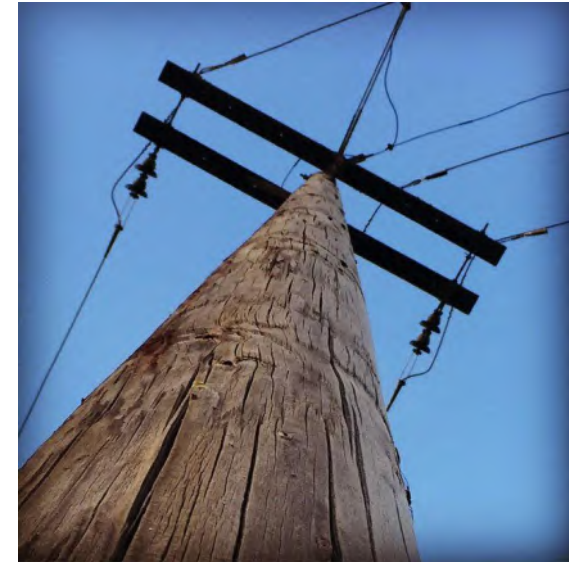


Oregon Department of **ENERGY**

Energy Facility Siting
Council Meeting

Virtual Webinar

August 27, 2021



Opening Items:

- Call to Order
- Roll Call
- Announcements

Announcements:

- Reminder that this meeting is being held in it's entirety via teleconference and webinar.
- Reminder to Council and to anyone addressing the Council to please remember to state your full name clearly, and no not use the speakerphone feature, as it will create feedback.
- You may sign up for email notices by clicking the link on the agenda or the Council webpage.
- You are also welcome to access the online mapping tool and any documents by visiting our website.

Announcements continued:

- Please silence your cell phones
- Please use the “Raise Your Hand” feature in Webex to speak during the public comment period, or press *3 to raise your hand if you are participating by telephone.
- Energy Facility Council meetings shall be conducted in a respectful and courteous manner where everyone is allowed to state their positions at the appropriate times consistent with Council rules and procedures. Willful accusatory, offensive, insulting, threatening, insolent, or slanderous comments which disrupt the Council meeting are not acceptable. Pursuant to Oregon Administrative Rule 345-011-0080, any person who engages in unacceptable conduct which disrupts the meeting may be expelled.

Agenda Item A (Action Item & Information Item)

Consent Calendar

August 27, 2021

- July Council Meeting Minutes
- Council Secretary Report

Agenda Item B (Action Item)

Boardman to Hemingway Transmission Line – Review of Motion By Ms. Irene Gilbert to Remove Contested Case Hearing Officer

August 27, 2021

Jesse Ratcliffe, Oregon Department of Justice Senior Assistant Attorney General

Oral Comment

- Ms. Irene Gilbert
- Idaho Power Company

Council Questions/Deliberation



OREGON
DEPARTMENT OF
ENERGY

**EFSC Meeting
On Break -
Meeting Resumes at
10:05 a.m.**



Agenda Item C (Action Item)

Boardman to Hemingway Transmission Line – Review of Interlocutory Appeal by Mr. Michael McCallister

August 27, 2021

Jesse Ratcliffe, Oregon Department of Justice Senior Assistant Attorney General

Oral Comment

- Mr. Michael McAllister
- Idaho Power Company
- Oregon Department of Energy

Council Questions/Deliberation

Agenda Item D (Information Item)

Project Updates

August 27, 2021

Project Leads, ODOE

Projects Under Review

Applications for Site Certificate

- Bonanza Energy Facility
- Nolin Hills Wind Power Project
- Port Westward Renewable Diesel Project (Exemption Request)
- Wagon Trail Solar Project

Requests for Amendment

- Eugene to Medford Transmission Line
- Stateline Wind Project
- Boardman Solar Energy Facility

