



Minnesota Public Utilities Commission



# Public Information and Scoping Meeting

## Mankato Energy Center Expansion

Public Utilities Commission Docket Number

- IP-6949/GS-15-620



# Meeting Purpose

- Explain the Commission's review process
- Provide information about the proposed project
- Gather information for the environmental review
- Answer general questions about the process and the project



# Public Utilities Commission

- ❑ State Agency
- ❑ Regulates
  - Permitting for power plants, pipelines, transmission lines
  - Local and in-state long distance telephone companies
  - Investor-owned electric and natural gas utilities – rates and services
- ❑ 5 Commissioners
  - Appointed by the Governor
  - Serve staggered terms
  - Full time employment
- ❑ 50 staff



# Large Electric Power Generating Plant

- 50,000 kilowatts or more
  
- Requires **Site Permit** from Minnesota Public Utilities Commission
  - Minnesota Statutes, Chapter 216E
  - Minnesota Rules, Part 7850



# Who's Who?

- **Applicant** – Company asking for Site Permit–  
*Mankato Energy Center II, LLC*
- **Department of Commerce Energy Environmental Review and Analysis (EERA)** – State agency, conducts environmental review
- **Office of Administrative Hearings (OAH)** – State agency, Administrative Law Judge (ALJ) holds hearings, summarizes the facts in the record, writes report for Public Utilities Commission



# Who's Who?

- **Public Utilities Commission (PUC) Energy Facilities Planner** – Assists in building the record. Informs Commissioners on impacts of different decisions. Neutral party, does not give legal advice, not an advocate.
- **Public Utilities Commission (PUC) Public Advisor** – Helps citizens participate in the site permit processes. Neutral party, does not give legal advice, not an advocate.



# Factors Considered in Public Utilities Commission's Decision

- Human settlement – displacement, noise, aesthetics, cultural values, recreation, public services
- Public health and safety
- Economy– agriculture, forestry, tourism, mining
- Archaeological and historic resources

