

November 11, 2004

Robert Schroeder, Chair
Minnesota Environmental Quality Board
3rd Floor, Centennial Office Building
658 Cedar Street
St. Paul, MN 55101

MONTICELLO DRY SPENT NUCLEAR FUEL STORAGE PROPOSAL
ENVIRONMENTAL IMPACT STATEMENT SCOPING

Dear Mr. Schroeder:

Northern States Power Company d/b/a Xcel Energy (“Xcel Energy”) will be filing an application with the Public Utilities Commission in the near future for a Certificate of Need seeking permission to establish a dry spend nuclear fuel storage facility at the Monticello power plant. The requirement for a Certificate of Need for the proposal is contained in Minnesota Statutes §116C.83. That same statute also requires an Environmental Impact Statement be prepared by the Environmental Quality Board.

The purpose of this letter is to formally request that the Environmental Quality Board begin the process of establishing the scope of the Environmental Impact Statement as provided in Minnesota Rules Part 4410.2100.

After discussing with your staff and the staffs of several other state agencies, how best to coordinate the process of preparing an EIS with the Certificate of Need process, we believe it would be most effective to begin the EIS scoping process at this time. Agency staffs expressed an interest in moving far enough along in the development of the EIS so that environmental information could be available at the time hearings take place in the Certificate of Need process. To accomplish that goal without delaying the hearing process, the EIS process needs to begin.

To assist the Board in the development of a draft scope for the Environmental Impact Statement, we have drafted an Environmental Assessment Worksheet in

which we describe our proposal and provide our assessment of potential environmental impacts. A copy of our draft EAW is enclosed.

Xcel Energy stands ready to assist the Board in whatever way we can so that a high quality EIS can be prepared.

Please call me at (612) 330-6732 if you need anything further to begin the EIS scoping process or have any questions regarding our proposal.

Sincerely,

JAMES ALDERS
MANAGER REGULATORY PROJECTS

Enclosure

C w/enc: Alan Mitchell EQB staff
John Wachtler EQB staff
Janet Gonzalez PUC staff
Marya White DOC
Kate O'Connell DOC
Patricia Bloomgren DOH

ENVIRONMENTAL ASSESSMENT WORKSHEET

Note to preparers: This form is available at www.mnplan.state.mn.us. *EAW Guidelines* will be available in Spring 1999 at the web site. The Environmental Assessment Worksheet provides information about a project that may have the potential for significant environmental effects. The EAW is prepared by the Responsible Governmental Unit or its agents to determine whether an Environmental Impact Statement should be prepared. The project proposer must supply any reasonably accessible data for — but should not complete — the final worksheet. If a complete answer does not fit in the space allotted, attach additional sheets as necessary. The complete question as well as the answer must be included if the EAW is prepared electronically.

Note to reviewers: Comments must be submitted to the RGU during the 30-day comment period following notice of the EAW in the *EQB Monitor*. Comments should address the accuracy and completeness of information, potential impacts that warrant further investigation and the need for an EIS.

1. **Project title** Monticello Independent Spent Nuclear Fuel Storage Facility

2. Proposer	Xcel Energy	3. RGU
Contact person	James Alders	Contact person
Title	Manager Regulatory Projects	Title
Address	414 Nicollet Mall	Address
City, state, ZIP	Minneapolis Minnesota 55401	City, state, ZIP
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4. **Reason for EAW preparation** (check one)
- EIS scoping Mandatory EAW Citizen petition RGU discretion
- Proposer volunteered

If EAW or EIS is mandatory give EQB rule category subpart number and subpart name

An Environmental Impact Statement is required pursuant to Minnesota Statutes § 116C.83 Subdivision 6(b).

5. **Project location** County Wright City/Township Monticello
- NE¼ SE¼ Section 32 Township 122N Range 25W

Attach each of the following to the EAW:

- County map showing the general location of the project; (See Attachments A)
- U.S. Geological Survey 7.5 minute, 1:24,000 scale map indicating project boundaries (photocopy acceptable); (See Attachment B-1 and B-2)
- Site plan showing all significant project and natural features. (See Attachment C-1 and C-2)

6. **Description**

- a. Provide a project summary of 50 words or less to be published in the *EQB Monitor*.

Xcel Energy proposes to expand the storage of spent nuclear fuel at the

Monticello generating plant by establishing a dry storage facility or Independent Spent Fuel Storage Installation (ISFSI) approximately 200 feet by 460 feet in size to store up to 30 dry storage canisters in concrete vaults.

b. Give a complete description of the proposed project and related new construction. Attach additional sheets as necessary. Emphasize construction, operation methods and features that will cause physical manipulation of the environment or will produce wastes. Include modifications to existing equipment or industrial processes and significant demolition, removal or remodeling of existing structures. Indicate the timing and duration of construction activities.

The spent fuel storage facility consists of a lighted area, approximately 460 feet long and 200 feet wide, located adjacent to the Monticello Nuclear Generating Plant reactor and generation building. Two fences surround the facility with a clear zone between. A perimeter road around the two fences provides visual access to the entire site. Within the storage area, spent fuel canisters are stored in prefabricated, modular, concrete vaults placed on a reinforced concrete support pad that is 18 to 24 inches thick. Each storage vault is approximately 10 ft wide by 18 ft high by 20 ft long and is designed to provide radiation shielding and environmental protection for the canister. Concrete approach pads surround the support pad to accommodate delivery and transfer of the spent fuel canister from the plant into the storage modules. A small 18' by 22' concrete building will be located within the storage facility to house electrical equipment. The site and storage vaults are monitored with cameras, other security devices, and temperature sensors. An access road connects the ISFSI to the plant.

The proposed design capacity of the storage facility is 30 storage units. The storage facility is laid out so that it can accommodate another 35 canisters on a second support pad without having to change the security perimeter. The extra space could be used for casks to decommission the plant or for operation beyond 2030 if determined appropriate in the future.