Bonanza Energy Facility

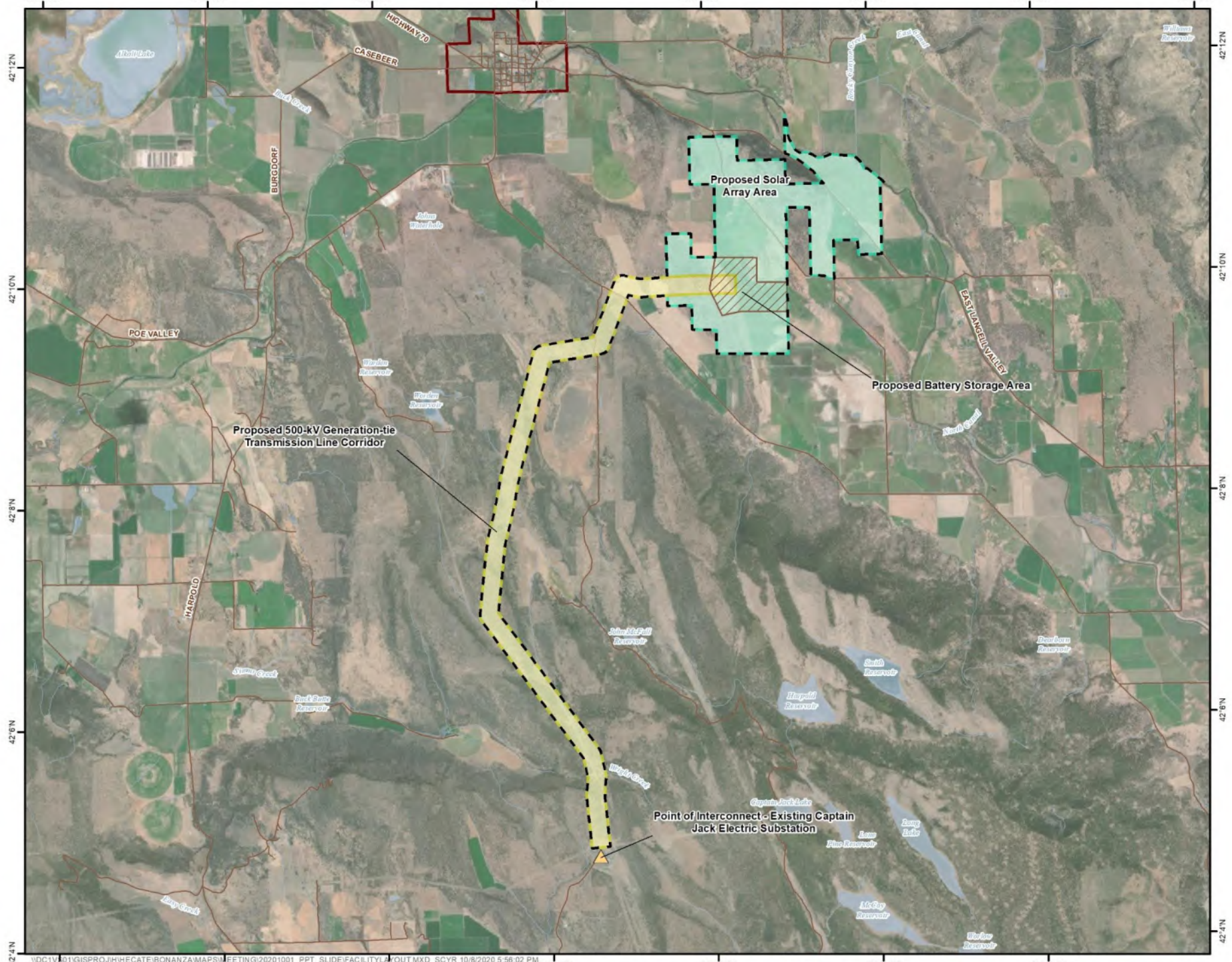
Proposal: 150 to 300 MW solar photovoltaic energy generation facility

Site Boundary: 2,733 acres (4.2 sq. miles)

