

September 22, 2004

Mr. Charles Bomberger
General Manager, Nuclear Asset Management
414 Nicollet Mall (Ren. Sq. 8)
Minneapolis, MN 55401

SUBJECT: SUMMARY OF AUGUST 31, 2004, PUBLIC MEETING ON PLANNED
DECOMMISSIONING OF XCEL ENERGY'S PATHFINDER FACILITY IN SIOUX
FALLS, SOUTH DAKOTA

Dear Mr. Bomberger:

On August 31, 2004, the U. S. Nuclear Regulatory Commission (NRC) staff held a public meeting in Sioux Falls, South Dakota to discuss Xcel Energy's planned decommissioning of its Pathfinder Facility, and to solicit public comments on this activity. The enclosed meeting summary (Enclosure 1), agenda (Enclosure 2), attendees (Enclosure 3), and presentation (Enclosure 4) are provided for your information. This information, along with a transcript of the meeting will also be posted on NRC's website, www.nrc.gov/materials/decommissioning/public-involve.html.

If you have any questions or comments regarding this information, please contact me at (301) 415-6722.

Sincerely,

/RA/

Chad J. Glenn, Project Manager
Decommissioning Directorate
Division of Waste Management
and Environmental Protection
Office of Nuclear Material Safety
and Safeguards

Docket No.: 030-05004
License No.: 22-08799-02

Enclosures:

1. Meeting Summary
2. Agenda
3. Attendance List
4. Presentation Slides

cc: Service List

**SUMMARY OF AUGUST 31, 2004, PUBLIC MEETING
ON PLANNED DECOMMISSIONING OF XCEL ENERGY'S PATHFINDER FACILITY IN
SIOUX FALLS, SOUTH DAKOTA**

On August 31, 2004, a public meeting was held in Sioux Falls, South Dakota. The purpose of this meeting was to (1) inform the public that the U.S. Nuclear Regulatory Commission (NRC) has received a decommissioning plan (DP) and a license amendment request from Xcel Energy to authorize decommissioning activities at the Pathfinder facility in Sioux Falls, South Dakota; (2) describe NRC's decommissioning review process and inspection responsibilities; (3) describe Xcel Energy's planned decommissioning activities and proposed schedule for decommissioning; and (4) address questions and solicit public comments on Xcel Energy's proposed decommissioning action.

During this meeting, NRC staff provided an overview of its decommissioning review process and inspection responsibilities. NRC staff stated that it has completed its acceptance review and is presently conducting a safety and environmental review of the DP. Xcel Energy representatives provided an overview of their planned decommissioning activities and schedule for completing decommissioning. Public attendance was light and there were no issues or concerns raised regarding the proposed decommissioning action.

**PUBLIC MEETING AGENDA
ON THE DECOMMISSIONING OF XCEL ENERGY'S PATHFINDER FACILITY
IN SIOUX FALLS, SOUTH DAKOTA**

Date and Time: Tuesday, August 31, 2004 @ 7:00 - 9:00 P.M.

Location: County Commission Meeting Room
2ND Floor County Administration Building
415 N. Dakota Avenue, Sioux Falls, SD

Purpose: The U.S. Nuclear Regulatory Commission (NRC) will hold a public meeting to (1) inform the public that NRC has received a license amendment request from Xcel Energy to authorize decommissioning activities at the Pathfinder facility in Sioux Falls, SD; (2) describe NRC's decommissioning review and approval process; (3) describe the decommissioning activities and schedule in Xcel Energy's decommissioning plan; and (4) address questions and solicit public comments on Xcel Energy's decommissioning plan.

AGENDA

7:00 p.m. Welcome, Meeting Objectives and Ground Rules
Dan Hindbjorgen, Facilitator

7:05 p.m. NRC Introductory Remarks
Dan Gillen, Deputy Director, Decommissioning Directorate

7:15 p.m. NRC Decommissioning process
Chad Glenn, Project Manager, Decommissioning Directorate

7:30 p.m. NRC Inspection Responsibilities
Blair Spitzberg, Branch Chief, Region IV

7:45 p.m. Xcel Energy Planned Decommissioning Activities
Joel Beres, Xcel Energy Project Manager

