

NPPD's Approach to Utility Scale Wind Development



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Manager**

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Kearney, NE



Nebraska Public Power District

"Always there when you need us"

Presentation Take-Aways

1. NPPD is supportive of wind development for Nebraska load.
2. NPPD has developed wind over the last decade and has plans to add wind over the next decade.
3. Even though NPPD is ineligible for Production Tax Credits, NPPD has an approach to minimize the short-term rate impact while providing some risk mitigation.

Presentation Overview

- ✓ **Public Power Principles**
- ✓ NPPD's Role in Wind Development
- ✓ NPPD's Pace in Wind Development
- ✓ NPPD's Future Plans with Wind Development
- ✓ NPPD's PPA Model using an RFP Process

Public Power Principles

- ✓ Nebraskans are the owners and customers of our public power system
 - You have a voice
 - Board sets direction
 - Keep rates low
 - Keep reliability high
 - Keep an eye on potential carbon legislation
- ✓ How are we doing?
 - Nebraska has 5th lowest electric rates in the nation at 6.51cents/kWh (Source: DOE and EIA, 2008)
 - NPPD continues to meet reliability goals (generation, transmission)

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NPPD's Role in Wind Development

✓ Described as both leading and cooperative

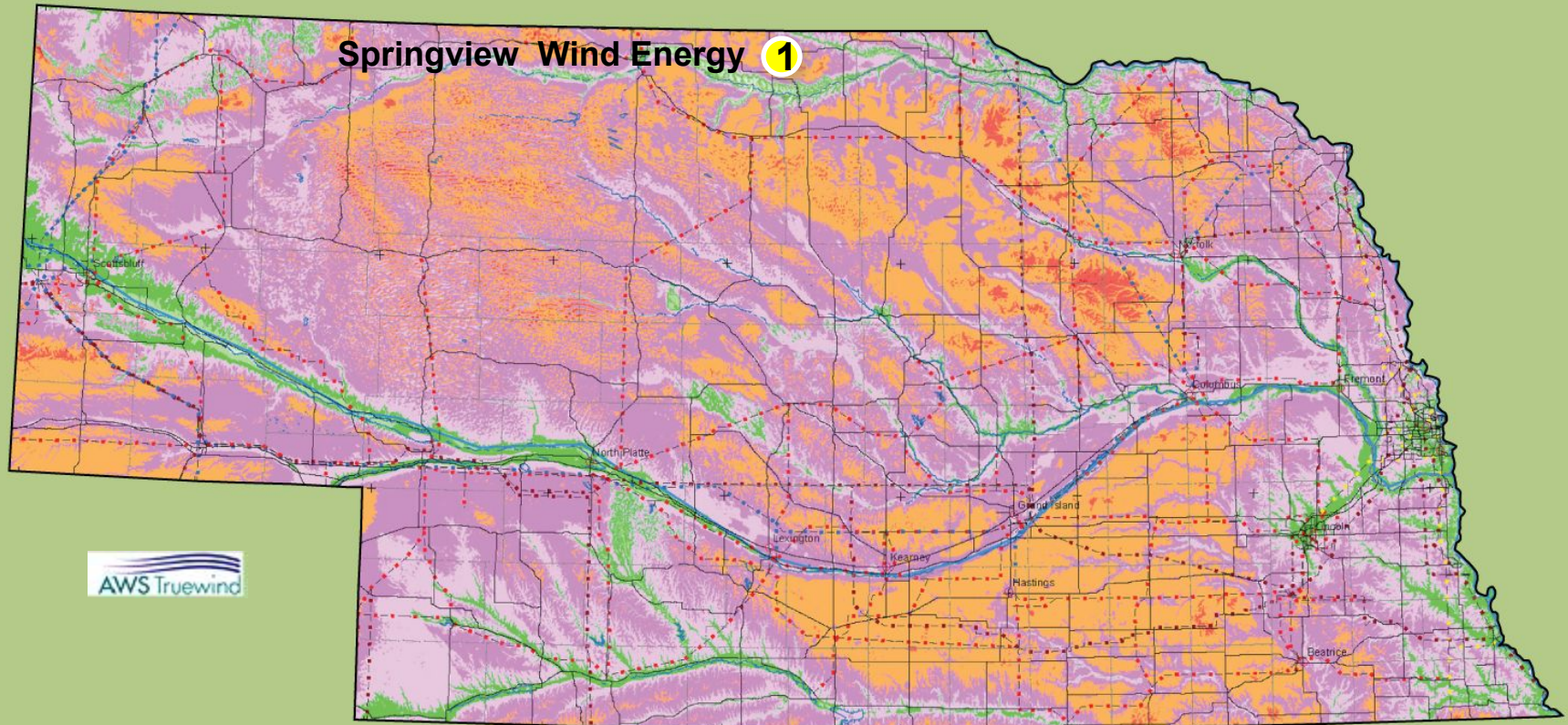
Given opportunities of wind...

- ✓ Mostly Class 4 wind and a lot of Class 5 Wind (Nebraska is ranked between 4th and 6th for potential)
- ✓ Lower CO2 emissions
- ✓ Income opportunities for landowners
- ✓ Jobs created in rural Nebraska
- ✓ Potential attraction of manufacturers to the state
- ✓ Wind power can be “distributed generation”
- ✓ Very minimal amount of waste/no water

Given the challenges of wind...