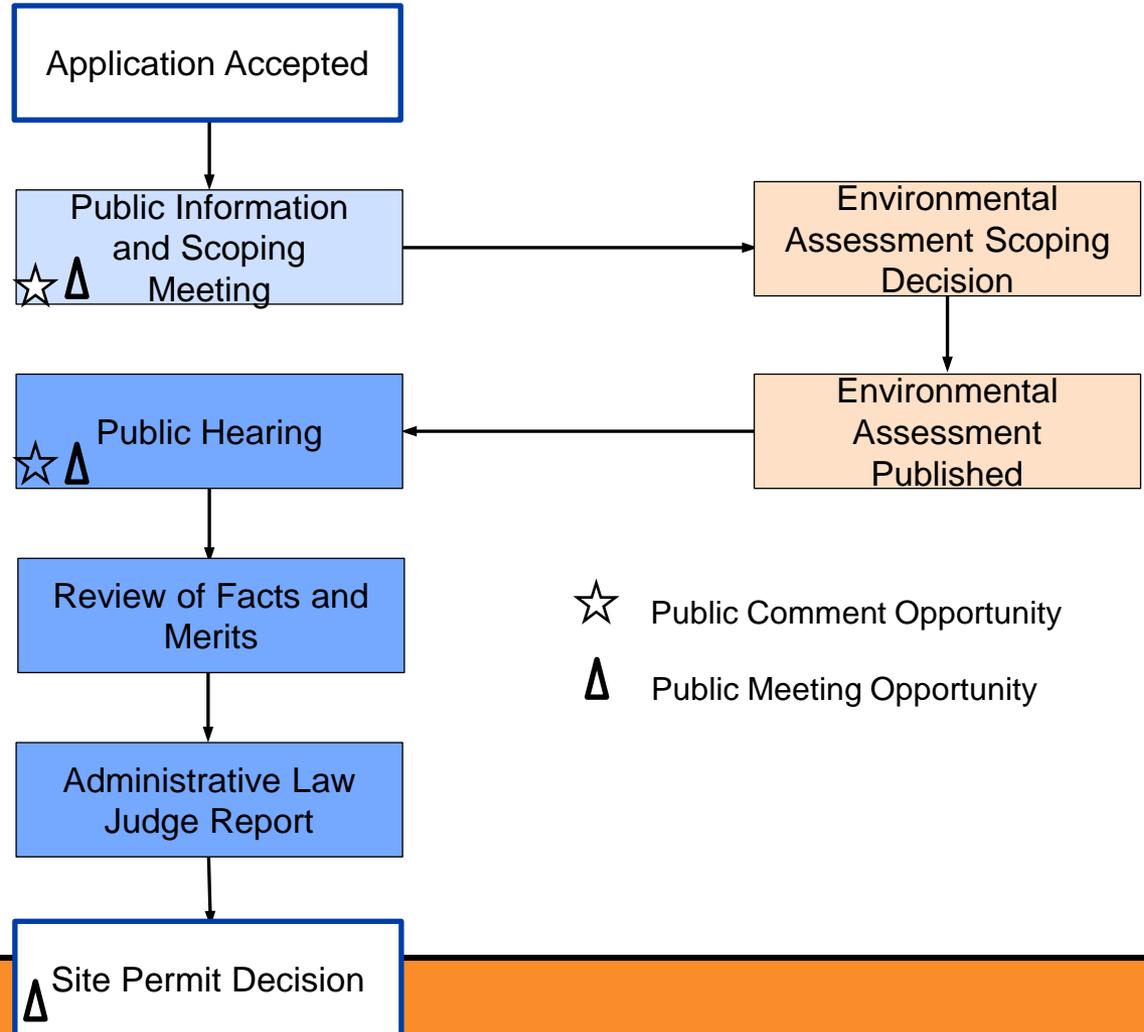


# Factors Considered

- Natural environment – air, water, plants, animals
- Maximize energy efficiencies
- Allow for future expansion
- Use of existing power plant sites
- Electrical system reliability
- Costs to construct, operate, and maintain the power plant



# Site Permit Process





# Estimated Project Timeline

Site Permit Application Filed	August 2015
Site Permit Application Accepted	September 2015
<b>*Public Information &amp; Scoping Meeting</b>	<b>October 2015</b>
Comment Period Closes	October 27, 2015
Environmental Assessment Scoping Decision	November 2015
Environmental Assessment Published	February 2016
Public Hearing	March 2016
Administrative Law Judge Report	April 2016
Site Permit Decision	May 2016



# Sample Notice of Comment Period

STATE OF MINNESOTA PUBLIC UTILITIES COMMISSION

## NOTICE OF COMMENT PERIOD ON APPLICATION COMPLETENESS

*Issued: August 10, 2015*

**In the Matter of Mankato Energy Center II, LLC's Application for a Site Permit for the 345 MW Expansion of the Mankato Energy Center**

→ **PUC Docket Number/s:**     **Docket No. IP-6949/GS-15-620**

→ **Comment Period:**     Initial comment period closes August 24, 2015 at 4:30pm  
Reply comment period closes August 31, 2015 at 4:30pm  
*Comments must be received by 4:30pm on the close date*  
*Comments received after comment period closes may not be considered*

### Topic/s Open for Comment:

- Does the application contain the information required under Minnesota Rules, part 7850.1900?
- Are there any contested issues of fact with respect to the representations made in the application?
- Should the Commission appoint an advisory task force?



# KEYS to Sending Comments

- Include the docket number (*15-620*)
- Stick to topics listed
- No need to submit comments more than once
- Verbal and written comments carry the same weight
- Commission's decision based on facts in the record
- Comments are public information
- Must be received before deadline



# How to Learn More

## See all documents related to this project

- [mn.gov/puc](http://mn.gov/puc)
- Select *Search eDockets*
- Enter the year and the Docket Number
  - **15** is the year and **620** is the number
  - Select *Search*
- The list of documents will appear on the next page



# How to Learn More

## Project Mailing List

- ❑ Receive information about project milestones and opportunities to participate
  - Email or US Mail
  - Complete and return *Project Mailing List* card
  - Contact the Public Utilities Commission
    - [docketing.puc@state.mn.us](mailto:docketing.puc@state.mn.us)
    - 651-201-2204 or 1-800-657-3782



# How to Learn More

**Subscribe** to receive email notification when new documents are added to the Docket

1. [mn.gov/puc](http://mn.gov/puc)
2. Select *Subscribe to a Docket*
3. Type your email address
4. For *Type of Subscription*, select *Docket Number*
5. For *Docket Number*, select *YEAR* in the first box, type *NUMBER* in the second box
6. Select *Add to List*

\*Subscribing may result in a large number of emails



# How to Learn More

## Subscribe to Dockets

### Instructions

You may subscribe to receive electronic notification of documents filed before the MNI. You will receive electronic notification at the email address you provide below. You may

<b>Email Address:</b>	<input type="text" value="sample@abc.org"/>	*
<b>Type of Subscription:</b>	<input type="text" value="Docket Number"/>	*
<b>Docket Number:</b>	<input type="text" value="15"/> <input type="text" value="620"/>	*
<b>Description:</b>	<input type="text" value="Notice of Site Permit Application to construct Electric Power Plant."/>	

When your list of subscriptions to add is complete, click Save. A confirmation will be sent to you.  
**Important Note:** Your subscriptions will not be saved until you confirm your selections!