8:00 p.m. Public questions/comments

9:00 p.m. Adjourn

**PATHFINDER PUBLIC MEETING
TUESDAY, AUGUST 31, 2004
COUNTY COMMISSION MEETING ROOM**

ATTENDANCE LIST

NAME ORGANIZATION (IF ANY)	PHONE NUMBER	E-MAIL ADDRESS
Jim Wilcox Xcel Energy	(605) 339-8350	james.c.wilcox@xcelenergy.com
D. Blair Spitzberg USNRC, Region IV	(817) 860-8191	dbb@nrc.gov
Kim Gruss USNRC, HQ	(301) 415-4149	kag1@nrc.gov
Jon Peckenpaugh USNRC, HQ	(301) 415-6753	jmp@nrc.gov
Charles Bomberger Xcel Energy	(303) 356-2161	charles.bomberger@xcelenergy.com
Bruce Watson USNRC, HQ	(301) 415-6221	baw1@nrc.gov
Dan Gillen USNRC, HQ	(301) 415-7295	dmg2@nrc.gov
Doug Schult	(865) 300-8413	dscholt@duratekinc.com
Anita Turner USNRC, HQ	(301) 415-5508	alt@nrc.gov
Martin Bettmann South Dakota	(605) 773-3201	Martin.Bettmann@state.sd.us
Jim Herrin	(605) 339-2272	

**PATHFINDER PUBLIC MEETING
TUESDAY, AUGUST 31, 2004
COUNTY COMMISSION MEETING ROOM**

ATTENDANCE LIST

NAME ORGANIZATION (IF ANY)	PHONE NUMBER	E-MAIL ADDRESS
Chad Glenn USNRC, HQ	(301) 865-7584	cjg1@nrc.gov
Jim Clark Xcel Energy	(605) 339-8359	
Joel Beres	(612) 766-0381	
Maxine Risty Court Reporter		
Dan Hindbjorgen Siouxfalls SD	(605) 339-0010	danh@siouxfall.com



United States Nuclear Regulatory Commission

NRC Introductory Remarks

**Daniel M. Gillen, Deputy Director
Decommissioning Directorate
Division of Waste Management
and Environmental Protection**

August 31, 2004



United States Nuclear Regulatory Commission

Purpose

- Describe NRC's Decommissioning Plan (DP) review and approval process
- Provide overview of the Pathfinder DP
- Obtain Public comments on DP



Regulatory United States Nuclear Commission

Who is NRC?

- Independent agency
- Experienced regulator
- Mission/Goals:
 - Safety
 - Security
 - Openness
 - Effectiveness

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Regulatory United States Nuclear Commission

Decommissioning Regulatory Framework

- Legislation
 - Atomic Energy Act of 1954, as amended
- License Termination Rule, 1997
 - All pathways
 - Dose-based; 25 mrem/year + ALARA
 - Restricted and unrestricted release
 - Implementing guidance in NUREG 1757

4



United States Nuclear Regulatory Commission

Decommissioning Program Activities

- Responsibility for decommissioning complex materials sites and most power reactors
 - 46 Complex materials sites
 - 15 power reactors

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United States Nuclear Regulatory Commission

Agenda

- Introductions
- NRC presentation
 - Licensing (DP review)
 - Inspection
- Xcel Energy presentation
- Questions and comments
- Feedback form

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United States Nuclear Regulatory Commission

Past and Present Decommissioning at Pathfinder Facility

- Nuclear power reactor operation 1964-1967
- Reactor Building and Fuel Handling Building decommissioned in 1992
- Current decommissioning focused on remaining materials facilities

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United States Nuclear Regulatory Commission

NRC Attendees

- Daniel Gillen, Deputy Director NRC HQ
- Blair Spitzberg, Branch Chief NRC Region IV
- Kim Gruss, Section Chief NRC HQ
- Chad Glenn, Project Manager NRC HQ
- Bruce Watson, Health Physicist NRC HQ
- Jon Peckenpaugh, Hydrogeologist NRC HQ
- Anita Turner, Health Physicist NRC HQ

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United States Nuclear Regulatory Commission

NRC Decommissioning Process

**Chad J. Glenn, Project Manager
Decommissioning Directorate
Division of Waste Management
and Environmental Protection**

August 31, 2004

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United States Nuclear Regulatory Commission