The location of the proposed storage facility on the plant site is shown in Attachments C-1 and C-2. A plan view drawing showing major components of the facility is shown on Attachment D. An artists rendering of the ISFSI is shown on Attachment E.

Xcel Energy proposes to use a dry storage canister system, called the NUHOMS 61BT, for the storage and transport of spent fuel at Monticello. The NUHOMS 61BT Dry Fuel Storage System is designed, licensed, and manufactured by Transnuclear Inc. It consists of a stainless steel canister that is placed into a radiation shielded transfer overpack and lowered into the MNGP spent fuel pool. The canister is filled with up to 61 spent fuel

Concrete Pads	40,000 sq ft
Electrical Building	400 sq ft
Gravel	20,400 sq ft
Asphalt Security Zone	<u>25,200 sq ft</u>
Facility Total	92,000 sq ft (200 ft x 460 ft)
Perimeter Roadway	58,000 sq ft

8. **Permits and approvals required.** List all known local, state and federal permits, approvals and financial assistance for the project. Include modifications of any existing permits, governmental review of plans and all direct and indirect forms of public financial assistance including bond guarantees, Tax Increment Financing and infrastructure.

<u>Unit of government</u>	<u>Type of application</u>	<u>Status</u>
Minnesota Public Utilities Commission	Certificate of Need	To be filed shortly

9. **Land use.** Describe current and recent past land use and development on the site and on adjacent lands. Discuss project compatibility with adjacent and nearby land uses. Indicate whether any potential conflicts involve environmental matters. Identify any potential environmental hazards due to past site uses, such as soil contamination or abandoned storage tanks, or proximity to nearby hazardous liquid or gas pipelines.

The proposed site is located entirely within the property of the existing Monticello Generating Plant property and is currently unused. The eastern portion of the site appears to have been used during construction activities for staging and lay-down. A review of aerial photos taken of the site, soon after the completion of the power plant, shows cleared areas in this vicinity. Additional evidence, such as concrete pads and old equipment, was found on the site. This area is now partially re-vegetated with quaking aspen (Populus tremuloides) and grasses dominate the ground cover. Additional common species in this area include big tooth aspen (P. grandidentata), black cherry (Prunus serotina), gray birch (Betula populifolia), poison ivy (Rhus radicans), Virginia creeper (Parthenocissus quinquefolia), and wild grape (Vitis sp.). Approximately 80 percent of the site is covered with this second growth vegetation. The western and southern portion of the site, borders on mature forest with numerous large pin oaks (Quercus palustris) still remaining along the edge of the site.

10. **Cover types.** Estimate the acreage of the site with each of the following cover types before and after development:

Before	After	Before	After
Types 1-8 wetlands 0 acres	0 acres	Lawn/landscaping 0 acres	0 acres
Wooded/forest 2.47 acre	0 acres	Impervious surfaces <0.1 acres	1.82 acres

Brush/Grassland		Other (describe)	frost-free gravel
1.06 acre	0 acres	0 acres	1.71 acres
Cropland			
0 acres	0 acres		
TOTAL		3.53 acres	3.53 acres

If **Before** and **After** totals are not equal, explain why:

11. **Fish, wildlife and ecologically sensitive resources**

a. Identify fish and wildlife resources and habitats on or near the site and describe how they would be affected by the project. Describe any measures to be taken to minimize or avoid impacts.

Project proposer does not expect significant impacts to fish or wildlife. See responses to 9 and 11b.

b. Are any state-listed (endangered, threatened or special concern) species, rare plant communities or other sensitive ecological resources such as native prairie habitat, colonial waterbird nesting colonies or regionally rare plant communities on or near the site? Yes No

The Minnesota Natural Heritage and Non-game Research Program identified two rare plant or animal species or other significant natural features within approximately a mile of the storage facility site.

Dry Oak Savanna

The project area appears to be located partially within an area identified by the Minnesota County Biological Survey as a “Site of High Biodiversity Significance.” The closest classified area to the site is an area of High significance, located just west of the storage facility site. The Minnesota Natural Heritage Program has classified this wooded habitat as a Sand-Gravel Subtype of the Dry Oak Savanna. In its Biological Report # 20, Minnesota’s Native Vegetation – A Key to Natural Communities Version 1.5, 1993, the Minnesota Department of Natural Resources describes this forest type is dry to dry-mesic community. It is most common in the deciduous forest-woodland zone, but also occurs sporadically throughout the prairie zone. The principal trees are bur oaks and northern pin oaks, but black oaks (*Q. velutina*) are also common in the southeast. The stature and spacing of trees is somewhat variable, reflecting differences in soils, topography, and climate, factors that strongly affect local droughtiness and fire frequency. Small, gnarly, open-grown trees are most common, although in moister spots, or in heavier soils, larger trees are sometimes more common. Tree spacing ranges from sparsely and evenly distributed to strongly clumped in moderately dense patches. Shrub cover is variable as well. The species composition of the shrub layer depends somewhat upon soil characteristics. Oak grubs and chokecherries are common on all

soil types. On sandier soils, prairie willows (*Salix humilis*), New Jersey tea (*Ceanothus americanus*), American hazelnuts (*Corylus americana*), sand cherries (*Prunus pumila*), and juneberries (*Amelanchier* spp.) are usually present. Wolfberries (*Symphoricarpos occidentalis*) are commoner on heavier soils.

Dry Oak Savanna occurs on the same kinds of landforms as Dry Prairie, except for bedrock bluffs. Correspondingly, substrates range from excessively-drained to well-drained, sand to loam soils. The presence of savanna rather than prairie indicates a lower fire frequency or intensity (or both) than in prairie. Dry Oak Savanna requires less frequent fire than Mesic Savanna for maintenance. However, in the complete absence of fire, woodland will eventually replace Dry Oak Savanna, which is what appears to have happened at the Monticello plant site. Grazing and browsing animals may also have had a role in the maintenance of Dry Oak Savanna.