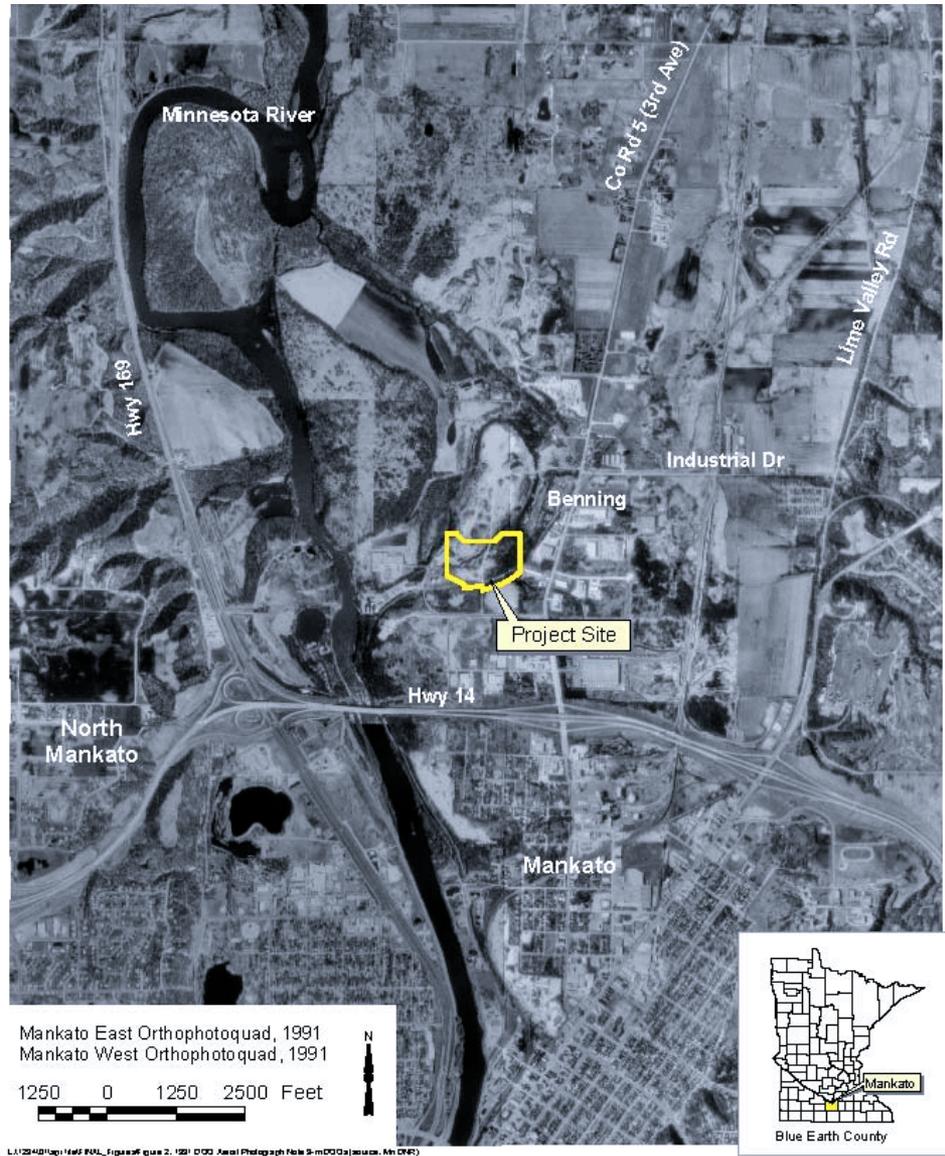
# PUC Project Contacts

Public Advisor  
Public Utilities Commission  
**Tracy M.B. Smetana**  
[consumer.puc@state.mn.us](mailto:consumer.puc@state.mn.us)  
Phone 651-296-0406  
Toll Free 1-800-657-3782