Decommissioning Process

- Xcel Energy submits Decommissioning Plan (DP)
- NRC reviews DP
- NRC submits "request for additional information"
- Xcel Energy revises DP
- NRC approves DP
- Xcel Energy performs site cleanup
- Xcel Energy demonstrates that site satisfies NRC criteria for site release (10 CFR 20, Subpart E)
- NRC performs confirmatory survey
- NRC terminates license

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United States Nuclear Regulatory Commission

Decommissioning Plan Contents

- Present site radiological status
- Planned decommissioning activities and schedule
- Plan to ensure protection of workers and the environment
- Planned final radiation survey
- Decommissioning cost estimate and funding mechanism

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United States Nuclear Regulatory Commission

Decommissioning Plan Review

- Xcel Energy submits DP
- NRC acceptance review, technical review, requests for additional information, and coordination with State and other regulators
- Xcel Energy responds to NRC's questions
- NRC completes safety and environmental reviews
- NRC approves DP via license amendment

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United States Nuclear Regulatory Commission

Activities Following DP Approval

- Site Decommissioning
- Regulatory oversight (inspections, surveys)
- Conduct Final Status Survey
- In-process confirmatory surveys
- Submit Final Status Survey Report (FSSR)
- Confirmatory Survey
- License termination

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United States Nuclear Regulatory Commission

**Proposed Decommissioning Schedule for
Pathfinder Facility**

- DP approval – February 2005
- Site cleanup completed – December 2005
- FSSR submittal – February 2006
- License termination – April 2006

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United States Nuclear Regulatory Commission

Opportunities for Public Involvement

- Public meetings
- Publicly-noticed meetings with licensee
- Informal contacts with NRC staff
(Telephone calls, e-mails)
- Licensee-initiated community outreach
- NRC website – <http://www.nrc.gov/public-involve.html>

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United States Nuclear Regulatory Commission

How to Participate?

- NRC published Federal Register Notice (FRN) on Xcel Energy's license amendment request and opportunity to comment
- FRN provides instruction on accessing related documents and submitting comments
- FRN provides opportunity and instruction on requesting a hearing on proposed action

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United States Nuclear Regulatory Commission

NRC Contacts

- Chad Glenn Project Manager, NRC HQ
(301) 415-6722 cjgl@nrc.gov
- Blair Spitzberg Branch Chief, NRC RIV
(817) 860-8191 dbs@nrc.gov



United States Nuclear Regulatory Commission

**NRC Decommissioning Inspection Program
Xcel Energy's Pathfinder site**

**D. Blair Spitzberg, Ph.D.
Branch Chief
NRC, Region IV**

August 31, 2004

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United States Nuclear Regulatory Commission

Organizational Oversight Responsibilities

- NRC Headquarters in Rockville, MD responsible for approval of decommissioning plan, program management, and license termination
- Region IV Office in Arlington, TX responsible for inspection

2



United States Nuclear Regulatory Commission

Why Inspect?

- Ensure safety and verify compliance
 - Inspect regulatory requirements (Title 10 of Code of Federal Regulations, Parts, 19, 20, 30)
 - Inspect implementation of approved decommissioning plan and procedures
 - Inspect other requirements specified in the license
- Where non-compliance is found, take enforcement action to establish compliance
- Perform confirmatory measurements
- Provide independent verification that site meets license termination criteria
- Enhance public confidence in NRC's regulatory process

Trust but Verify

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United States Nuclear Regulatory Commission

Core Inspection Program

- Decommissioning performance and status review
- Radiation protection
- Environmental protection
- Radioactive waste management and generator requirements
- Transportation of radioactive waste

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United States Nuclear Regulatory Commission

NRC Confirmatory Measurement Program

- Provides confidence in the quality of the licensee's survey and analytical measurement program
- Provides confidence that the site meets NRC decommissioning criteria
- Performed through independent surveys by NRC inspectors
- Performed through samples obtained by inspectors for NRC analysis
 - NRC samples are analyzed by Oak Ridge Institute for Science and Education (NRC Contractor)
 - Split samples may be compared for agreement with licensee results

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United States Nuclear Regulatory Commission

Post Inspection Activities

- Final exit meeting with licensee
- Inspection results briefed to NRC management upon return of inspector
- Inspection reports issued within 30 days of final exit
 - Document inspection findings and conclusions
 - Documents confirmatory measurement results
- Inspection reports available online at <http://www.nrc.gov>