Location: Southeast Klamath County, near Bonanza

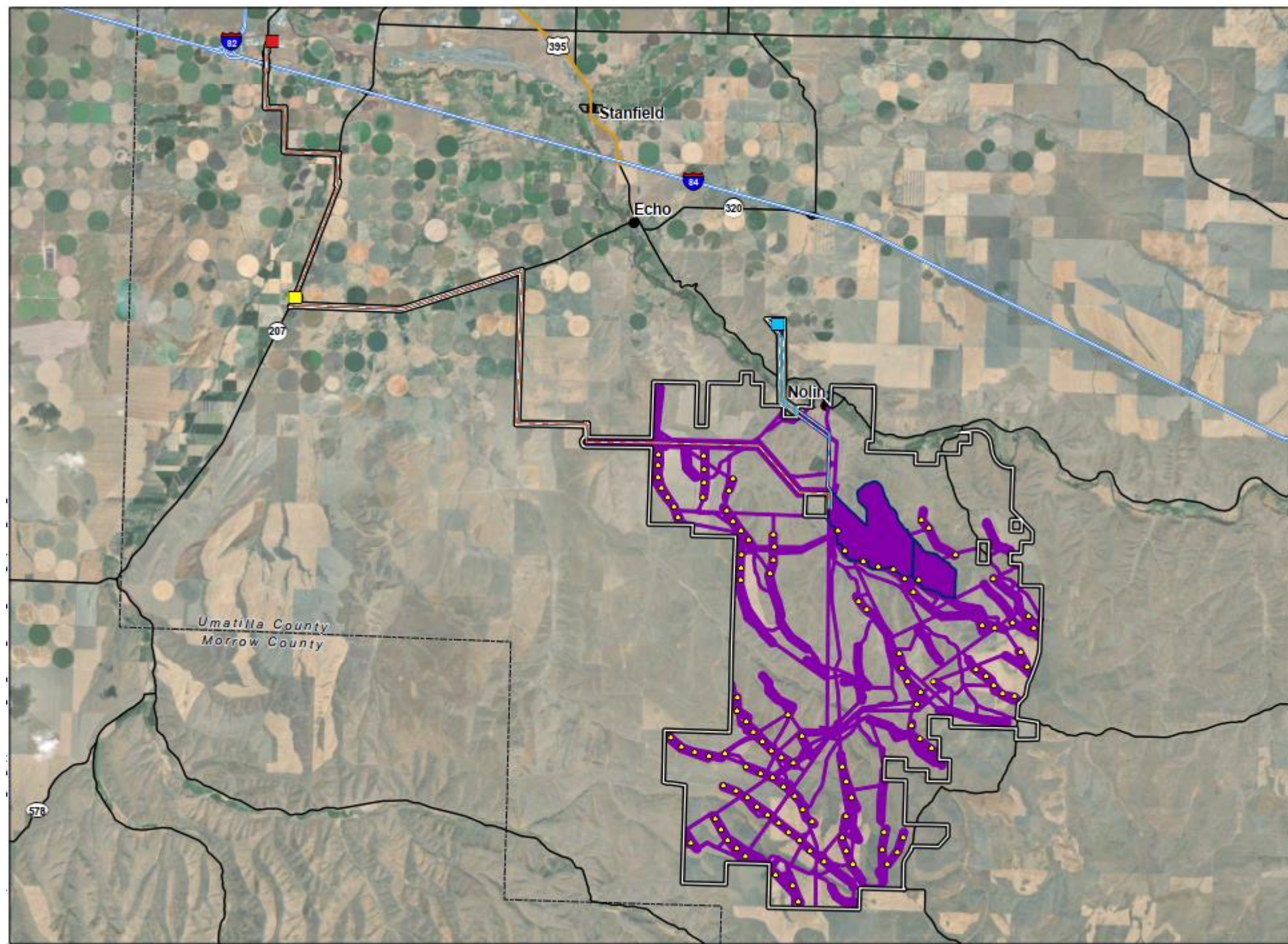
Applicant: Hecate Energy Bonanza LLC (Hecate Energy NAF LLC)

Status: Preliminary ASC anticipated in late 2021



Nolin Hills Wind Power Project

| | |
|-----------------------|---|
| Proposal: | 600 MW wind and solar PV energy generation facility |
| Site Boundary: | 48,196 acres with 1,896 acres (2.9 sq. miles) of solar PV |
| Location: | Northwest Umatilla County, near Echo |
| Applicant: | Nolin Hills Wind, LLC (Capital Power Corporation) |
| Status: | Reviewing preliminary ASC for completeness |

