

# ▪ WELCOME ▪

TO THE WAPA OPEN HOUSE

**This is an Open House meeting  
being held to collect comments for  
WAPA's Environmental Assessment  
for the Upper Badlands Wind Development  
Proposed Project**

**Please take a moment to register and view  
the various informational boards.  
Proposed Project team members are  
available to answer any questions.**

**Comment forms and Proposed Project information  
are available from any Proposed Project  
Team Member.**



The page features four decorative squares at the corners: top-left and bottom-right are dark teal with orange borders, while top-right and bottom-left are light teal. A thin black line runs horizontally across the top and bottom, and vertically down the sides, connecting these squares. The background is a light blue gradient with a faint image of a white wind turbine tower and blades.

## ■ ABOUT US ■

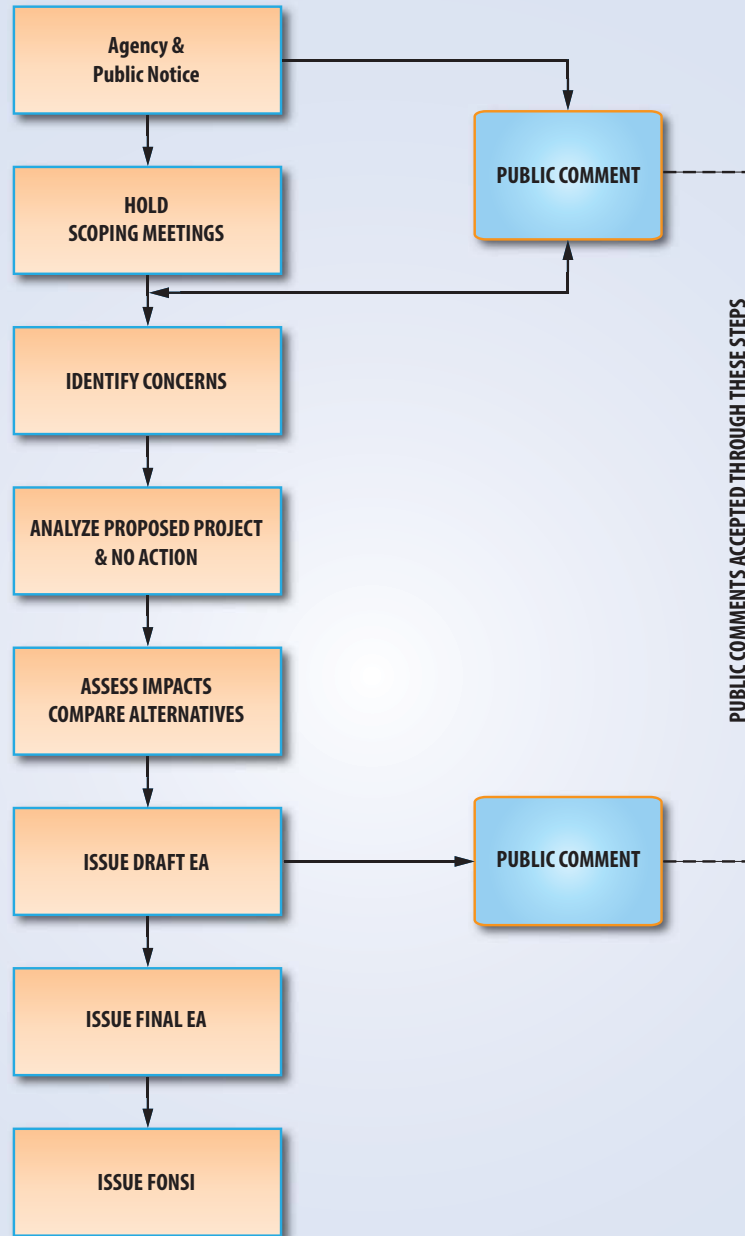
Upper Badlands Wind Development, LLC (UBWD) is a single entity developing the Proposed Project with funding from an outside investor. UBWD has signed several lease agreements with landowners within the Proposed Project footprint that allows for co-stewardship of the land. UBWD is working closely with Federal, State and Local agencies to comply with environmental and non-environmental laws, and UBWD has demonstrated a commitment to environmental stewardship.