- ✓ Competitive disadvantage from tax credits (Private developers get 2.1 cents/kWh)
- ✓ New wind is higher priced than coal generation. Addition of new wind results in a higher short-term rate impact
- ✓ Transmission designed and built for Nebraskans/not rest of the country
- ✓ Wind Farm siting concerns – Endangered species, air traffic, etc.
- ✓ Does Nebraska need more generation capacity?
- ✓ Non-dispatchable (not available all the time, we cannot turn wind on)

Public Power Involved Wind Development in Nebraska

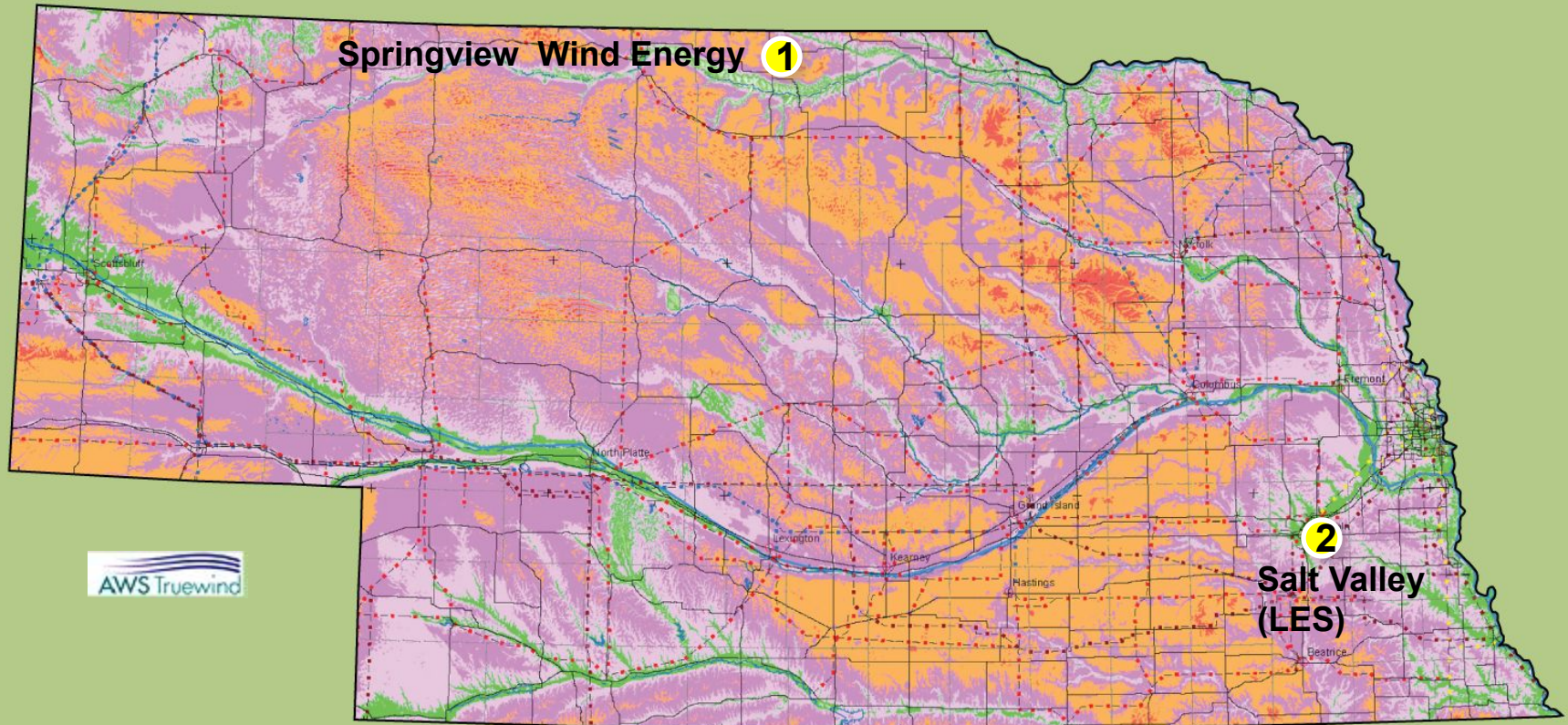


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414.48 Total MW

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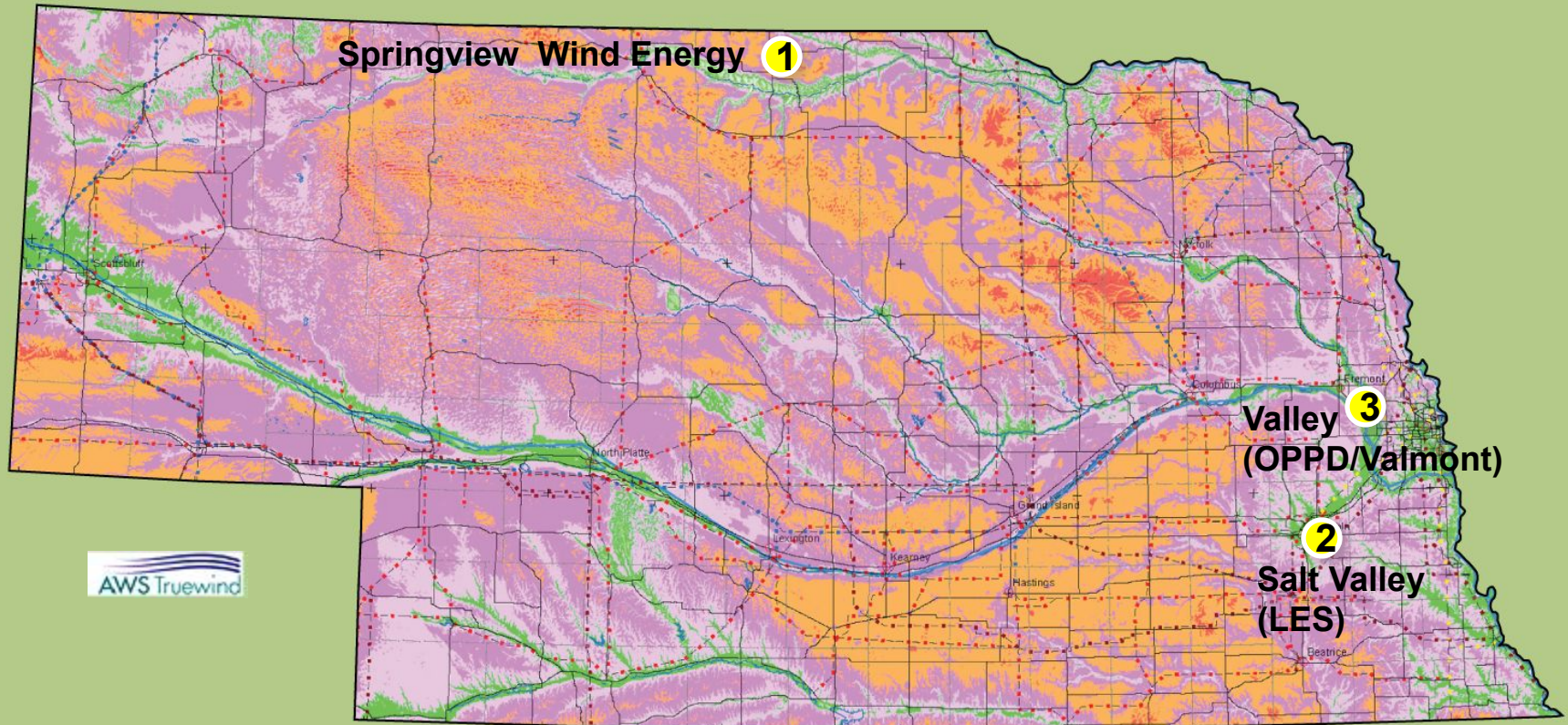


