

### **Spent Nuclear Fuel** (Beth Alferink, NRC, Leah Parks NRC,)

#### *Audit Needs*

- SNF-1** Section 4.11.2.2 states that there are 30 current dry containers on the ISFSI pad, and to store all the fuel that the site will have by 2030 MNGP would need 40 total dry containers (so an additional 10 by 2030). The existing ISFSI security perimeter can accommodate another 36 dry containers potentially, but on a second support pad (to be built) without having to change the security perimeter. The ISFSI facility requires a state of Minnesota Certificate of Need (CN). The placement of the 30 canisters was allowed by a CN issued in 2006 that expires in 2030. The ER states that Xcel applied for an additional CN to allow them to place ~13 more canisters from 2030-2040 on a new storage pad within the security perimeter footprint. Beyond 2040, Xcel Energy would need to seek additional CNs. If there are currently plans to construct a second pad within the ISFSI perimeter, what is the estimated timeframe for that work to be completed? Also, do you anticipate being able to store the entirety of waste that would be produced for the renewal period until September 8, 2050, on the second pad within the ISFSI security perimeter?

### **Cumulative Impacts** (Jeff Rikhoff, NRC)

#### *Audit Needs*

- CI-1** Please provide the name, description, location, and status of any past, present, or reasonably foreseeable future both on and offsite actions identified since the ER was prepared. Similarly, please provide any updates of actions discussed in the ER as conceptual or for which the need had yet to be determined.

## *Document Needs*

**CI-2** Any source documentation for information provided in response to CI-1.

### **Severe Accident Mitigation Alternatives (Jerry Dozier, NRC, Elijah Dickson, NRC)**

**SAMA-1** For MNGP, the newer internal event information accounts for a decrease in core damage frequencies (CDF) by a factor of 3.5. When uncertainties are considered, the regional population dose reduction based on MNGP specific newer information is on the order of a factor of 19 when compared to the upper bound estimates utilized in the 1996 Generic Environmental Impact Statement. When these factors are applied, the net change in risk for MNGP is a reduction by a factor of 17.8 ( $3.5 + 19 - 4.7 = 17.8$ ). Further, the significant decrease in environmental impacts is supported by the state-of-art-reactor consequence analysis (SOARCA) that found latent cancer fatality risk is reduced by a factor of 3 to 100. (NRC 2013f). Therefore, Xcel Energy concludes there is no new and significant information identified for impacts of severe accidents. Please be prepared to discuss.

**SAMA-2** In the ER, Monticello indicated that it is following the guidance in Nuclear Energy Institute (NEI) 17-04, "Model SLR New and Significant Assessment Approach for SAMA," Revision 1, for providing SAMA new and significant information. NEI 17-04 specifies, "Further documentation of the new and significant information review is listed in Section 3.5.2." Furthermore NEI 17-04 indicates, "Such documentation should be available to the NRC [U.S. Nuclear Regulatory Commission] either in the SLR ER (at the SLR applicant's discretion), or in supplemental information for review via E document reading room, audit, and RAs [requests for additional information]." Please provide the SAMA basis document in the online reference portal.

**SAMA-3** NEI 17-04 Section 3.1 "Data Collection" specifies:

"Use the latest risk models that are available for internal events (including internal flooding) and for each of the external events contributors identified for evaluation in NEI 05-01 ["Severe Accident Mitigation Alternatives (SAMA) Analysis Guidance Document," Revision A, November 2005]."

NEI 05-01 specifies:

"The IPEEE [Individual Plant Examination of External Events] identified the highest risk externally initiated accident sequences and potential means of reducing the risk posed by those sequences. Typically, the following external events were evaluated:

1. Internal fires
2. Seismic events
3. Other external events such as high wind events, external flooding, transportation and nearby facility accidents"

Explain how "Other external events such as high wind events, external flooding, transportation and nearby facility accidents" were considered in the Monticello SAMA New and Significant Evaluation? Discuss any recommendations to reduce risk due to each of these external events.



- SAMA-4** Please be prepared to discuss *the Analysis of SAMAs for New and Significant Information*.
- SAMA-5** Please be prepared to discuss any Monticello or other facility external event SAMAs evaluated.
- SAMA-6** Tables E4.15-1 and E4.15-2 of the ER provides the groupings and reduction in maximum benefit of SAMAs. Of particular interest is Cases 5, 8, 11 and 18. Please be prepared to discuss these results.
- SAMA-7** Please be prepared to discuss ER Section 4.15.1, *Design-Basis Accidents* relative to the process used to determine there was no new and significant issue.