Peregrine Falcon

The second occurrence found by the Natural Heritage and Nongame Research Program is a Peregrine Falcon (*Falco peregrinus*) nesting area, identified at the Monticello plant. Peregrine Falcons were recently removed from the U.S. Endangered Species List; however, they are still a state-listed threatened species in Minnesota and are further protected by the Migratory Bird Treaty Act. Historically, Peregrine Falcons nested on cliff ledges or in shallow caves in cliffs. However, this species has the ability to adapt to a wide range of environments, demonstrated by the diversity of habitats it now occupies throughout the world. Urban environments are becoming an important habitat for Peregrine Falcons, where buildings and bridges provide nesting structures and birds such as pigeons provide a food base. These urban Peregrine Falcons have contributed to the recovery of the species as a whole. In 1995, a nesting box was established on the stack at the Monticello Plant and peregrines introduced. Peregrines have successfully fledged at Monticello for years.

If yes, describe the resource and how it would be affected by the project. Indicate if a site survey of the resources has been conducted and describe the results. If the DNR Natural Heritage and Nongame Research program has been contacted give the correspondence reference number: . Describe measures to minimize or avoid adverse impacts.

Dry Oak Savanna

The storage facility site was chosen in an area that was previously disturbed. See item 9 above. Clearing of mature oaks and other native under story

will equal about 65 percent of the site, of which dry oak savanna type will equal about 20 percent or 0.71 acres.

Peregrine Falcon

The Peregrine Falcons presently reside on the stack located south of the plant building power plant facility. The proposed storage facility will be constructed well to the north of the nesting site. The project proposer does not anticipate any impacts on the nesting falcons.

12. **Physical impacts on water resources.** Will the project involve the physical or hydrologic alteration — dredging, filling, stream diversion, outfall structure, diking, and impoundment — of any surface waters such as a lake, pond, wetland, stream or drainage ditch? Yes No
If yes, identify water resource affected and give the DNR Protected Waters Inventory number(s) if the water resources affected are on the PWI: . Describe alternatives considered and proposed mitigation measures to minimize impacts.
13. **Water use.** Will the project involve installation or abandonment of any water wells, connection to or changes in any public water supply or appropriation of any ground or surface water (including dewatering)? Yes No
If yes, as applicable, give location and purpose of any new wells; public supply affected, changes to be made, and water quantities to be used; the source, duration, quantity and purpose of any appropriations; and unique well numbers and DNR appropriation permit numbers, if known. Identify any existing and new wells on the site map. If there are no wells known on site, explain methodology used to determine.
14. **Water-related land use management district.** Does any part of the project involve a shoreland zoning district, a delineated 100-year flood plain, or a state or federally designated wild or scenic river land use district? Yes No
If yes, identify the district and discuss project compatibility with district land use restrictions.

The project is located entirely within the Monticello power plant property and is not located in the flood plain.

The Mississippi River from St. Cloud to Anoka was added to Minnesota's Wild & Scenic Rivers Program in 1976. The portion of the Mississippi that passes by the Monticello power plant is within the portion of the Riverway designated “recreational”.

Recreational rivers are those rivers that may have undergone some impoundment or diversion in the past and that may have adjacent lands which are considerably developed, but that are still capable of being managed to further the purposes and intent of the designation. This means that bordering lands may have already been developed for a full range of agricultural or other land uses, and may also be readily accessible by pre-existing roads or railroads. Xcel Energy owns the largest undeveloped tract of land along this segment of

the river which includes the buffer zones of the Monticello and Sherco power plants.

The project is also located within the designated "Mississippi River Scenic Byway Corridor."

The proposed project will not be visible from either the Mississippi River or adjacent roadways, nor will the project impact any recreational opportunities that exist along this reach of the Mississippi River.

15. **Water surface use.** Will the project change the number or type of watercraft on any water body?

Yes No

If yes, indicate the current and projected watercraft usage and discuss any potential overcrowding or conflicts with other uses.

16. **Erosion and sedimentation.** Give the acreage to be graded or excavated and the cubic yards of soil to be moved:

Approximately 3.5 acres will be cleared. Approximately 4000 cubic yards of soil materials will be moved or excavated and replaced with structural fill for the concrete storage and approach pads at the site. The proposed site is relatively level.

Describe any steep slopes or highly erodible soils and identify them on the site map. Describe any erosion and sedimentation control measures to be used during and after project construction.

There are no steep slopes or highly erodible soils associated with the storage facility site. Hay bails, silt fencing or other erosion controls will be located around the site as necessary to mitigate erosion potential. These measures will be developed as part of the construction specifications later in the project.

17. **Water quality: surface water runoff**

Compare the quantity and quality of site runoff before and after the project. Describe permanent controls to manage or treat runoff. Describe any stormwater pollution prevention plans.

Since the site will not add any wastes to storm water, it is expected that the quality of the runoff will be similar to the existing runoff quality. The site will add a little more than an acre of impervious surfaces which will not absorb runoff. Therefore, the quantity of runoff will slightly increase. This runoff will be directed toward natural flow routes around the facility. Energy absorbing controls such as riprap and sediment controls will be used to minimize erosion into these natural flow routes.

The Monticello plant will be required to obtain a certification from the Minnesota Pollution Control Agency (MPCA) for any discharges into

streams and rivers and a permit for storm water discharges that occur during construction or operation activities. The permit application must outline an erosion and sediment control plan to be used to ensure that construction activities do not pollute nearby waterways.

b. Identify routes and receiving water bodies for runoff from the site; include major downstream water bodies as well as the immediate receiving waters. Estimate impact runoff on the quality of receiving waters.