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United States Nuclear Regulatory Commission

NRC Introductory Remarks

**Daniel M. Gillen, Deputy Director
Decommissioning Directorate
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August 31, 2004



United States Nuclear Regulatory Commission

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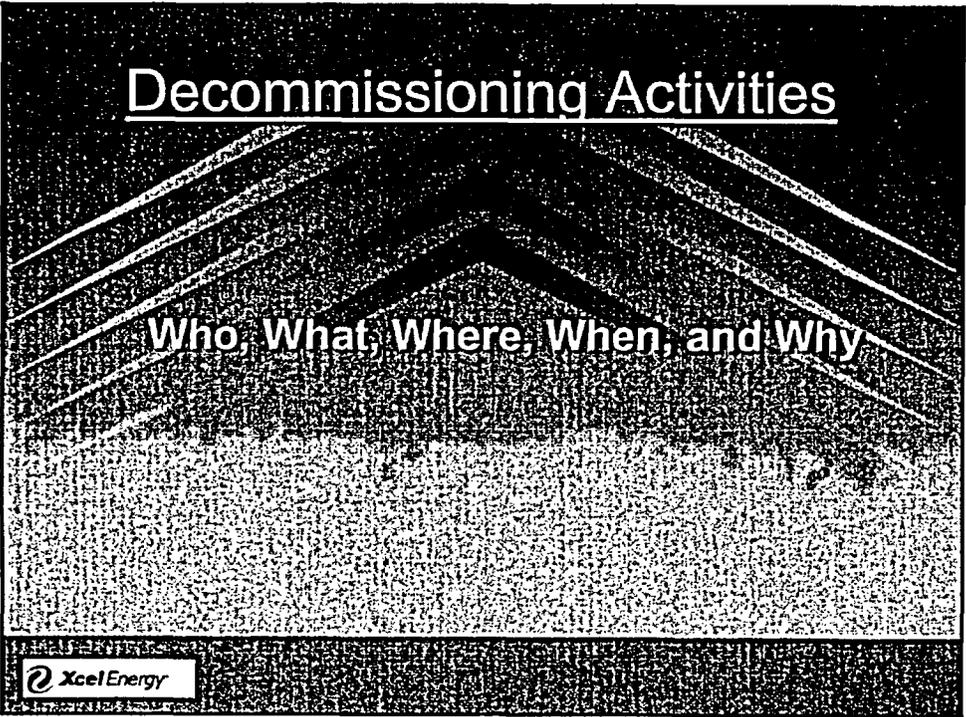


Regulatory United States Nuclear Commission

Decommissioning Regulatory Framework

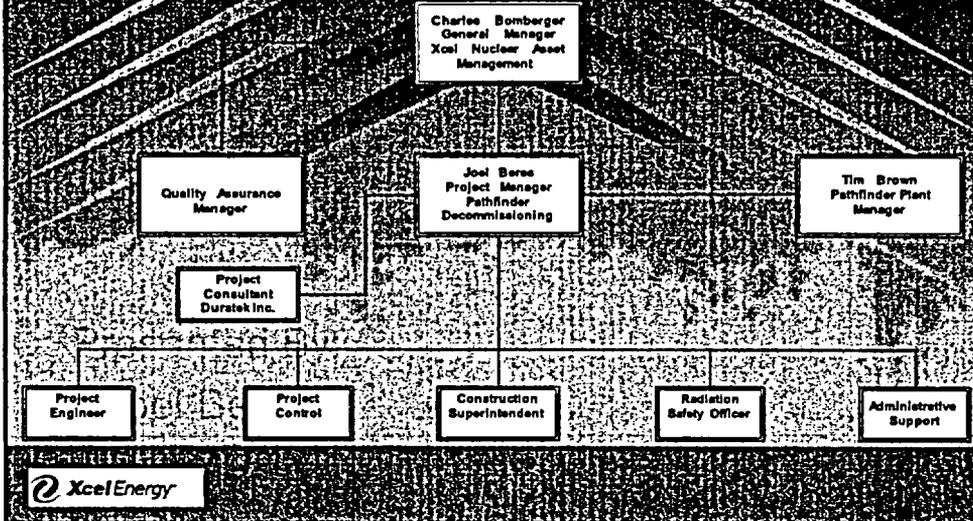
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Who

Pathfinder Project Organization



What Have We Done?