Monticello  
Hybrid Audit – In Person and Virtual

**Participants: Audit Team (NRC and Contractor)**

**NRC Participants:**

- Jessica Umana (In-Person)
- Jeff Rikhoff (Virtual)
- Caroline Hsu (Virtual)
- Nancy Martinez (In-Person)
- Lloyd Desotell (In-Person)
- Briana Arlene (Virtual)
- Leah Parks (In-Person)

**PNNL Participants:**

<b>Resource Area</b>	<b>NRC Staff</b>	<b>PNNL Staff</b>	<b>PNNL Staff Attending In-Person / Virtual</b>
Management	Jessica Umana	Caitlin Condon	In-Person
Ground Water and Surface Water Resources	Lloyd Desotell	Phil Meyer Becka Bence	In-Person Virtual
Terrestrial Resources	Caroline Hsu	Ann Miracle Tracy Fuentes	Virtual Virtual
Aquatic Resources	Briana Arlene	Ann Miracle Patrick Mirick	Virtual Virtual
Federally Protected Ecological Resources	Briana Arlene	Ann Miracle Patrick Mirick Tracy Fuentes	Virtual Virtual Virtual
Historic and Cultural Resources	Nancy Martinez	Lindsey Renaud	In-Person
Cumulative Impacts	Jeff Rikhoff	Dave Goodman Ann Miracle	Virtual Virtual

- **Audit Schedule** (All times in Central Time)
- **August 1-3, 2023**

**Tuesday, August 1, 2023**

<b>Time (Central Standard Time (CST))</b>	<b>Activity</b>	<b>Owner/Lead</b>
<b>9:00-9:30</b>	NRC Welcome/Kickoff – Site Admin Building (SAB) 5	Paul, Xcel
<b>9:30-10:30</b>	Radiologically Controlled Area Walkdown Brief and Guest Badging - SAB 5	Steve, Xcel
<b>10:30-12:30</b>	Field Walkdowns: General Site Tour Exterior grounds Transmission lines Possible alternative power generation locations ISFSI Plant views from publicly accessible areas	Paul (Steve, Tou, Matt, Max Jason), Xcel  All NRC
<b>12:30-1:30</b>	Lunch	
<b>1:30-2:30</b>	Field Walkdowns: Intake and Discharge: Cooling water intake structure, intake bays, and intake canal Intake structure trash racks and traveling screens, screen wash system (as observable) Discharge structure Accessible permitted outfall/storm drain locations Chemical treatment ponds	Paul (Jason, Tou), Xcel  All NRC  PNNL Ecology - Virtual
<b>2:30-4:30</b>	Field Walkdowns: Radwaste tour Liquid radwaste system - discharge locations Gaseous radwaste system - discharge locations	Paul (Jason, Tou), Xcel  NRC Staff  Philip Meyer, PNNL
<b>4:30-5:00</b>	NRC End of Day Brief	Max (Steve, Paul), Xcel  Jessica Umana, NRC

**Wednesday, August 2, 2023**

<b>Time (CST)</b>	<b>Activity</b>	<b>Owner/Lead</b>
<b>9:00-9:30</b>	NRC Start of Day	Jessica Umana, NRC
<b>9:30-12:00</b>	Audit Breakout Session  9:30 – 10:00 (Jessica Umana/All) General  10:00 – 12:00 Field Walkdowns: General Site Tour Historic and cultural sites  Field Walkdowns: Groundwater Tour Monitoring wells, dewatering and extraction wells Site landfill Groundwater extraction storage tanks REMP river sampling locations Land Application Areas Dredge spoils areas	Paul (Jason, Tou), Xcel  All NRC Staff
<b>12:00-1:00</b>	Lunch	
<b>1:00-4:30</b>	Audit Breakout Session (s) – Hybrid  1:00 – 2:30 (Nancy Martinez) Historic and Cultural Resources  2:30 – 4:00 (Briana Arlene) Aquatic Resources Federally Protected Ecological Resources  4:00 – 5:00 (Caroline Hsu) Terrestrial Resources	Steve (Max, Matt), Xcel  All NRC Staff
<b>4:30-5:00</b>	NRC End of Day Brief - Hybrid	Max (Steve, Paul), Xcel  Jessica Umana, NRC

**Thursday, August 3, 2023**

<b>Time (CST)</b>	<b>Activity</b>	<b>Owner/Lead</b>
<b>7:30-8:00</b>	NRC Start of Day	Jessica Umana, NRC
<b>8:00-12:00</b>	Audit Session – Hybrid  8:00 – 10:00 (Lloyd Desotell) Water Resource  10:00 – 12:00 (Leah Parks) Human Health Waste Management Spent Nuclear	Steve (Max, Matt), Xcel  All NRC Staff
<b>12:00</b>	NRC End of Day	
<b>1:00-5:30</b>	Offsite: Cultural Resources SHPO - Offsite	Nancy Martinez, NRC Lindsey Renaud, PNNL
<b>1:00-5:30</b>	Offsite: Ground Water State Meeting - Offsite	Lloyd Desotell, NRC Phil Meyer, PNNL
<b>4:30-5:00</b>	NRC End of Day Brief - Hybrid	Jessica Umana, NRC

**\*Meteorology and Climatology, Noise, Alternatives, Aquatic, and Federally Protected Ecological Resources, and SAMA breakout sessions will be held virtually the week of August 14, 2023, date and time TBD. Audit will be closed when all audit breakout sessions are complete.**