Energy Facilities Planner  
Public Utilities Commission  
**Tricia DeBleeckere**  
[tricia.debleeckere@state.mn.us](mailto:tricia.debleeckere@state.mn.us)  
Phone 651-201-2254

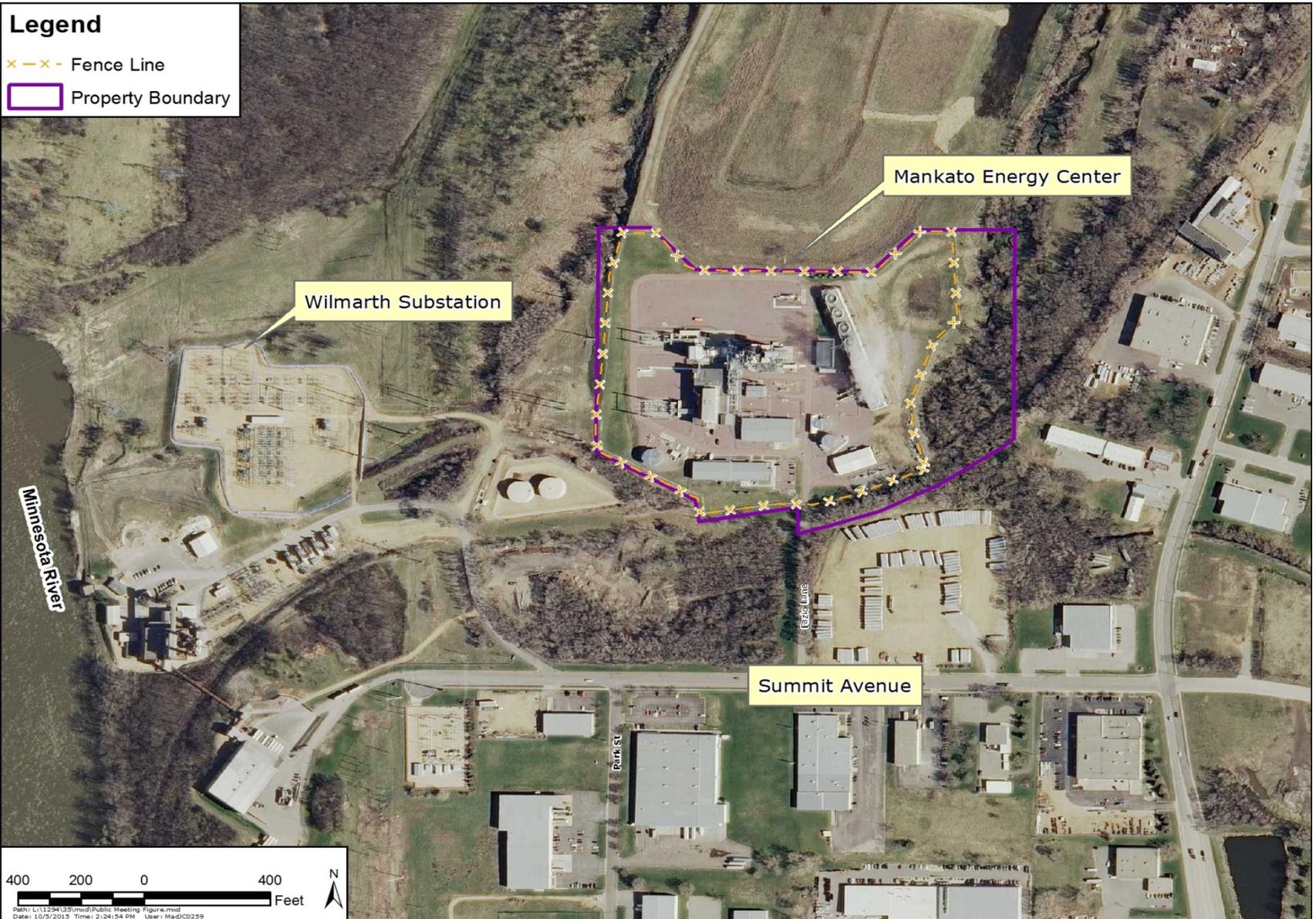
# Mankato Expansion

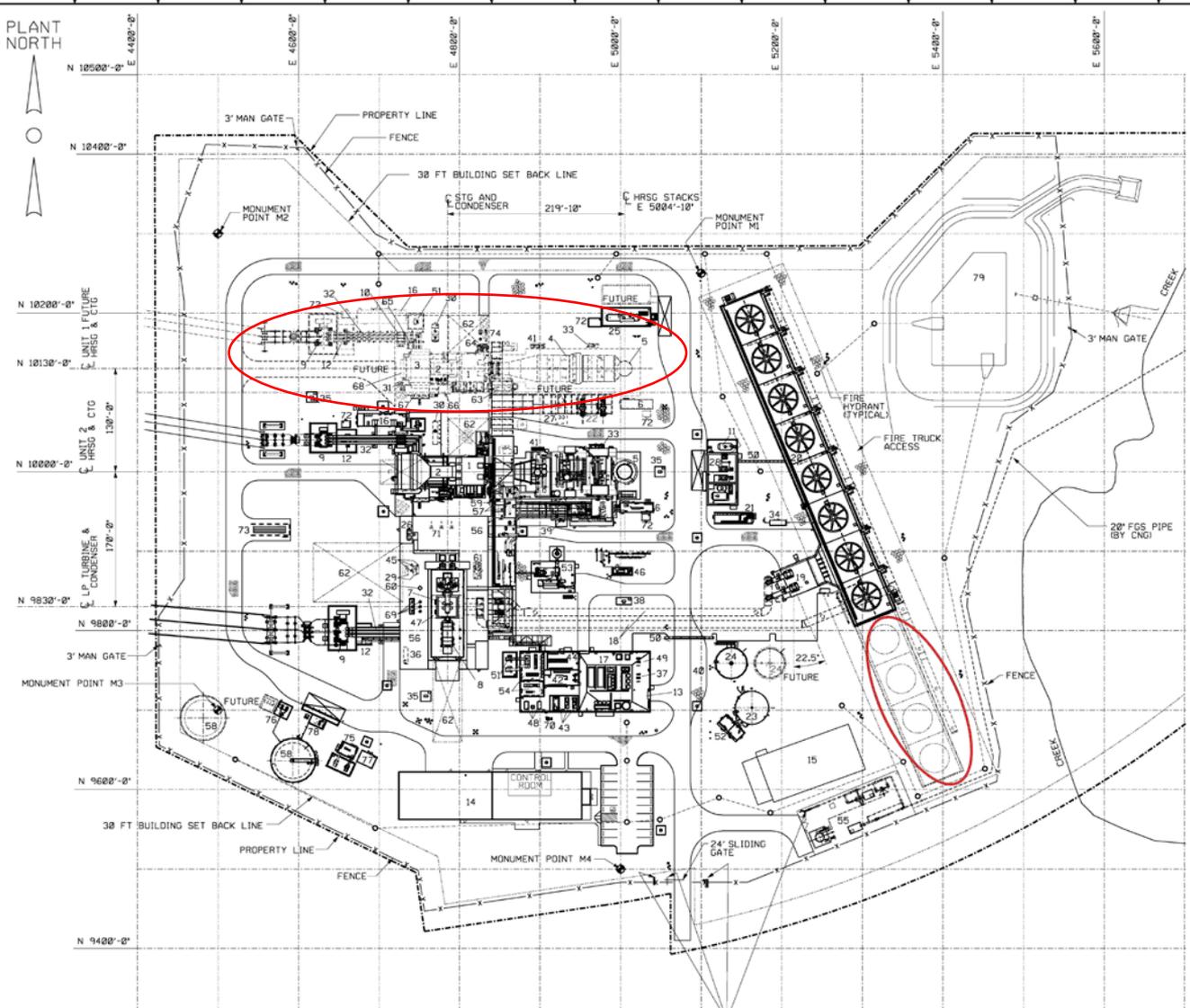
- 345 MW expansion of the existing Mankato facility under a PUC-approved contract with Northern States Power (Xcel Energy)
- Involves installation of an additional combustion turbine (CT) and heat recovery steam generator (HRSG), and expansion of the existing cooling tower
  - Existing steam turbine was oversized to accommodate expansion
  - New CT and HRSG will exclusively burn natural gas
- Utilizes existing site footprint in industrial area well-buffered from residential and commercial areas
- Utilizes existing offsite infrastructure (electrical transmission, gas and gray water)
- Recycles gray water from Mankato treatment plant with no direct intake or discharge impacts to Minnesota River
- Original Certificate of Need and Site Permit approvals included full project, including proposed expansion