- Assembled a highly qualified project team
- Researched the site history
- Characterized the radiological profile of the site
- Developed a comprehensive Decommissioning Plan and submitted it to the NRC
- Set up quality controls

What Will We Do?

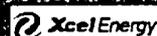
When NRC approval is granted

- Remove radioactive byproduct material from the Pathfinder Site (remediation)
- Very small amount of contaminated material
 - Estimated at less than 1300 cubic feet
- Ship the low level radioactive waste to an approved processing facility in Tennessee
- Survey to ensure that the remediation was successful



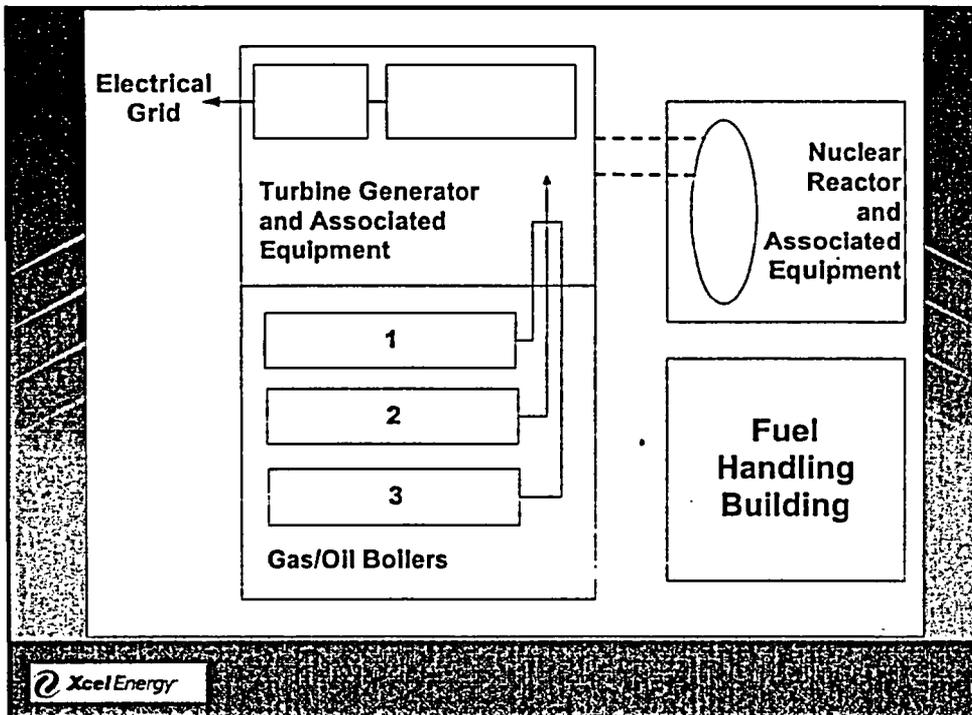
What is the Scope of the Remediation Activities?

- Clean and/or remove portions of the condenser
- Clean and/or remove floor drain piping
- Clean and/or remove floor drain sumps
- Clean boiler mud drums



How Did the Residual Material Come into Being and How Long has it Been There?

- 1964 - 1967 Pathfinder Atomic Plant Operation
- 1970 - Remove Spent Fuel
- 1970 - Disconnect the nuclear reactor and re-power the turbine generator with steam from 3 new boilers (Pathfinder Peaking Plant)
- 1992 - Decommission the reactor and nuclear steam components
- 1994 - Build Angus-Anson
- 2000 - Stop Operation of Pathfinder Peaking Plant
- Present - Decommission the turbine generator and auxiliaries, terminate our radioactive materials license, and free release the site



Where?

- Remediation will occur within the Pathfinder Turbine Building and Boiler Buildings
- Surveying will occur at all areas and buildings that were affected by plant operation
- Soils, groundwater, and surface water are not contaminated



When?

- The project is subject to NRC approval
- 2005 - 2006 timeframe
- Remediation Activities 2-4 months
- Surveying Activities 1-2 months per survey
- Project completion will be well within statutory requirements



Why?

- Required by law
- Prudent to do now
 - Radiological condition of the site is known
 - Internal expertise is available
 - Financial wherewithal
 - Likely to get more expensive in the future



Contact Numbers

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