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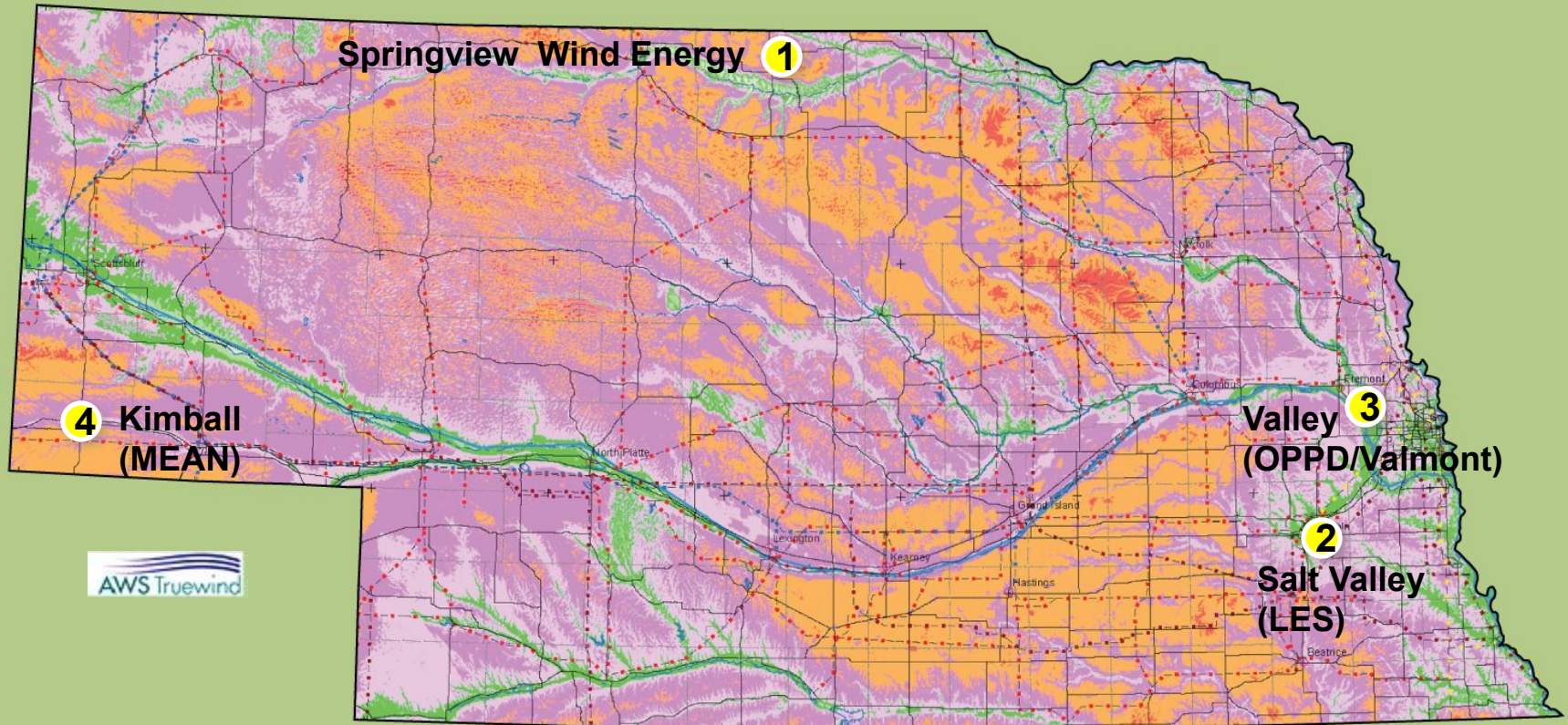