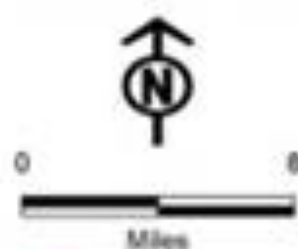
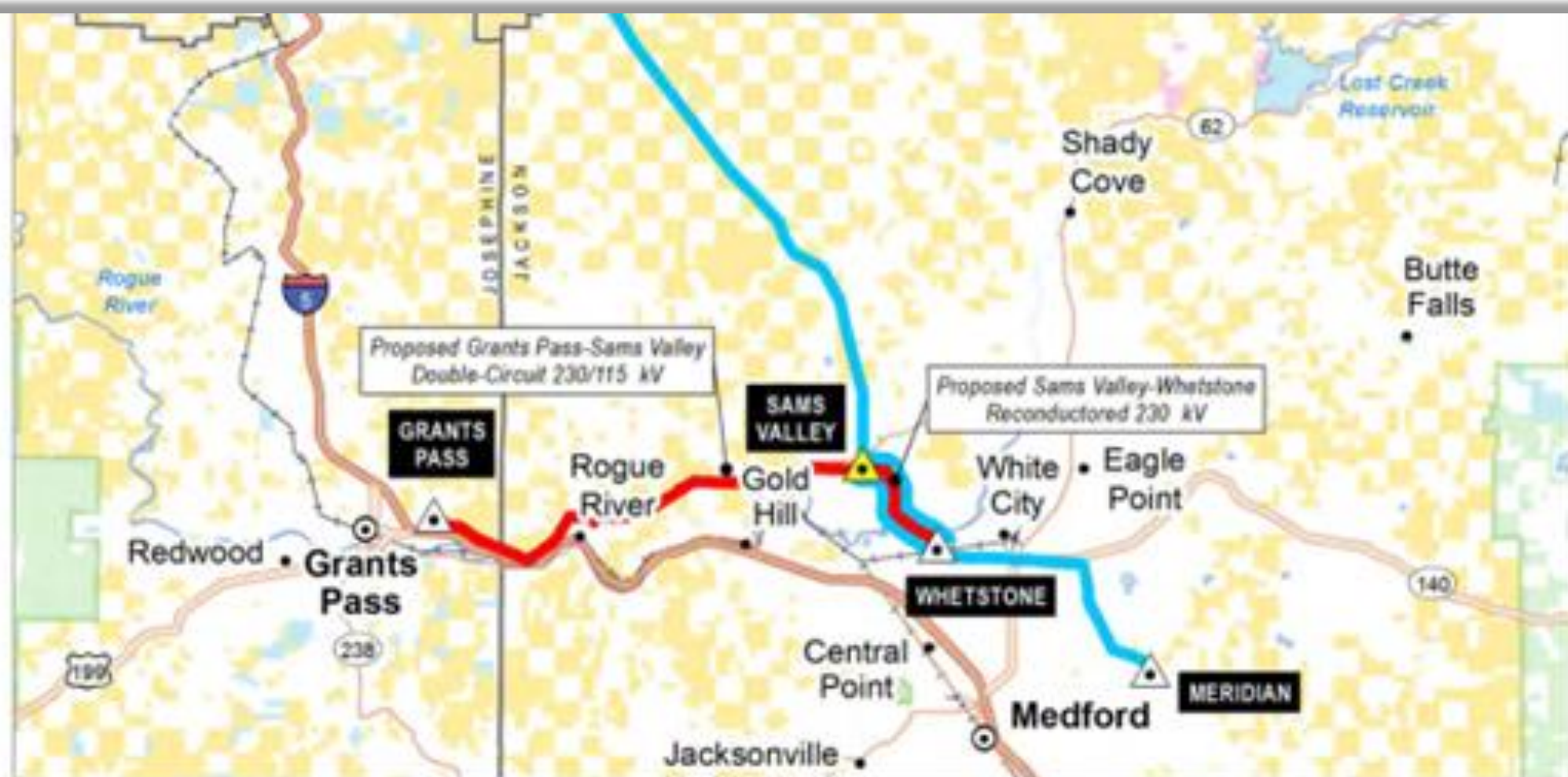


Eugene to Medford Transmission Line RFA 4

| | |
|---------------------------|--|
| Approved Facility: | 146-mile, 500 kV transmission line |
| Location: | Eugene, Lane County, through Douglas County to Medford, Jackson County |
| Certificate Holder: | PacifiCorp |
| Approved Facility Status: | Operating |

Eugene to Medford Transmission Line RFA 4

- Amendment Request:** Expand site boundary; new 17.6-mile 230 kV transmission line; new 500/230 kV substation; reconductor 230 kV transmission line; temporarily improve existing access roads
- Amendment Locations:** Jackson and Josephine counties, and the City of Rogue River
- Amendment Status:** Reviewing preliminary RFA for completeness



PACIFICORP
A subsidiary of PacifiCorp Energy Services, Inc.