## ■ ABOUT US ■

WAPA is a Federal power marketing agency within the Department of Energy that markets and delivers federal wholesale electric power to municipalities, rural electric cooperatives, public utilities, irrigation districts, Federal and State agencies, and Native American tribes in 15 Western and Central states. The Proposed Project would be located within WAPA's Upper Great Plains Region, which operates in North and South Dakota, most of Montana, and portions of Iowa, Minnesota and Nebraska. As a Federal agency, WAPA must comply with the provisions of the National Environmental Policy Act of 1969 (NEPA), U.S. Department of Energy NEPA Implementing Procedures, and the Council on Environmental Quality Regulations for Implementing the NEPA.



# EA PROCESS OVERVIEW





# ■ ENVIRONMENTAL SURVEYS ■

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**AVIAN SURVEYS** October 2017 - October 2019

- Point counts for eagles and passerine birds
- Eagle nest surveys

**SHARP-TAIL GROUSE LEK SURVEYS** May 2018

**GENERAL BIOLOGICAL SURVEYS** September 2018

**CULTURAL RESOURCE & WETLAND SURVEYS** Summer 2019





## PROGRAMMATIC ENVIRONMENTAL ■ IMPACT STATEMENT (PEIS) ■

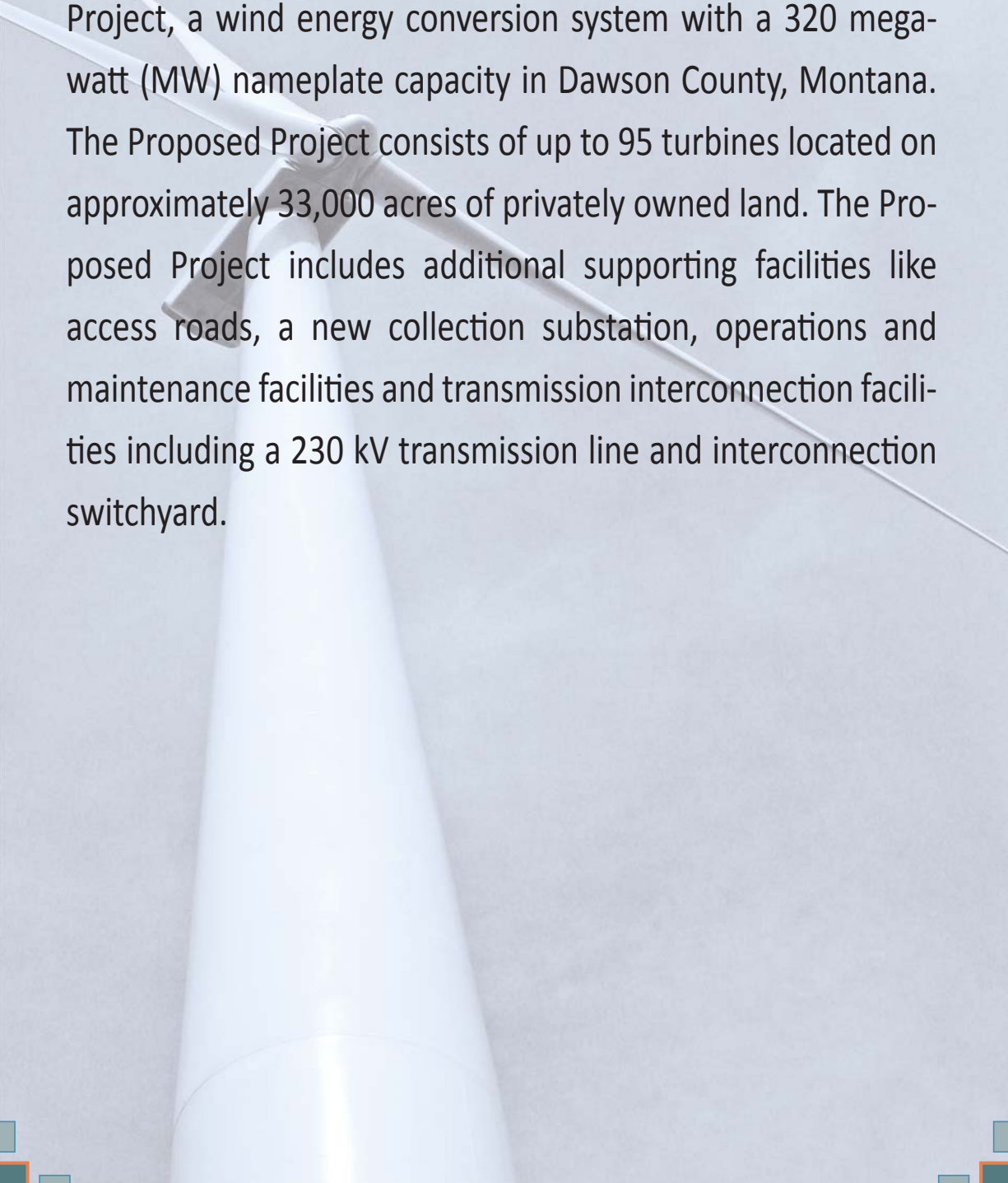
The Programmatic Environmental Impact Statement (PEIS) was jointly prepared between WAPA and the United States Fish and Wildlife Service (USFWS). The PEIS was developed to address Federal Action of interconnection request made to WAPA from wind energy projects or requests for placement of wind energy project components in areas managed by the USFWS as wetland or grassland conservation easement in the UGP Region. The UGP Region encompasses all or parts of the states of Iowa, Minnesota, Montana, Nebraska, North Dakota and South Dakota.