During construction it is estimated that most storm water will drain into the soil since there will be little impervious surfaces and the sandy soils of the site are highly permeable. Construction measures will ensure that there are no point discharges from the site into any drainage ditches that could pass sediment runoff into natural flow routes that discharge into the Mississippi River

The storage facility will be designed with a slight slope to direct runoff to the sides of the facility. Ditches along the perimeter road will collect runoff and disperse the water to existing natural flow routes. Flow dispersion methods such as riprap will be used to absorb runoff energy before entering natural flow routes. Sediment controls such as geo-textiles and in-situ vegetation will be used to minimize erosion.

18. Water quality: wastewaters

Describe sources, composition and quantities of all sanitary, municipal and industrial wastewater produced or treated at the site.

There will be no change in wastewater produced or discharged at the Monticello Generating Plant Site. The facility will contain no restroom facilities or any other wastewater generating processes.

b. Describe waste treatment methods or pollution prevention efforts and give estimates of composition after treatment. Identify receiving waters, including major downstream water bodies, and estimate the discharge impact on the quality of receiving waters. If the project involves on-site sewage systems, discuss the suitability of site conditions for such systems.

Not applicable

c. If wastes will be discharged into a publicly owned treatment facility, identify the facility, describe any pretreatment provisions and discuss the facility's ability to handle the volume and composition of wastes, identifying any improvements necessary.

Not applicable

d. If the project requires disposal of liquid animal manure, describe disposal technique and location and discuss capacity to handle the volume and composition of manure. Identify any improvements necessary. Describe any required setbacks for land disposal systems.

Not applicable

19. Geologic hazards and soil conditions

a. Approximate depth (in feet)

to ground water:	maximum 38.8 ft	minimum 29.6 ft	average 35 ft
to bedrock:	maximum 116 ft	minimum 97 ft	average 105 ft

Describe any of the following geologic site hazards to ground water and also identify them on the site map: sinkholes, shallow limestone formations or karst conditions. Describe measures to avoid or minimize environmental problems due to any of these hazards.

No sinkholes, shallow limestone formations or karst was found. There were a total of 12 borings at the site. The borings provided no indication of any irregular soil conditions.

b. Describe the soils on the site, giving NRCS (SCS) classifications, if known. Discuss soil granularity and potential for groundwater contamination from wastes or chemicals spread or spilled onto the soils. Discuss any mitigation measures to prevent such contamination.

The soils at the MNGP are primarily Hubbards, which are sandy mixed, frigid Entic Hapludolls. These soils are excessively permeable and have limited available water capacity. They readily transmit rainwater or any surface water to groundwater and are susceptible to wind erosion. The storage system proposed for use includes canisters that are sealed by welding and thus do not release any contaminants. There are no other sources of contamination at the facility that could contaminate the soil.

20. Solid wastes, hazardous wastes, storage tanks

a. Describe types, amounts and compositions of solid or hazardous wastes, including solid animal manure, sludge and ash, produced during construction and operation. Identify method and location of disposal. For projects generating municipal solid waste, indicate if there is a source separation plan; describe how the project will be modified for recycling. If hazardous waste is generated, indicate if there is a hazardous waste minimization plan and routine hazardous waste reduction assessments.

The storage facility will house spent nuclear fuel in stainless steel canisters, sealed by welding and stored in concrete vaults. The storage system is completely passive. No wastes are generated.

b. Identify any toxic or hazardous materials to be used or present at the site and identify measures to be used to prevent them from contaminating groundwater. If the use of toxic or hazardous materials will lead to a regulated waste, discharge or emission, discuss any alternatives considered to minimize or eliminate the waste, discharge or emission.

Spent nuclear fuel continues to emit radiation after it is removed from the reactor. The United States Nuclear Regulatory Commission has established standards limiting the exposure to radiation to employees and the public. The storage system proposed limits exposure to radiation to levels well below federal limits and several orders of magnitude below background

radiation levels experienced by the general public. The system of canisters and vaults proposed at the storage facility are designed to shield employees and the public from harmful levels of radiation and have been licensed by the NRC. The storage system is completely sealed and will not discharge any contaminants that could affect the groundwater or any other environment.

c. Indicate the number, location, size and use of any above or below ground tanks to store petroleum products or other materials, except water. Describe any emergency response containment plans.

There are no storage tanks of any kind associated with the proposed facility.

21. **Traffic.** Parking spaces added 0. Existing spaces (if project involves expansion) .
Estimated total average daily traffic generated .

Construction of the storage facility will include clearing and removal of topsoil, grading, excavation and structural fill of the storage pad, pouring the concrete storage pad, duct bank, and miscellaneous foundations, erecting the electrical building and fences, placing gravel, and associated activities. The vehicles employed include bull dozers, scrapers, front end loaders, graders, dump trucks, cement trucks, delivery trucks, and various small support vehicles. During the 6 month construction period, a total of 22 construction workers are estimated with a peak at any one time of 12 workers and an average of 8 workers. Additional traffic will be generated from truck deliveries and commuting workers. It is estimated that construction activities and deliveries will add an average of 7 trips each day and commuting will add up to 16 trips (2 per round trip) each day.

No full time staff is required at the storage facility during operation beyond existing plant personnel.

Estimated maximum peak hour traffic generated (if known) and time of occurrence . Provide an estimate of the impact on traffic congestion on affected roads and describe any traffic improvements necessary. If the project is within the Twin Cities metropolitan area, discuss its impact on the regional transportation system.

With a peak construction force of 12 workers, the peak hour traffic generated during the morning and evening commuting hours would be 12 vehicles. During peak construction activity (between the morning and evening commuting hours) it is estimated that the peak hour traffic generated due to deliveries is 3 trucks.