Project Features

- Proposed 230/115 kV Transmission Line and 230 kV Reconductor
- Existing Eugene-Meridian 500 kV Transmission Line
- Transmission Lines Adjacent to Each Other

Substations

- Proposed
- Existing

Land Status

- Bureau of Land Management
- Forest Service
- Military Reservation or Corps of Engineers

- Private
- State or Local
- State or Local Parks and Recreation or Wildlife



Port Westward Renewable Diesel Project

| | |
|-------------------|--|
| Proposal: | Exemption request for a renewable diesel production facility capable of processing up to 50,000 barrels per day of renewable biomass feedstocks. |
| Location: | Port Westward Industrial Park, Clatskanie, Columbia County |
| Applicant: | NEXT Renewable Fuels Oregon, LLC |
| Status: | Determined incomplete. Waiting for local land use approval. |

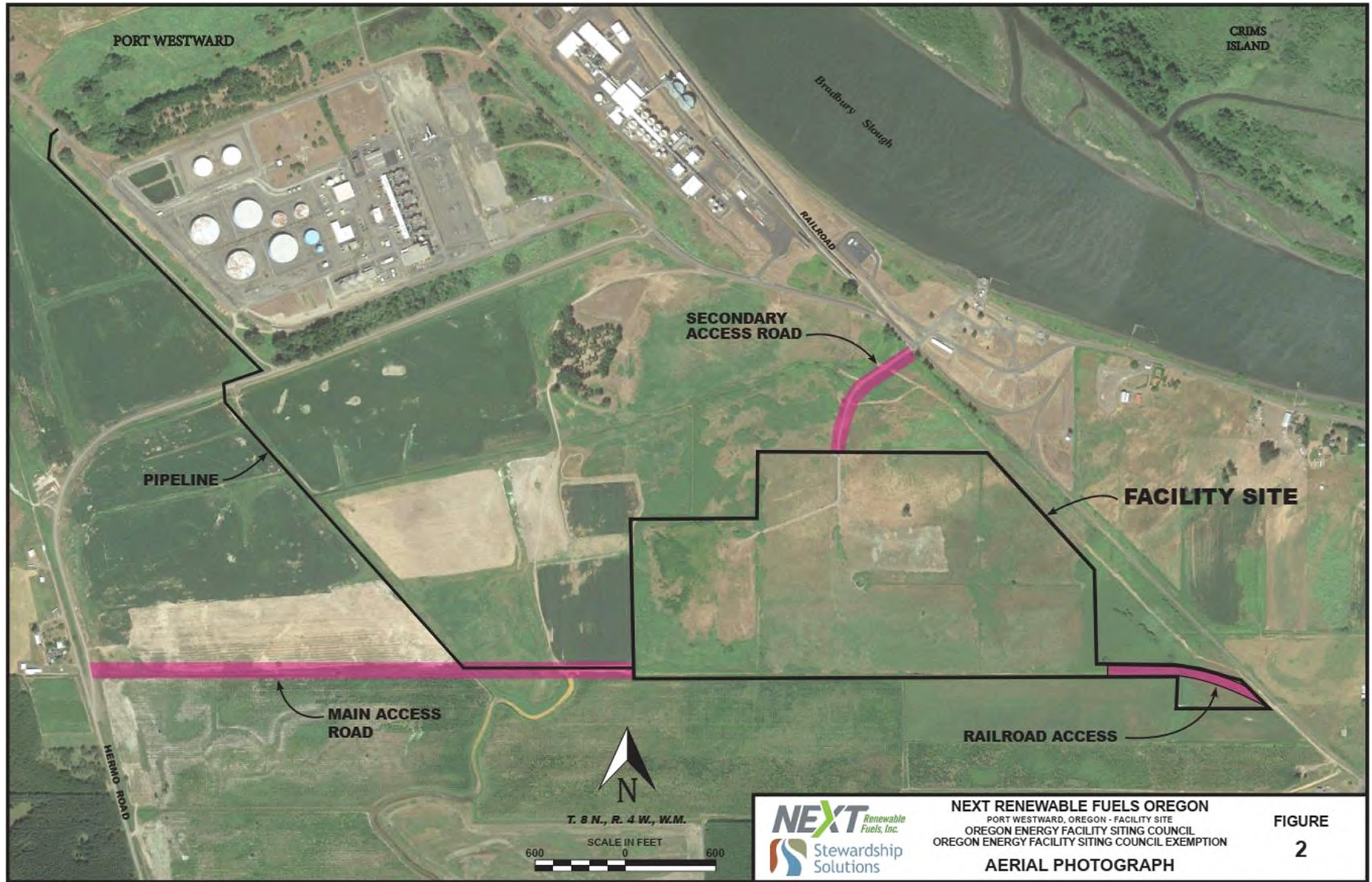
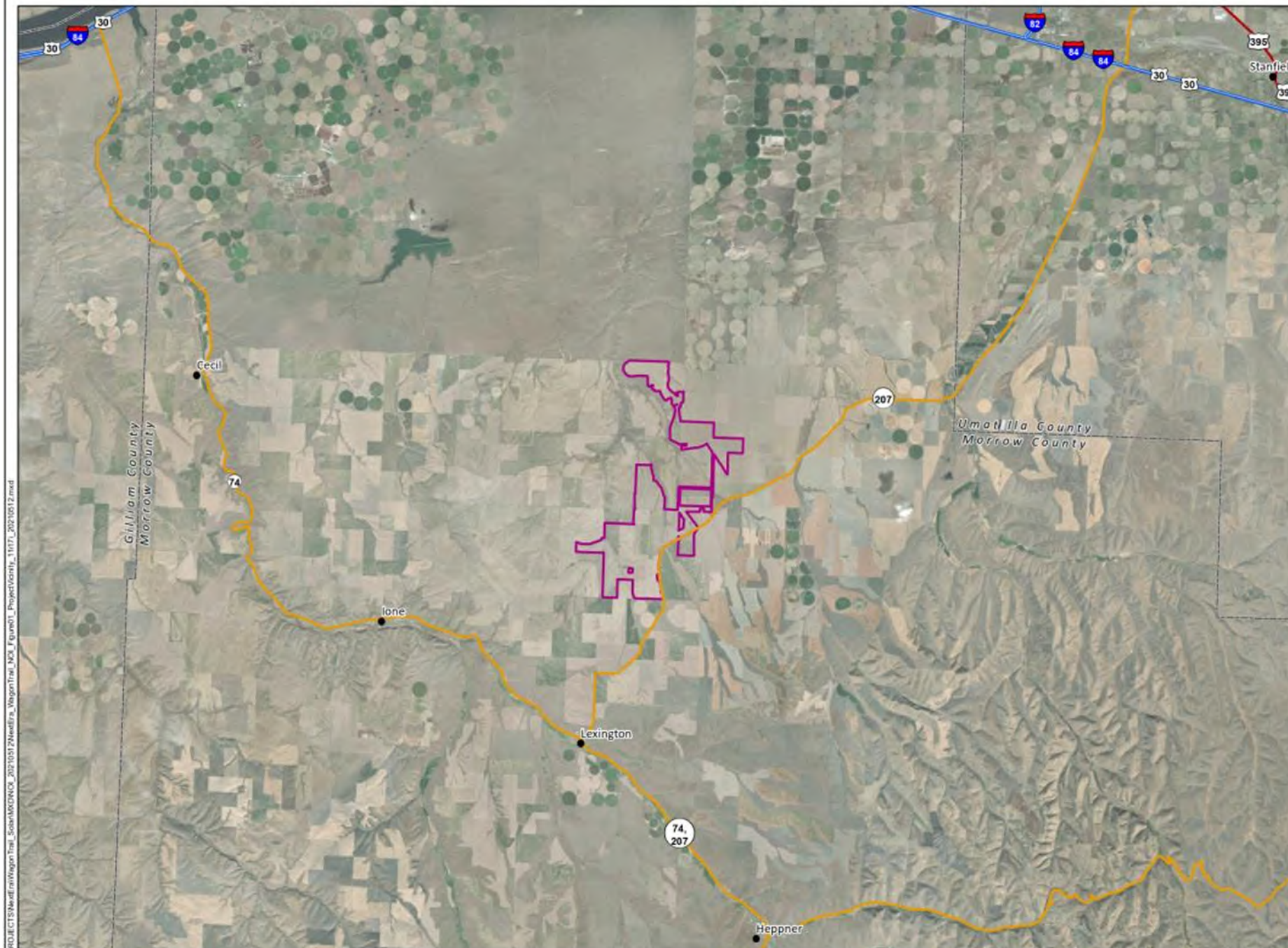