### Legend

- ✕ - - ✕ Fence Line
- ▭ Property Boundary





**LEGEND**

1. COMBUSTION TURBINE
2. CT GENERATOR BELOW AIR INLET
3. CT AIR INLET
4. HRSG
5. HRSG STACK
6. CEM/HRSG POWER DISTRIBUTION CENTER
7. STEAM TURBINE
8. ST GENERATOR (HYDROGEN COOLED)
9. GENERATOR STEP-UP TRANSFORMER
10. CT GENERATOR CIRCUIT BREAKER
11. ACID STORAGE TANK AND FEED SKID
12. UNIT AUXILIARY TRANSFORMER
13. WATER TREATMENT & BOP ELECTRICAL CONTROL BLDG
14. ADMIN/MAINTENANCE WAREHOUSE/CONTROL ROOM BLDG
15. EXISTING WAREHOUSE BUILDING
16. CTG POWER DISTRIBUTION CENTER
17. WATER TREATMENT EQUIPMENT AREA
18. CIRCULATING WATER LINES
19. CIRCULATING WATER PUMPS
20. COOLING TOWER
21. COOLING TOWER POC
22. BOILER FEED PUMPS (ENCLOSED)
23. SERVICE / FIRE WATER STORAGE TANK
24. DEHN WATER STORAGE TANK
25. AMPHONIA STORAGE TANK
26. CLOSED COOLING WATER HEAD TANK
27. BLOWDOWN TANK & SUMP
28. COOLING TOWER CHEMICAL FEED ENCLOSURE
29. CLOSED CYCLE COOLING WATER PUMPS (GRADE)
30. FALSE START/WATER WASH TANK (UNDERGROUND)
31. WATER WASH SKID
32. 150 PHASE BUS DUCT
33. AMPHONIA INJECTION SKID
34. OIL/WATER SEPARATOR
35. OIL / WATER SUMP & PUMPS
36. FIRE VALVE STATION FOR STEAM TURBINE AREA & CSUT
37. SERVICE WATER PUMPS
38. CHEMICAL AREA SUMP & PUMPS
39. BLOWDOWN TANK SILENCER
40. DEMINERALIZED WATER TRAILER AREA
41. DUCT BURNER SKID
42. SAMPLE PANEL & LAB
43. CYCLE CHEMICAL FEED
44. STATION BATTERY ROOM
45. SLANG SIV COND & EXHAUST FANS MEZZ
46. FUEL GAS DOW POINT HEATER
47. CONDENSER
48. AIR COMPRESSORS & RECEIVER
49. DENON WATER PUMPS
50. PIPE TRENCH
51. LIST TRANSFORMER 4160-480 V
52. FIRE PUMP SKID ENCLOSURE
53. AUXILIARY BOILER
54. ELECTRICAL ROOMS
55. FUEL GAS PIPING AREA (BY ENG)
56. SITS LOWER ENCLOSURE
57. CT AIR INLET HEATING WATER PUMPS
58. FUEL OIL STORAGE TANK
59. CT AIR INLET WATER HEATER
60. STEAM TURBINE DRAIN TANK SILENCER
61. STB FUEL OIL TANK AND PUMPS
62. CRANE AREA / MAINTENANCE
63. ROTOR AIR COOLER
64. MAIN & PILOT FILTER SEPARATOR
65. FT AND METRIC CUBICLE
66. MECHANICAL PACKAGE
67. ELECTRICAL PACKAGE
68. STARTING PACKAGE (BELOW AIR INLET)
69. CONDENSATE PUMPS AND STRAINERS
70. SANITARY SEWER LIFT STATION
71. CCW HEAT EXCHANGER (PLATE & FRAME)
72. FIRE PROTECTION VALVE HOUSE
73. HYDROGEN STORAGE AREA
74. FUEL GAS HEATER/ KNOCKOUT DRAIN TR
75. FUEL OIL PIPING AND TRANSFORMER
76. FUEL OIL FORWARDING PUMPS AND FILTER
77. FIRE FOAM HOUSE
78. FUEL OIL UNLOADING STATION
79. SEDIMENT POND / STORMWATER BASIN

**LEGEND:**

- ▨ GRAVEL
- ▨ ASPHALT
- ▨ CONCRETE
- ⊠ ELECTRICAL MAN-HOLE
- STORM WATER CATCH BASIN

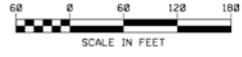
F 01-28-05	UPDATED.	TB	MBI	JJK
E 10-14-04	UPDATED.	TB	MBI	JJK
D 07-28-04	UPDATED.	TB	MBI	JJK
C 05-18-04	ISSUED FOR REVIEW & COMMENT	TB	MBI	JJK
B 07-28-04	PRELIMINARY	WT	MBI	JJK
G 07-26-05	ISSUED FOR INFORMATION	MC	MBI	JJK