The addition of 12 vehicles on local roadways during construction activities will not create any traffic impacts. No traffic improvements are proposed or deemed necessary.

22. **Vehicle-related air emissions.** Estimate the effect of the project's traffic generation on air quality,

including carbon monoxide levels. Discuss the effect of traffic improvements or other mitigation measures on air quality impacts. Note: If the project involves 500 or more parking spaces, consult *EAW Guidelines* about whether a detailed air quality analysis is needed.

The minimal number of addition vehicles on local roadways during construction activities for such a short duration will add only a negligible amount of air emissions to the environment. No traffic improvements or mitigation measures are warranted.

23. **Stationary source air emissions.** Describe the type, sources, quantities and compositions of any emissions from stationary sources of air emissions such as boilers, exhaust stacks or fugitive dust sources. Include any hazardous air pollutants (consult *EAW Guidelines* for a listing) and any greenhouse gases (such as carbon dioxide, methane, nitrous oxide) and ozone-depleting chemicals (chloro-fluorocarbons, hydrofluorocarbons, perfluorocarbons or sulfur hexafluoride). Also describe any proposed pollution prevention techniques and proposed air pollution control devices. Describe the impacts on air quality.

The storage facility does not use nor generate any air emissions.

24. **Odors, noise and dust.** Will the project generate odors, noise or dust during construction or during operation? Yes No
If yes, describe sources, characteristics, duration, quantities or intensity and any proposed measures to mitigate adverse impacts. Also identify locations of nearby sensitive receptors and estimate impacts on them. Discuss potential impacts on human health or quality of life. (Note: fugitive dust generated by operations may be discussed at item 23 instead of here.)

Construction of the project will generate some small amounts of noise and dust. Earth moving equipment such as bull dozers, scrapers, and graders will clear and level the area. Concrete trucks will deliver concrete to the site and pumping trucks will place it. Similar industrial vehicles will be used for erecting the electrical building and fences.

Ambient sound level data was collected in the vicinity of the Monticello plant. The daytime L_{90s} varied from 44 to 59 dBA and the nighttime L_{90s} varied from 38 to 52 dBA depending on traffic density and proximity to I 94.

The predicted sound levels from the facility site during construction are expected to be much lower than the ambient sound levels indicating that no noise impact will occur.

During the operation of the storage facility the spent fuel will be moved from the plant to the storage facility with either a front-end loader or truck. To be conservative, both vehicles were assumed to be used concurrently. The sound levels in the residential areas near the ISFSI were estimated to be 6-17 dBA below the ambient sound levels. Therefore, there is no sound

impact due to the operation of the storage facility.

25. **Nearby resources.** Are any of the following resources on or in proximity to the site?
Archaeological, historical or architectural resources? Yes No

The closest historical site is located approximately 3 three miles from the facility site and no impacts are anticipated.

Prime or unique farmlands or land within an agricultural preserve? Yes No

The facility site is not located on designated Prime of Unique farmland.

Designated parks, recreation areas or trails? Yes No

The closest park/recreation area to the project is the Montissippi County Park located approximately 1 mile to the southeast. The proposed project will not impact this area.

Scenic views and vistas? Yes No

The storage facility will not affect aesthetics in the vicinity. The facility will not be seen from the Mississippi River since it is located several feet higher on the south bank of the river close to the plant generating and reactor building.

Other unique resources? Yes No

If yes, describe the resource and identify any project-related impacts on the resource. Describe any measures to minimize or avoid adverse impacts.

To the west of the site is an area of Biological Sensitivity identified by the Minnesota Natural Heritage Department. This area is identified as a Bur Oak (*Q. macrocarpa*) – Pin Oak Woodland and has been classified this area as a Sand-Gravel Subtype of a Dry Oak Savanna . Impacts to this resource are not expected.

26. **Visual impacts.** Will the project create adverse visual impacts during construction or operation? Such as glare from intense lights, lights visible in wilderness areas and large visible plumes from cooling towers or exhaust stacks? Yes No
If yes, explain.

The facility site is obscured by wooded areas within the plant property and will not be visible during construction or operation. During operation facility lighting will illuminate the facility site for security reasons. However, the light fixtures are only 40 ft high, which is less than many of the trees surrounding the site.

27. **Compatibility with plans and land use regulations.** Is the project subject to an adopted local

comprehensive plan, land use plan or regulation, or other applicable land use, water, or resource management plan of a local, regional, state or federal agency?

Yes No. If yes, describe the plan, discuss its compatibility with the project and explain how any conflicts will be resolved. If no, explain.

This project is located entirely within the property boundary of the existing Monticello power plant site. Therefore no impacts or changes to land use will occur other than the use of a currently unoccupied part of the plant site.

28. **Impact on infrastructure and public services.** Will new or expanded utilities, roads, other infrastructure or public services be required to serve the project? __Yes No. If yes, describe the new or additional infrastructure or services needed. (Note: any infrastructure that is a connected action with respect to the project must be assessed in the EAW; see *EAW Guidelines* for details.)

The storage facility will obtain electrical power from nearby electrical service lines serving other plant facilities.

29. **Cumulative impacts.** Minnesota Rule part 4410.1700, subpart 7, item B requires that the RGU consider the "cumulative potential effects of related or anticipated future projects" when determining the need for an environmental impact statement. Identify any past, present or reasonably foreseeable future projects that may interact with the project described in this EAW in such a way as to cause cumulative impacts. Describe the nature of the cumulative impacts and summarize any other available information relevant to determining whether there is potential for significant environmental effects due to cumulative impacts (*or discuss each cumulative impact under appropriate item(s) elsewhere on this form*).

There will be no other impacts related from this project. The storage facility will be constructed to house 30 storage vaults. The secured area will be sized to support up to 65 storage vaults. If, in the future, additional storage vaults are required, they will be shipped by rail to the storage facility site and placed without any additional impacts to the environment.