FIGURE
2

Wagon Trail Solar Project

| | |
|----------------|--|
| Proposal: | 500 MW solar photovoltaic energy generation facility |
| Site Boundary: | 7,339 acres (11.47 sq. miles) |
| Location: | Morrow County, near the City of Arlington |
| Applicant: | Wheatridge East Wind, LLC, (NextEra Energy Resources, LLC) |
| Status: | Preliminary ASC anticipated in late summer 2021 |



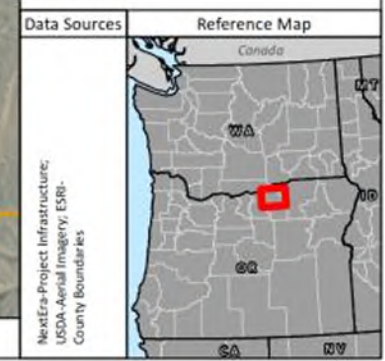
Wagon Trail Solar Project



Figure 1
Vicinity Map

MORROW COUNTY, OREGON

- Site Boundary
- City/Town
- Interstate Highway
- US Highway
- State Highway
- County Boundary

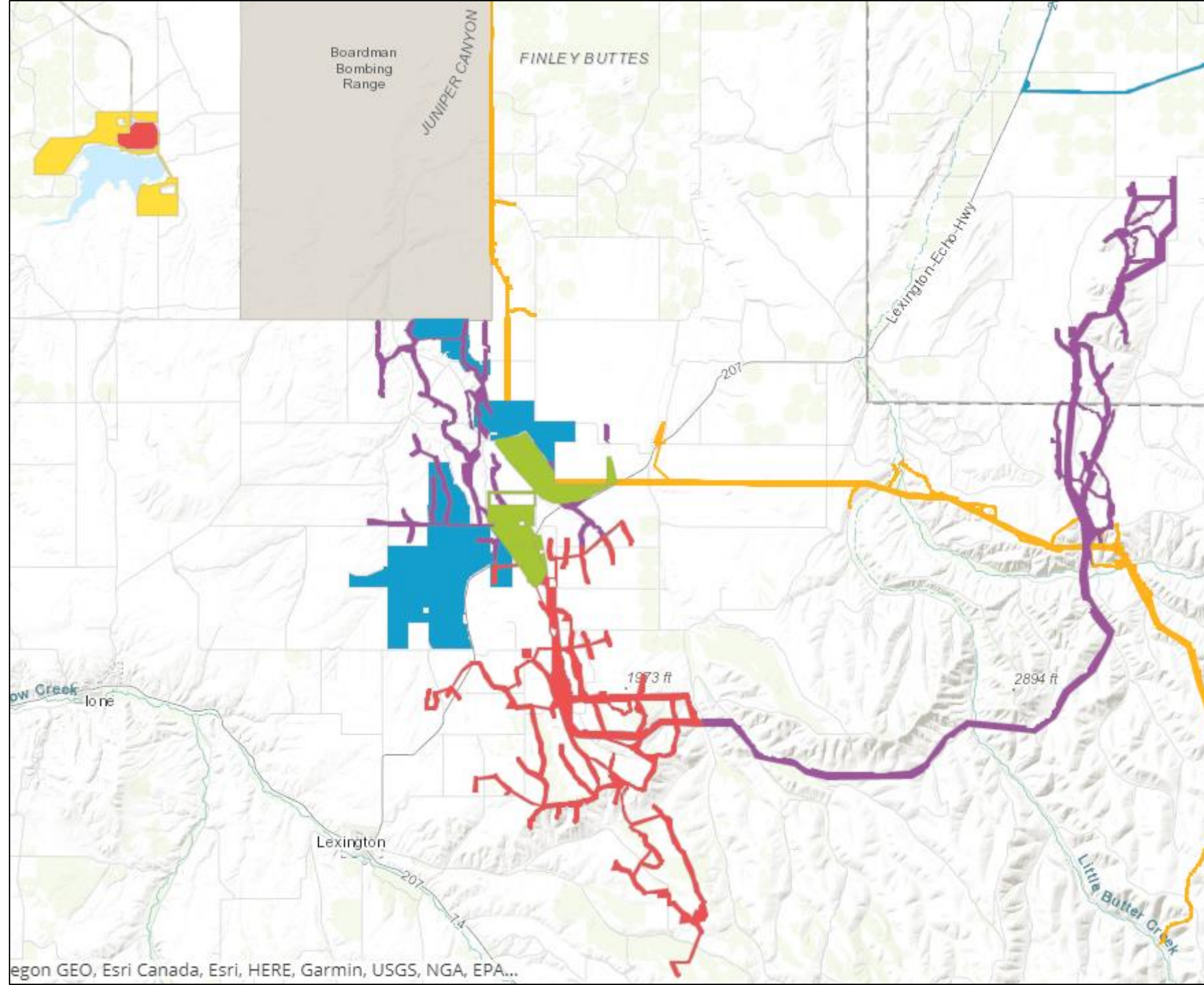


P:\GIS\PROJECTS\Wagon Trail Solar\MOX\MOX_20210120\Wagon Trail_MX_Figure01_ProjectVicinity_11012_20210120.mxd