REV	DATE	DESCRIPTION	DESIGNED BY	CHECKED BY	DATE
MS CARTER	05-14-04	PROFESSIONAL ENGINEER STAMP			
M BORDEN	05-14-04	PROJECT ENGINEER			
JD KADINGO	05-14-04	PROJECT ENGINEER			

MONUMENT POINTS	PLANT COORDINATES	BLUE EARTH COUNTY COORDINATES
M1	N.10250'-0", E.5100'-0"	
M2	N.10300'-0", E.4500'-0"	
M3	N.9700'-0", E.4500'-0"	
M4	N.9500'-0", E.5000'-0"	

FOR TRANSLATION BETWEEN PLANT COORDINATES & BLUE EARTH COUNTY COORDINATES SEE DRAWING MK-GEN-DE-C1-0001

**PIPING INTERFACE POINTS:**  
 6" PWS PIPE E.5041'-0 3/4", N.9490'-0 1/4", CL EL 93'-2 3/4"  
 2" FGS PIPE E.5042'-0 3/4", N.9490'-0 1/4", CL EL 93'-0 3/4"  
 2" SSW PIPE E.5057'-10", N.9490'-0 1/4", CL EL 89'-3"  
 20" RWS PIPE E.5106'-2", N.9487'-0", CL EL 93'-3 1/2"  
 10" WWC PIPE E.5107'-11", N.9487'-0", CL EL 93'-3 1/2"  
 20" FGS PIPE E.5232'-10 3/4", N.9574'-3 3/4", CL EL 102'-6"



WHL: F-1 Jul 01 12:21:09 2005

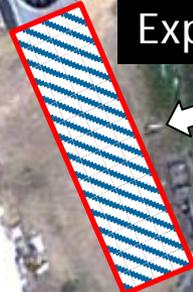
PEC-F3.E1.geng0001.dgn

# 2004 Site Plan Showing Design of Full Plant Including Expansion

New Combustion Turbine and HRSG



Cooling Tower Expansion



Mankato Energy Center Expansion

Image © 2011 GeoEye  
© 2011 Google

© 2010 Google

44°11'56.82" N 94°00'08.21" W elev 814 ft

Eye alt 2056 ft





## Mankato Energy Center Expansion Project Public Information and Scoping Meeting

Docket Number: IP6949/GS-15-620

Mankato, Minnesota  
October 13, 2015

Ray Kirsch, Environmental Review Manager  
Minnesota Department of Commerce  
Energy Environmental Review and Analysis

[raymond.kirsch@state.mn.us](mailto:raymond.kirsch@state.mn.us)