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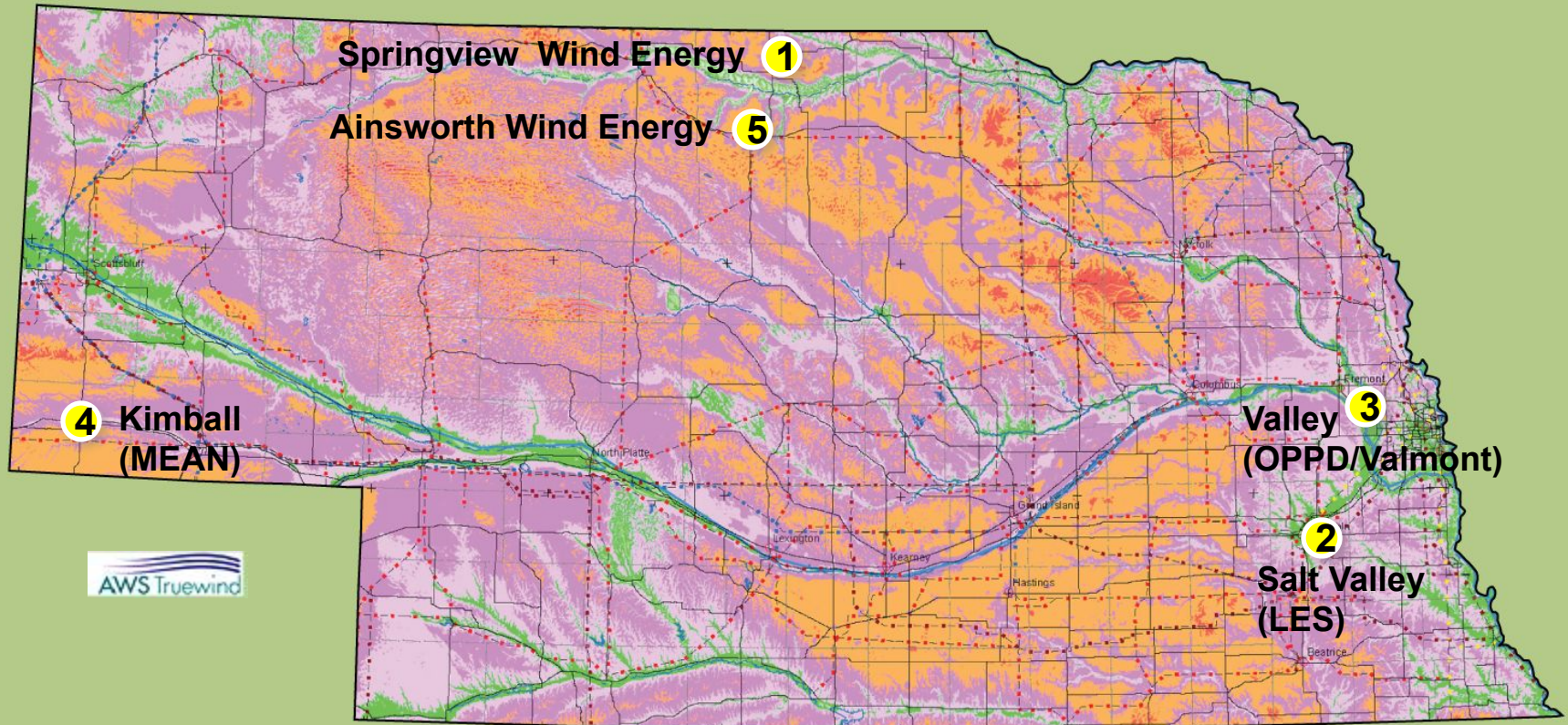


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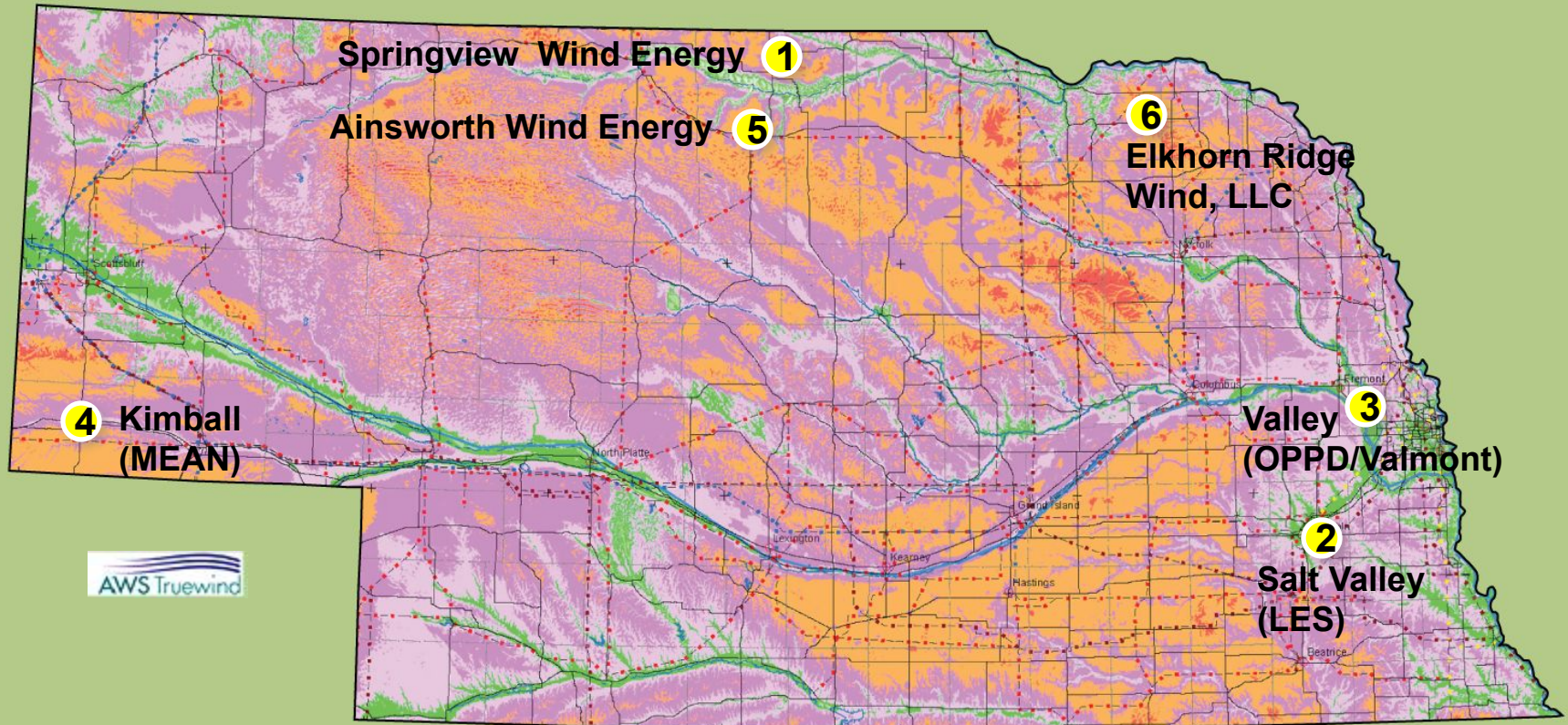