30. **Other potential environmental impacts.** If the project may cause any adverse environmental impacts not addressed by items 1 to 28, identify and discuss them here, along with any proposed mitigation.

There should be no other environmental impacts not addressed in items 1 through 28.

31. **Summary of issues.** *Do not complete this section if the EAW is being done for EIS scoping; instead, address relevant issues in the draft Scoping Decision document, which must accompany the EAW.* List any impacts and issues identified above that may require further investigation before the project is begun. Discuss any alternatives or mitigative measures that have been or may be considered for these impacts and issues, including those that have been or may be ordered as permit conditions.

RGU CERTIFICATION. The Environmental Quality Board will only accept **SIGNED** Environmental Assessment Worksheets for public notice in the EQB Monitor.

I hereby certify that:

- The information contained in this document is accurate and complete to the best of my knowledge.
- The EAW describes the complete project; there are no other projects, stages or components other than those described in this document, which are related to the project as connected

Draft 11/10/04

actions or phased actions, as defined at Minnesota Rules, parts 4410.0200, subparts 9b and 60, respectively.

- Copies of this EAW are being sent to the entire EQB distribution list.

Signature

Date

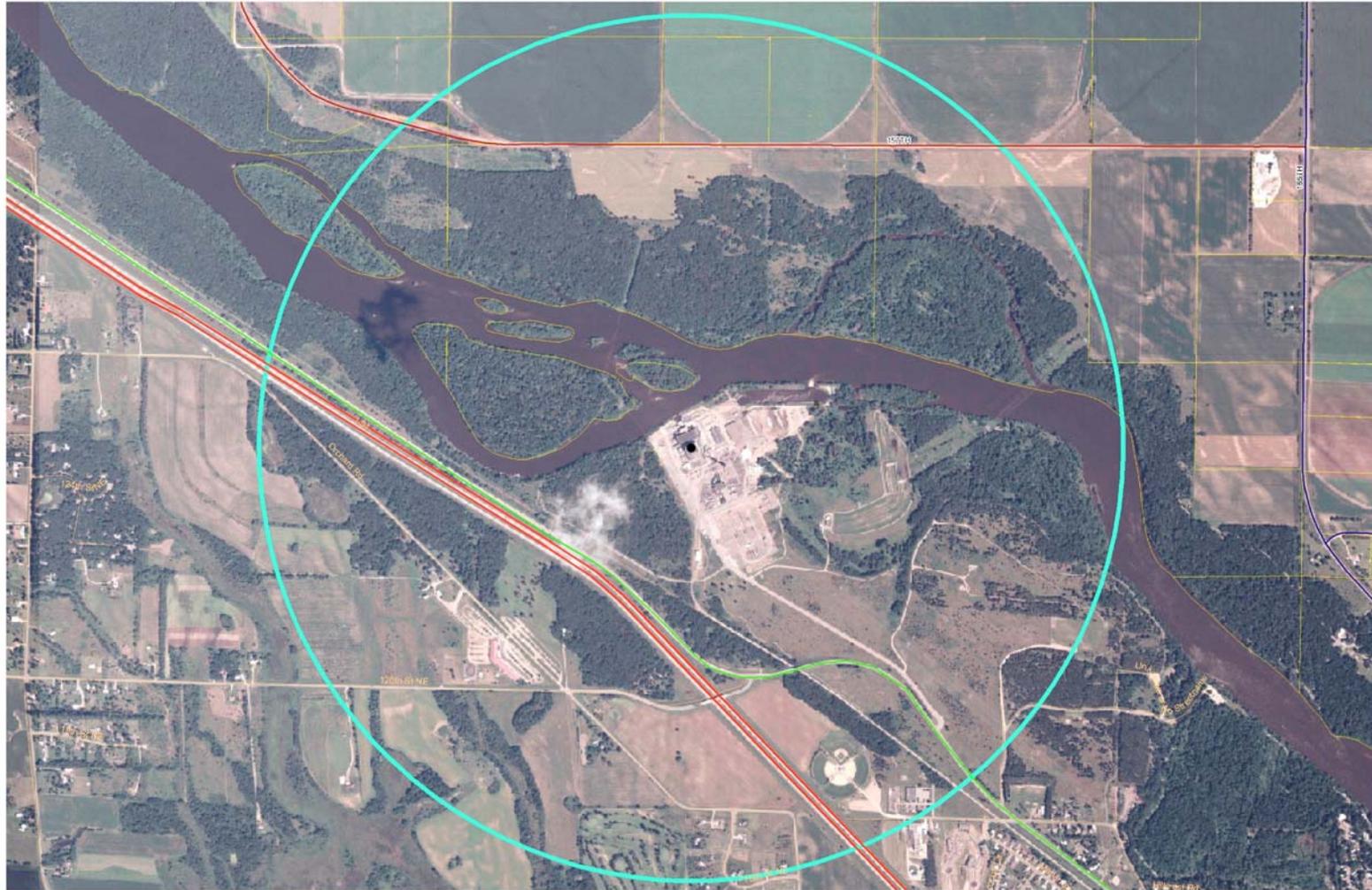
Title

Environmental Assessment Worksheet was prepared by the staff of the Environmental Quality Board at Minnesota Planning. For additional information, worksheets or for *EAW Guidelines*, contact: Environmental Quality Board, 658 Cedar St., St. Paul, MN 55155, 651-296-8253, or www.mnplan.state.mn.us