The PEIS assesses environmental impacts associated with wind energy facilities and identifies Best Management Practices (BMP's) that are common to the UGP region that avoid or minimize impacts from the Proposed Project to the environment. The PEIS allows developers that accept BMP's, along with evaluation processes and conservation measures proposed in the PEIS, to complete an Environmental Assessment that tiers off analysis in the PEIS.





## PROPOSED ■ PROJECT DESCRIPTION ■



Upper Badlands Wind Development, LLC (UBWD) proposes to construct the Upper Badlands Wind Development Proposed Project, a wind energy conversion system with a 320 megawatt (MW) nameplate capacity in Dawson County, Montana. The Proposed Project consists of up to 95 turbines located on approximately 33,000 acres of privately owned land. The Proposed Project includes additional supporting facilities like access roads, a new collection substation, operations and maintenance facilities and transmission interconnection facilities including a 230 kV transmission line and interconnection switchyard.



## ■ PURPOSE and NEED ■

WAPA's purpose and need is to consider and respond to the Proposed Project's interconnection request in accordance with the SPP Tariff and the Federal Power Act. The interconnection to WAPA's transmission system is a Federal action under the National Environmental Policy Act (NEPA). Upper Badlands Wind Development, LLC (UBWD) will commission an Environmental Assessment (EA) tiered to the analysis conducted in the Upper Great Plains (UGP) Wind Energy Final Programmatic Environmental Impact Statement (PEIS).


The EA will analyze two alternatives, the Proposed Project Alternative and a No Action Alternative. WAPA will evaluate the EA to determine a Finding of No Significant Impact (FONSI) for the Proposed Project or not approve the interconnection Agreement under the No Action Alternative.