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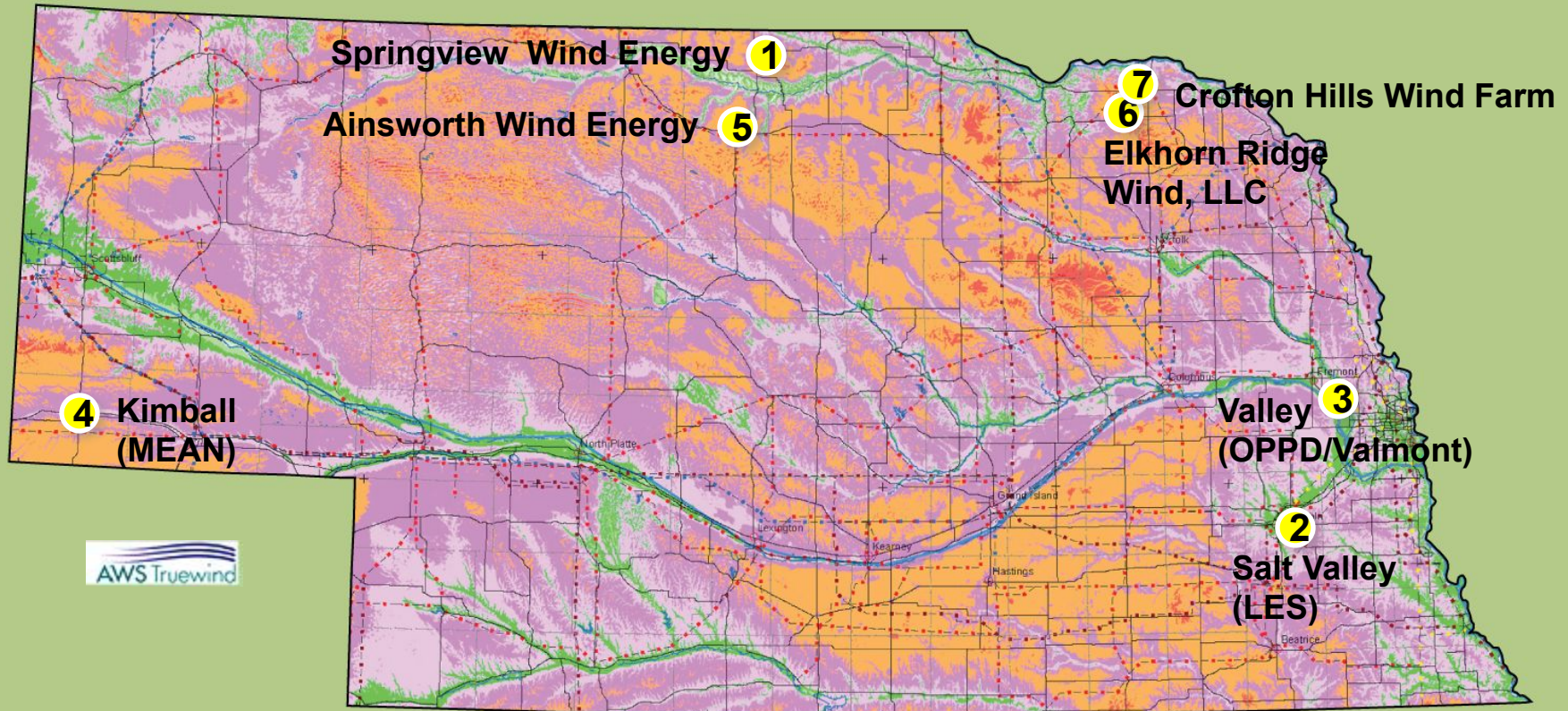


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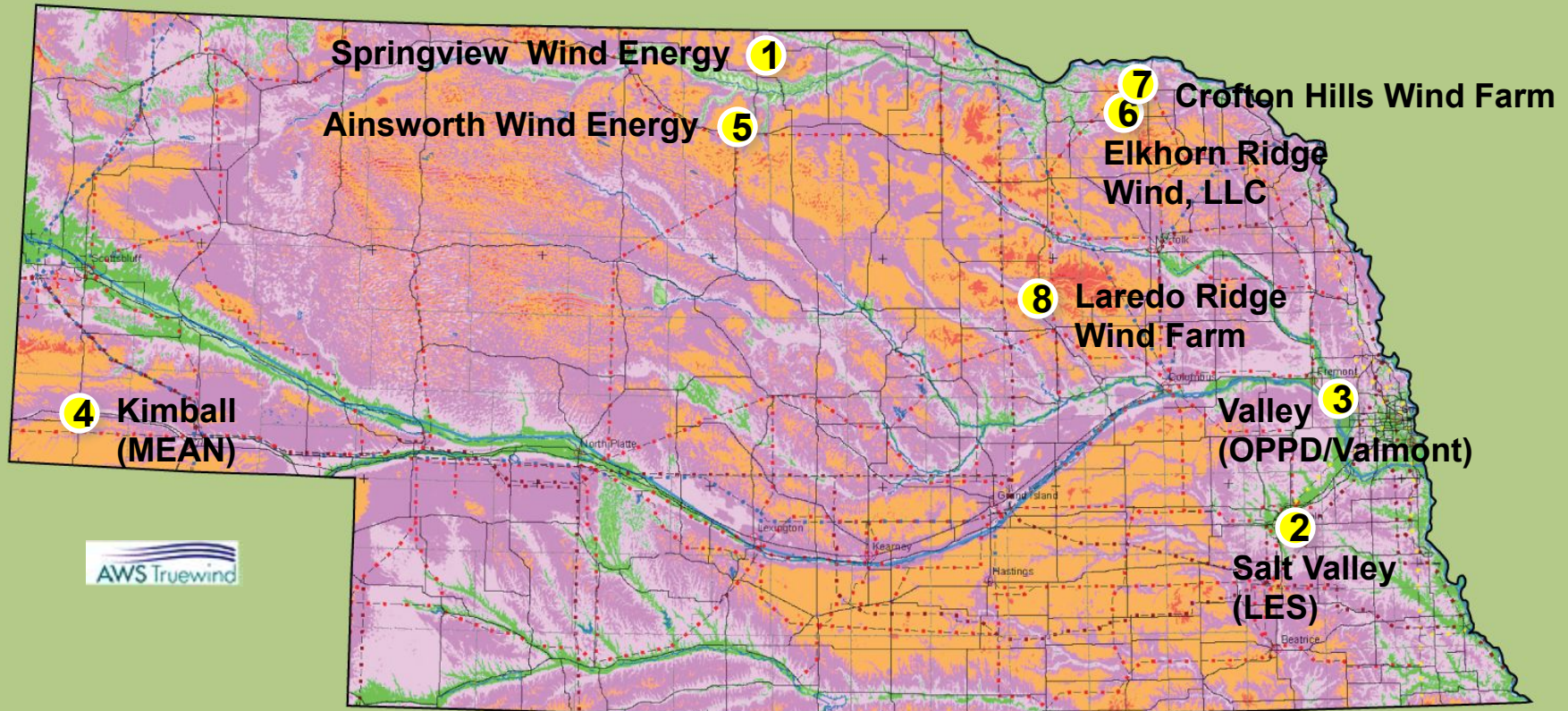