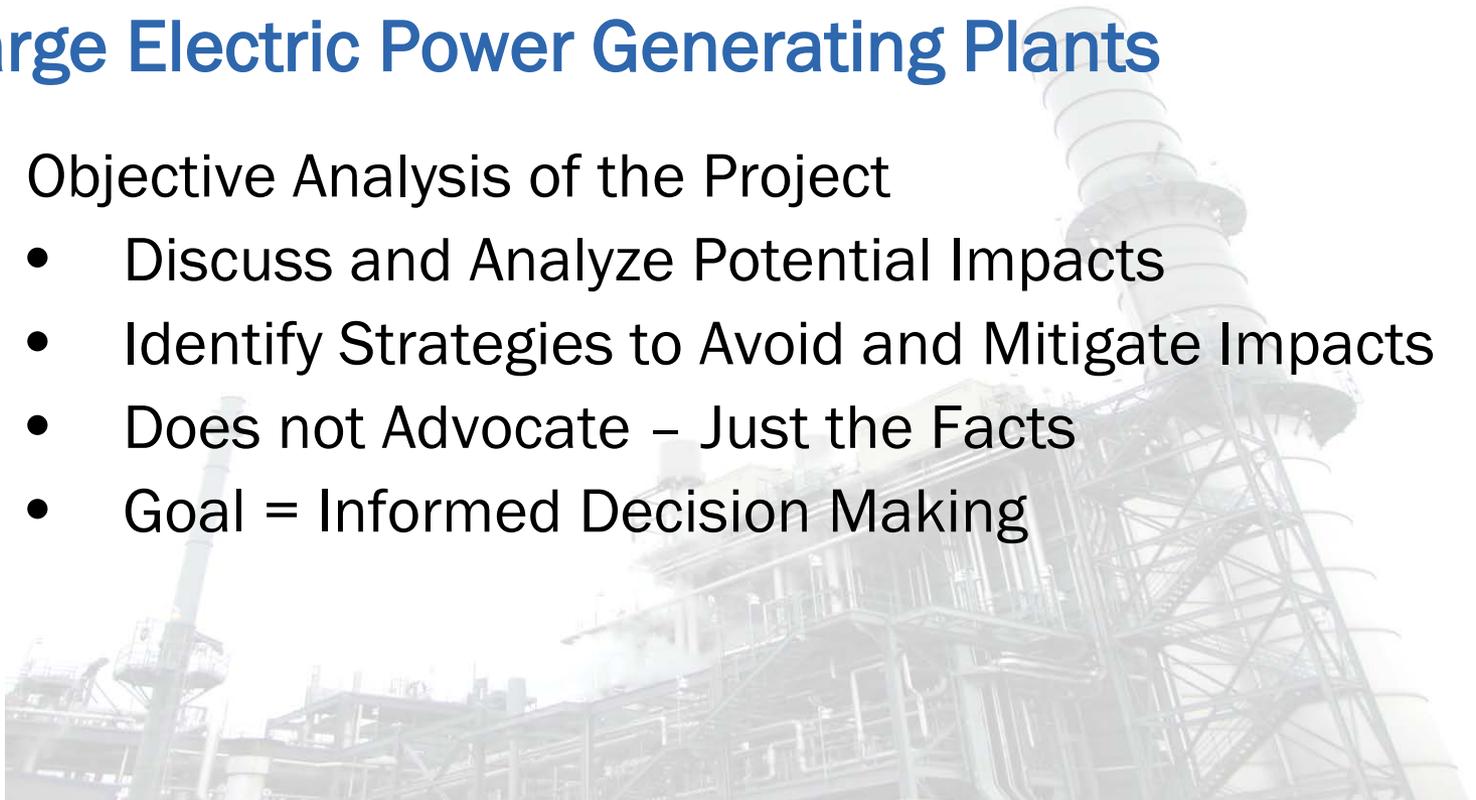
Phone: 651-539-1841

Toll Free: 1-800-657-3794

# Environmental Review

## Department of Commerce Conducts Environmental Review for Large Electric Power Generating Plants

- Objective Analysis of the Project
  - Discuss and Analyze Potential Impacts
  - Identify Strategies to Avoid and Mitigate Impacts
  - Does not Advocate – Just the Facts
  - Goal = Informed Decision Making



# Environmental Review

## Environmental Assessment

- An Environmental Assessment (EA) will be Prepared for the Mankato Energy Center Expansion Project
- First Step in Preparing the EA is Scoping
  - “Table of Contents”
  - What Do We Need to Know / Analyze
  - Input from Agencies, Local Governments, and the Public

# Environmental Review

## Scope of Environmental Assessment (EA)

- Potential Human and Environmental Impacts
- Strategies to Avoid and Mitigate Impacts



# Comments

## Comments on the Scope of the Environmental Assessment (EA)

- Verbal Comments at Tonight's Meeting
- Complete and Submit a Comment Sheet
- Comment On-Line  
<http://mn.gov/commerce/energyfacilities>
- Mail, Fax, or Email a Comment:
  - Ray Kirsch
  - Minnesota Department of Commerce
  - 85 7<sup>th</sup> Place East, Suite 500
  - St. Paul, MN 55101-2198
  - fax: 651-539-0109
  - [raymond.kirsch@state.mn.us](mailto:raymond.kirsch@state.mn.us)
- Comment Period Ends: **October 27, 2015**

# Comments

## Comments on the Scope of the Environmental Assessment (EA)

- Department of Commerce Website for the Mankato Energy Center Expansion Project

[www.mn.gov/commerce/energyfacilities/Docket.html?Id=34238](http://www.mn.gov/commerce/energyfacilities/Docket.html?Id=34238)

# Comments

## Comments on the Scope of the Environmental Assessment (EA)

- One Speaker at a Time
- Please State and Spell Your Name for the Court Reporter
- Please Limit Comments to a Few Minutes
- Maintain Respect for Others
- Direct Your Comments / Questions to the Scope of the EA

# Comments

## Comments on the Scope of the Environmental Assessment (EA)

- “Table of Contents”
  - What Do We Need to Know / Analyze
- Human and Environmental Impacts
- Strategies to Avoid and Mitigate Impacts