# PROPOSED PROJECT SITING PRINCIPLES

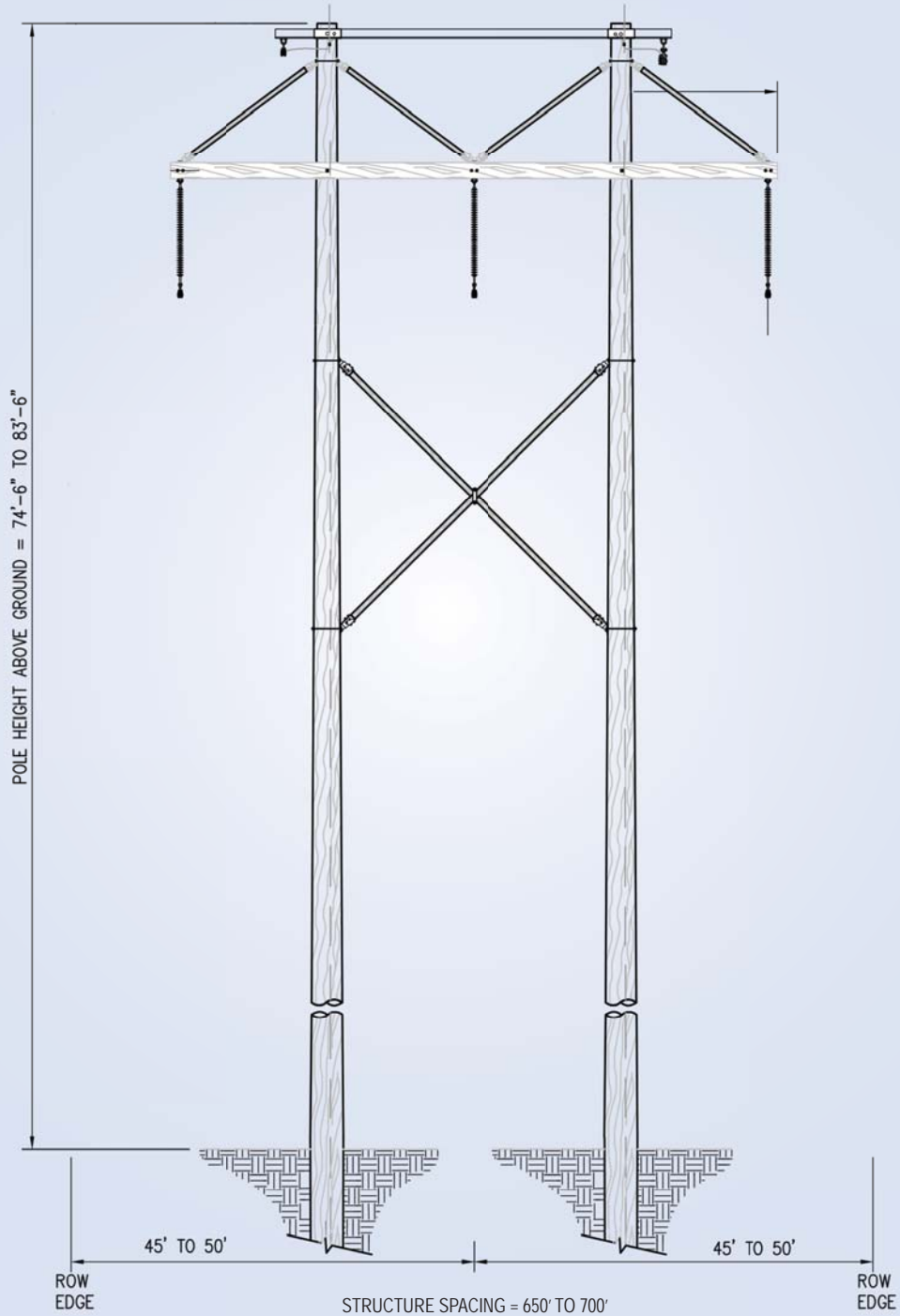
## TURBINES

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- Identify wind potential
  - Research land availability and community support
  - Minimize impacts on existing roads, residences, and other encumbrances
  - Avoidance of sensitive wetland, biological and cultural resources
  - Identify appropriate access conditions
  - Evaluate aviation compatibility
  - Consider regulatory needs