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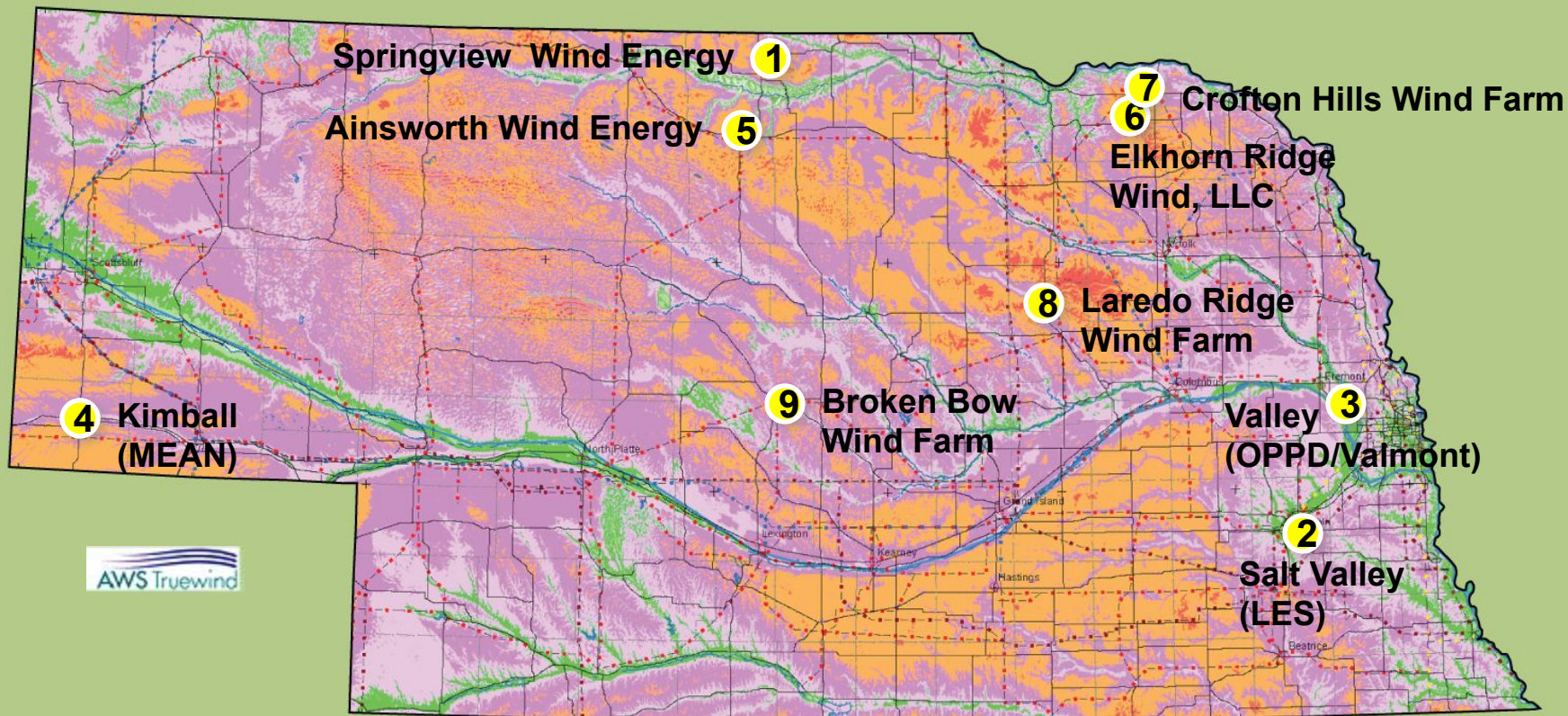