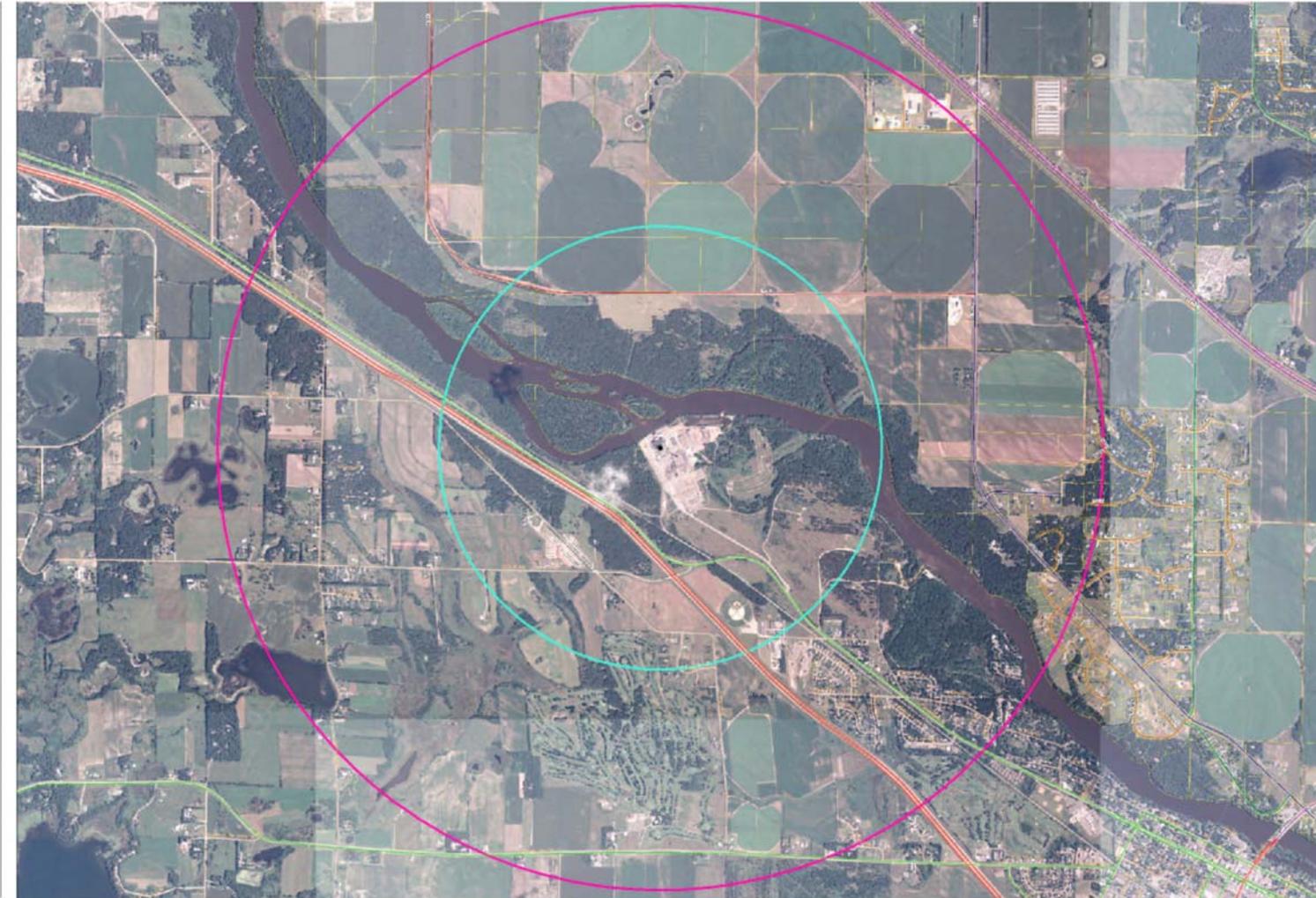
Attachment A Six Mile Radius Sherburne and Wright County