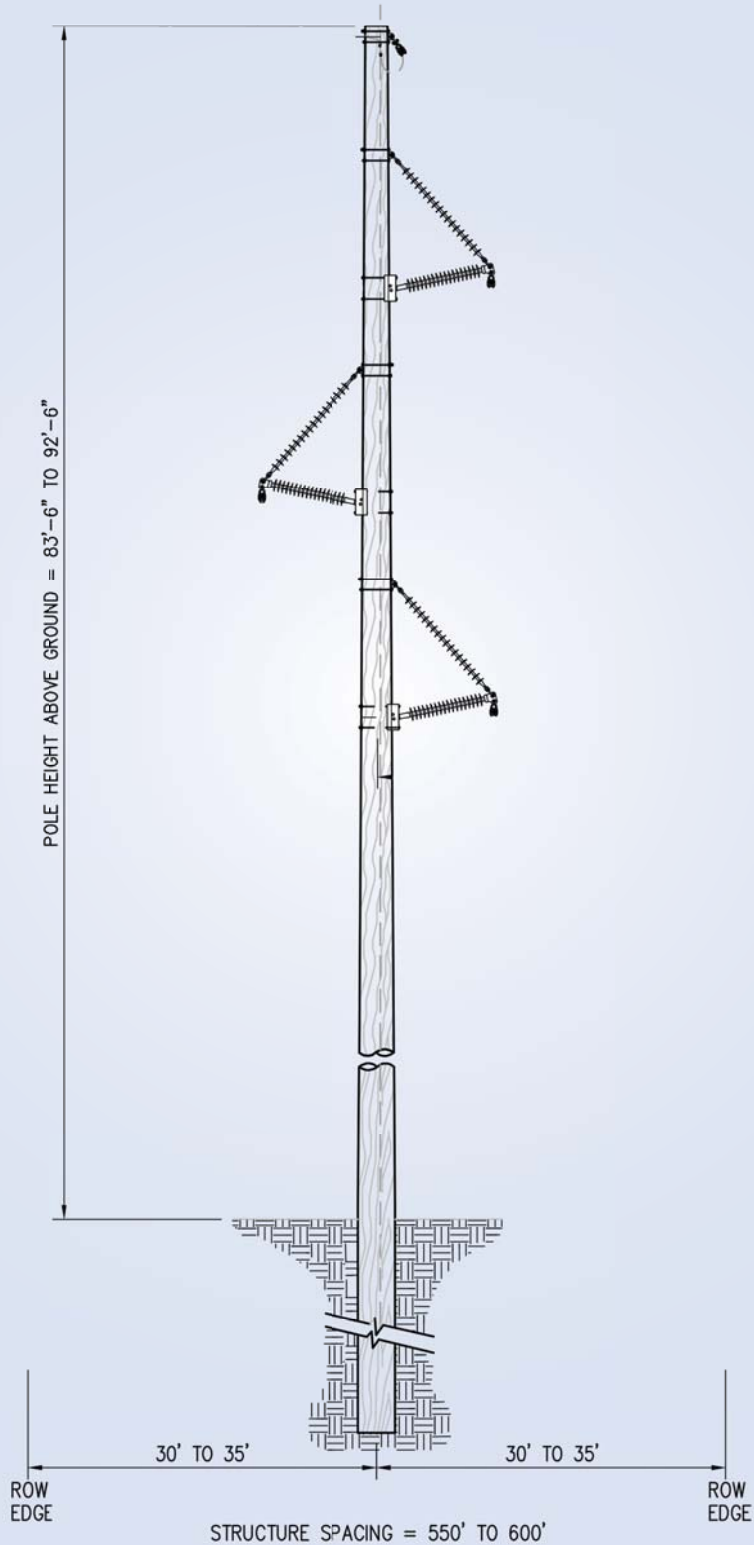
## TRANSMISSION LINE

- Minimize length
- Minimize angles and points of intersection
- Minimize impacts to existing land use
- Minimize environmental impacts
- Consider regulatory needs
- Consider FAA height restrictions
- Evaluate right of way availability
- Describe engineering feasibility
- Consider access constraints

# TYPICAL 230 kV H-FRAME TRANSMISSION STRUCTURE



# TYPICAL 230 kV WOOD POLE TRANSMISSION STRUCTURE



# TYPICAL WIND TURBINE