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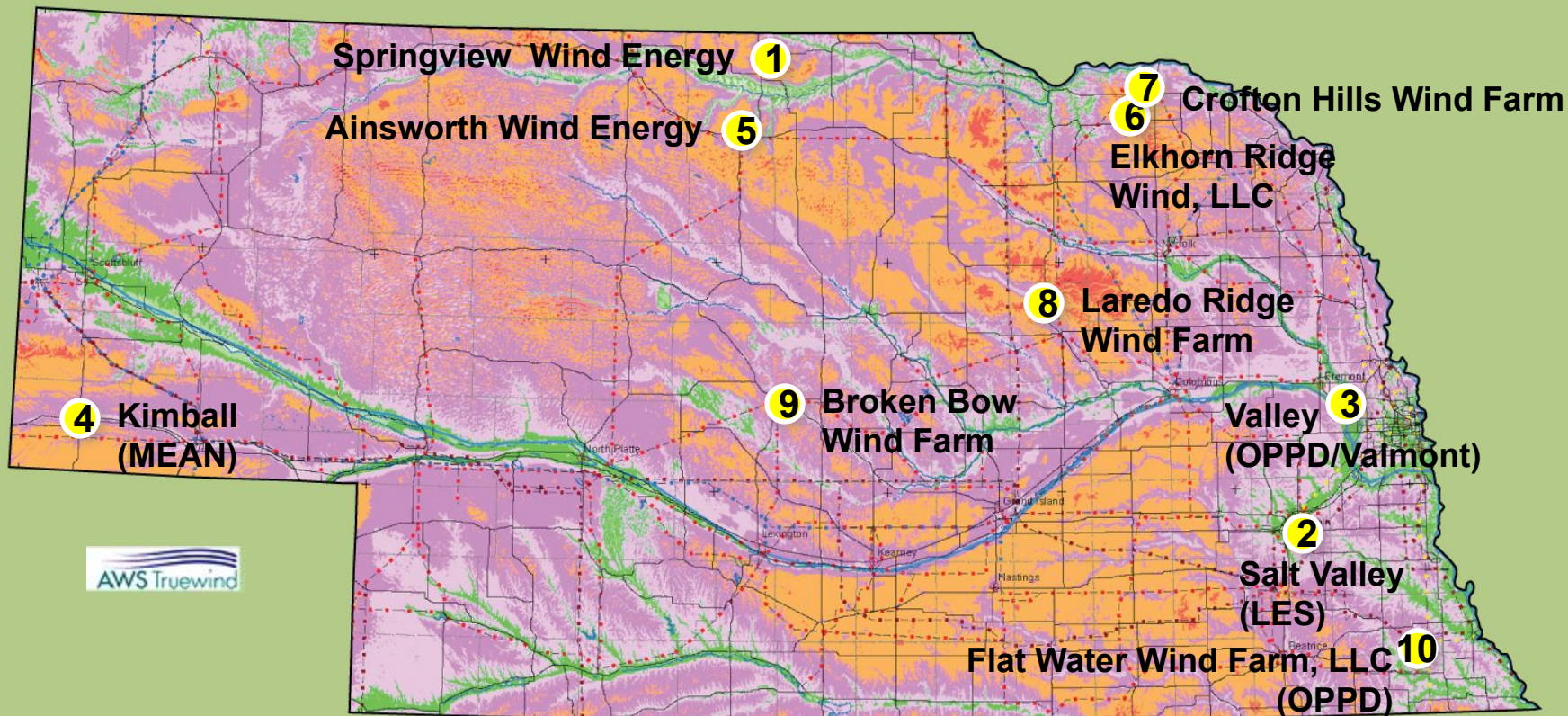


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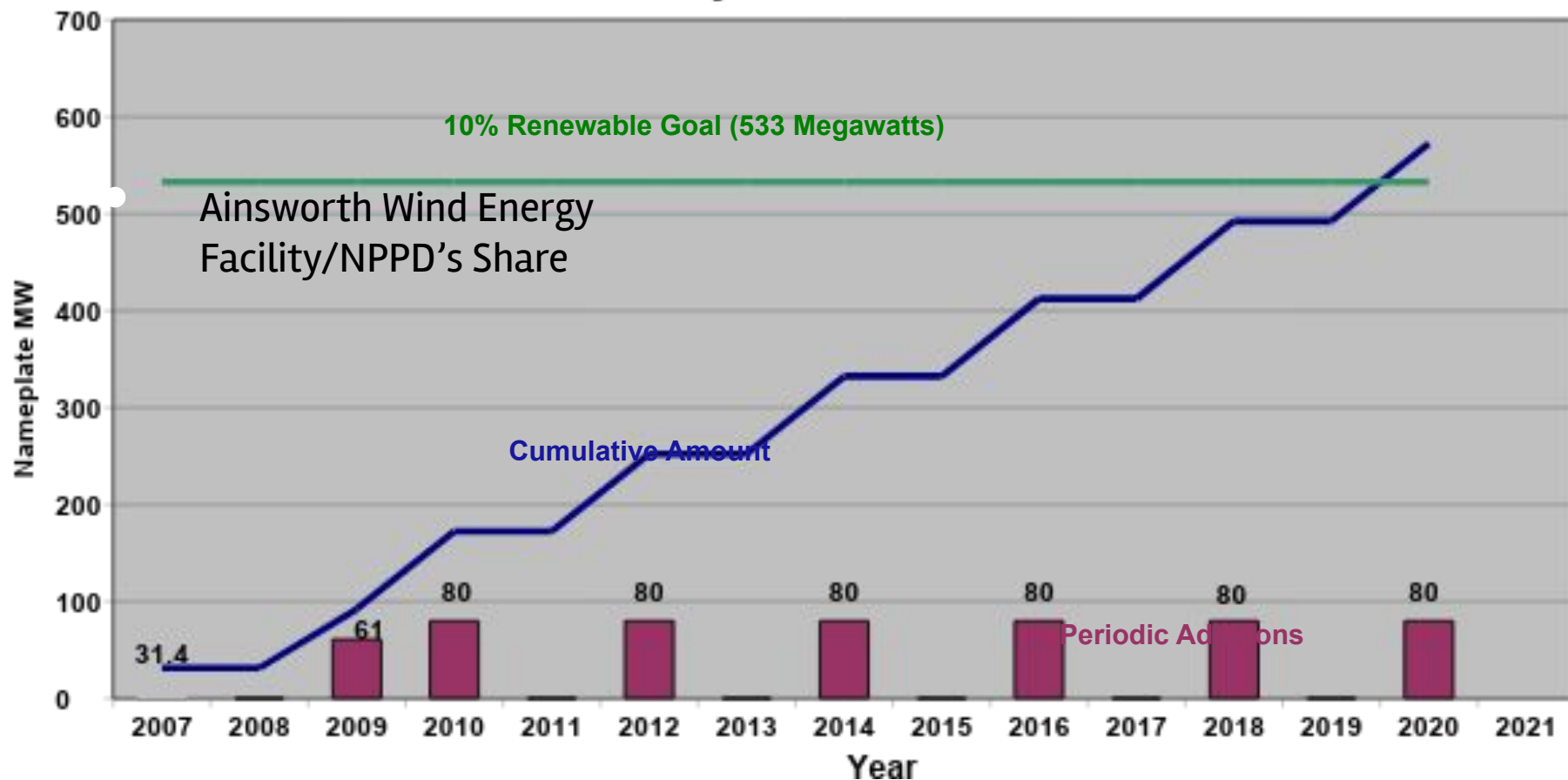
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NPPD's Pace in Wind Development