Attachment B-1 One Mile Radius Ariel Photograph



Attachment B-2
Two Mile Radius Arial Photograph

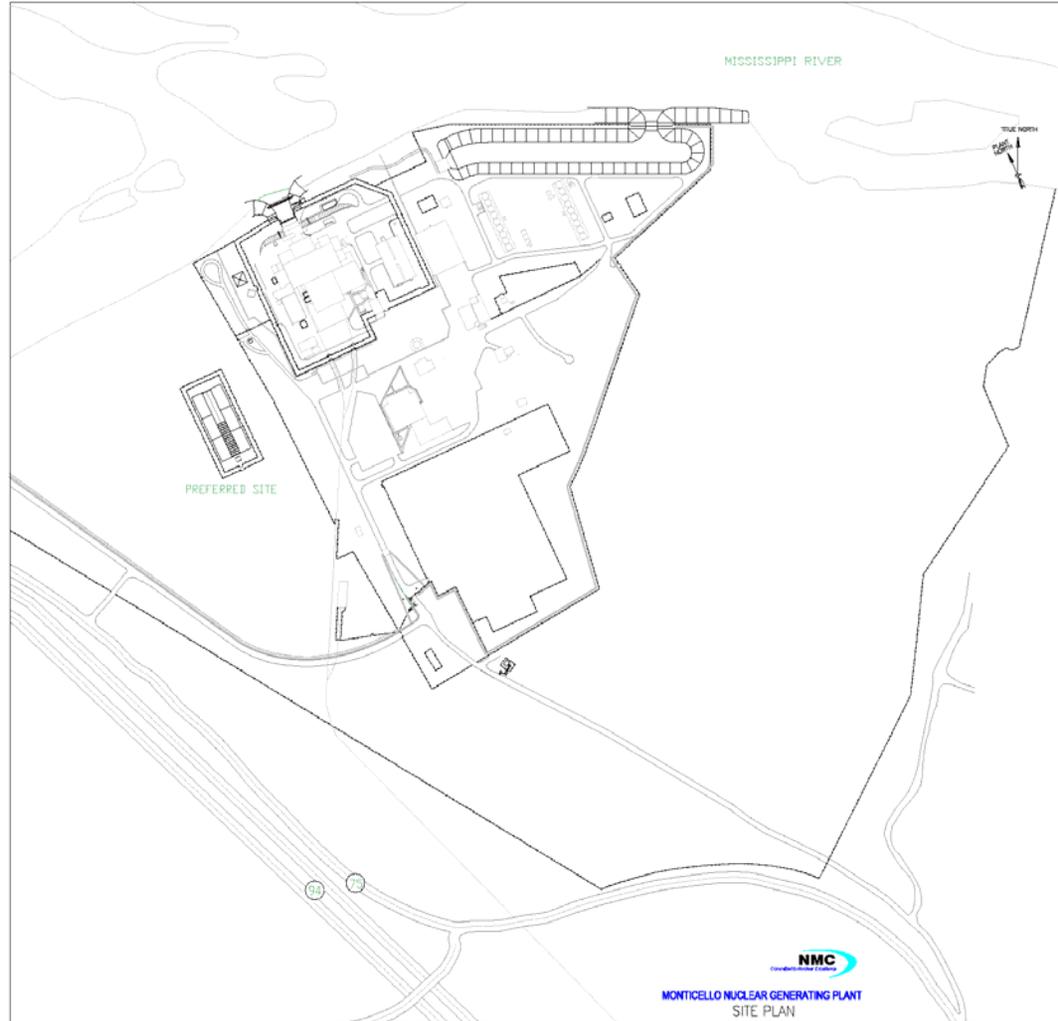


Attachment C-1 Project Boundaries

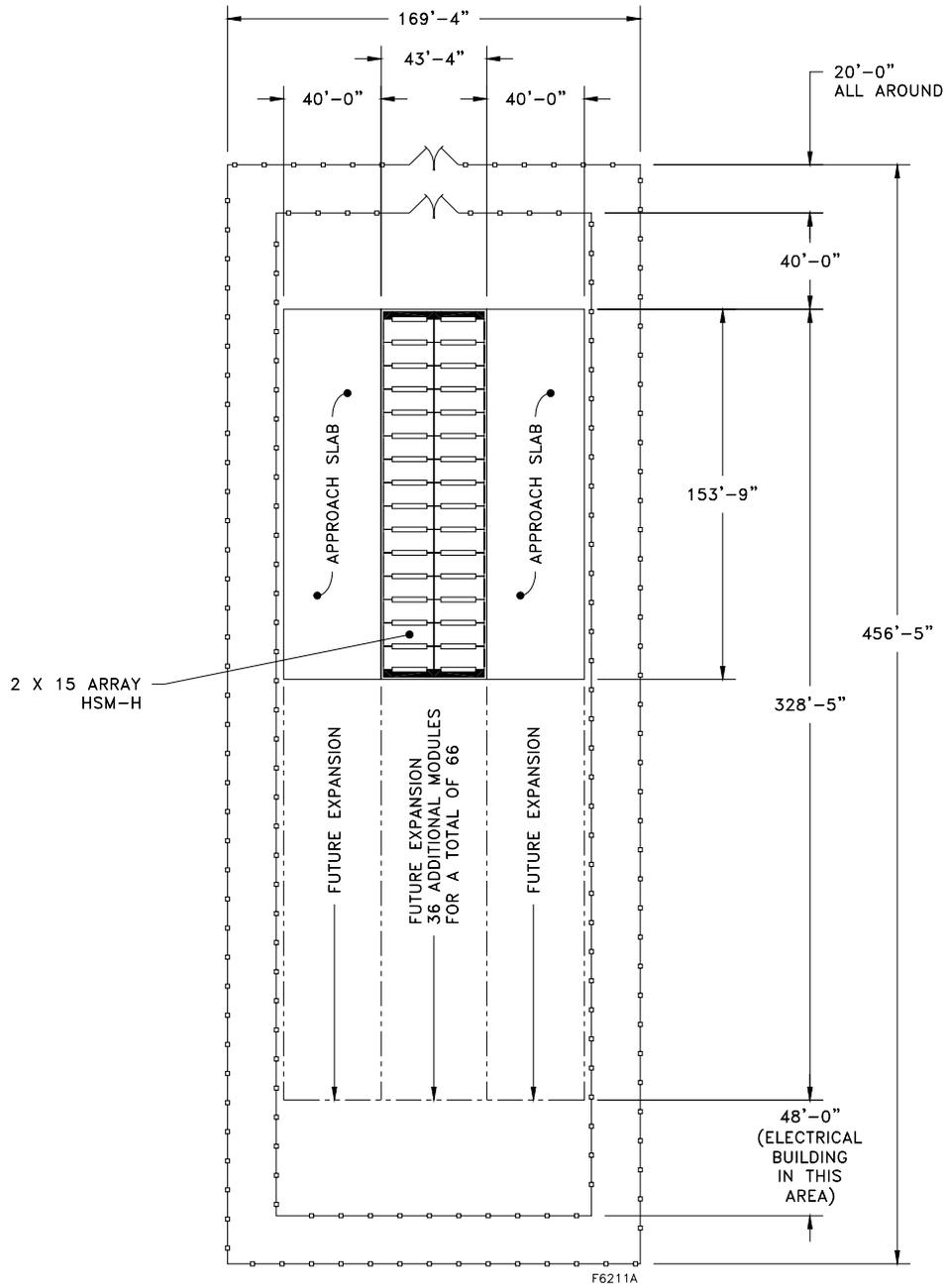


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Source: USGS, MN Date Deli, Land Management Information Center, Minnesota Geographic Data Clearinghouse, MN NRD

Attachment C-2 Project Boundaries



Attachment D Plan View



Attachment E
Artist's Rendering of the ISFSI