✓ Described as “prudent”

NEBRASKA PUBLIC POWER DISTRICT Wind Generation Addition Plan to Meet 10% Renewable Goal by 2020



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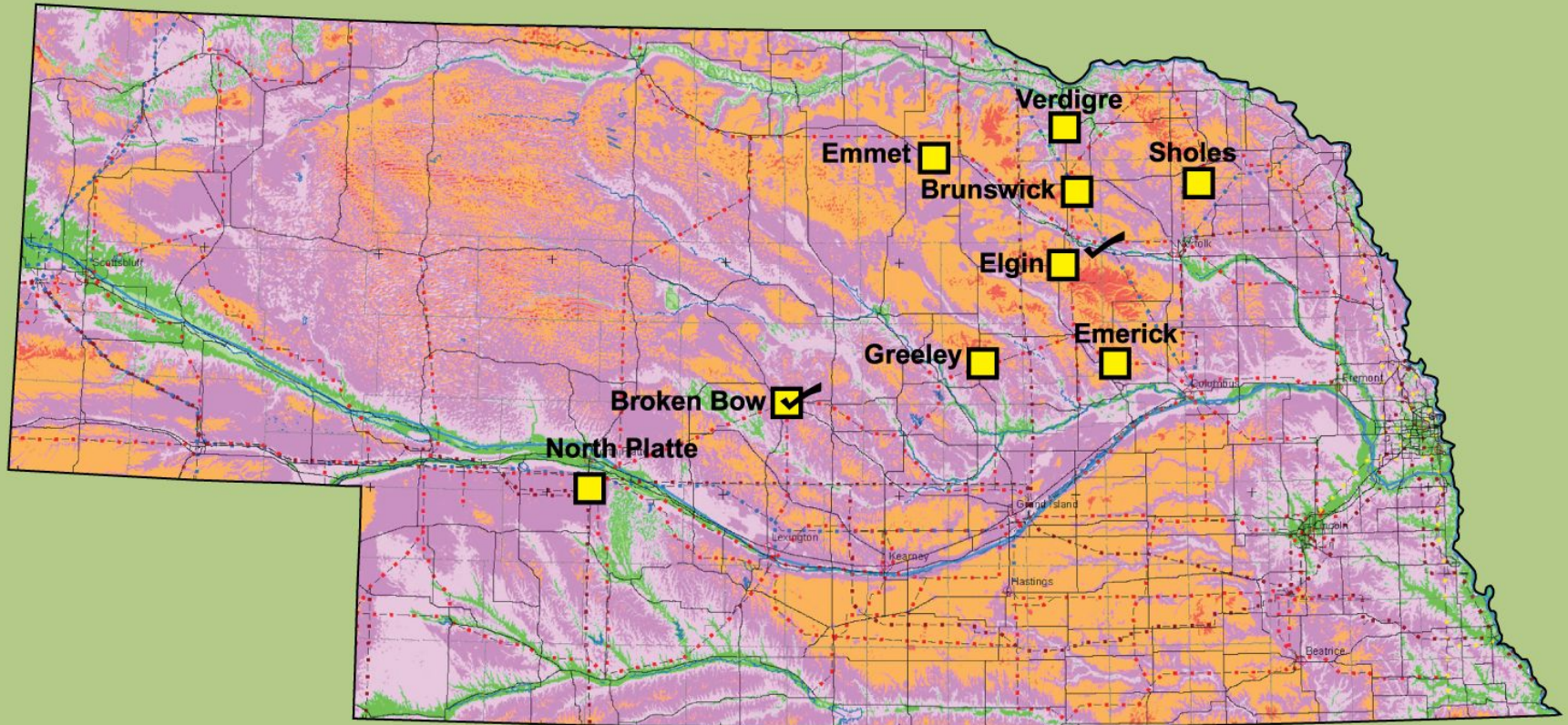
NPPD's Future Plans with Wind Development

- ✓ Have 72 MW of wind installed today
- ✓ Have 122 MW of wind planned for next 2 years
- ✓ Difference: (533 MW – 194 MW = 339 MW*)
- ✓ Positioned to add more wind generation, as directed by the NPPD board
 - Have the best wind sites “RFP ready” for wind developers

Note: Interested landowners are invited to attend tomorrow morning's session entitled “Landowners issues, legal rights, & landowner associations”

* Can be any type of renewable, not just wind

NPPD's Wind Monitoring Sites in Nebraska



- WIND MONITORING SITES
- ✓ PLANNED WIND DEVELOPMENT

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- ✓ **NPPD's PPA Model using an RFP Process**

NPPD's PPA Model using an RFP Process

- ✓ Methodical way to minimize the short-term rate impact on ratepayers
- ✓ Instead of building, owning and operating wind farms, NPPD buys power through Power Purchase Agreements (PPA) from private wind developers (the recipients of the Federal Production Tax Credits (PTC))
- ✓ The Process
 - NPPD selects project area for development (4 point test)
 - NPPD issues a Request For Proposal (RFP) to developers for competitive and fair bids
 - NPPD selects developer based on bids and credentials and negotiates final PPA

NPPD's PPA Model using the RFP Process (cont'd)

- √ NPPD & ratepayers benefit
 - Developer takes on financial and operation risk (pay only for power output)
 - Predictable wind pricing for 20 years
 - Diversified fuel (wind) is a hedge as other fuel costs increase
 - Addresses potential climate change legislation

Presentation Take-Aways

1. NPPD is supportive of wind development for Nebraska load.
2. NPPD has developed wind over the last decade and has plans to add wind over the next decade.
3. Even though NPPD is ineligible for Production Tax Credits, NPPD has an approach to minimize the short-term rate impact while providing some risk mitigation.

Questions?

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