1:200,000 WGS 1984 UTM Zone 11N

0 1 2 4 6 8 Miles

NOT FOR CONSTRUCTION



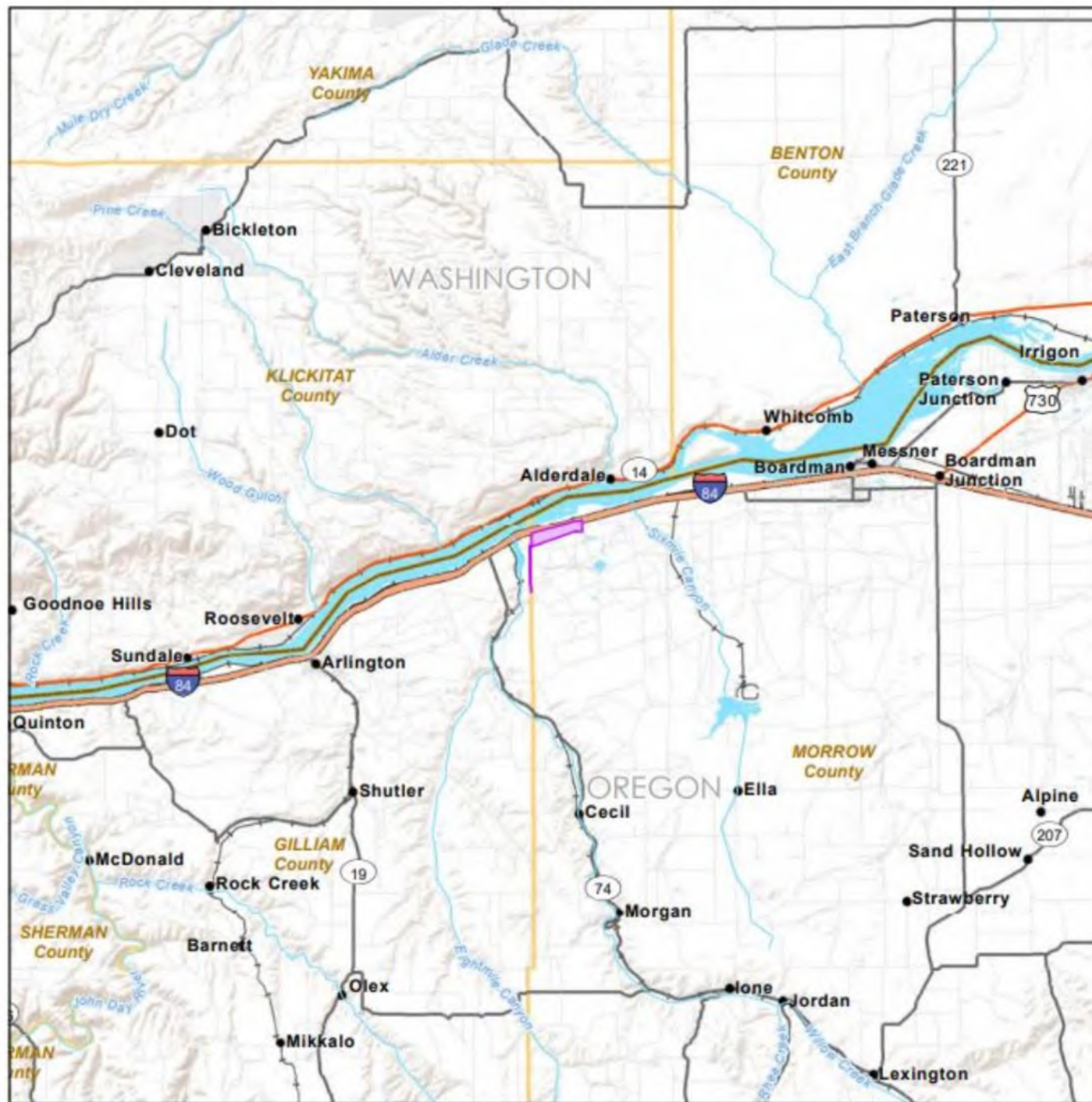
Boardman Solar Energy Facility RFA 1

| | |
|---------------------|---|
| Approved Facility: | 75 MW solar photovoltaic energy generation facility |
| Site Boundary: | 798 acres (1.25 sq. miles) |
| Location: | Near the border of Gilliam and Morrow County, immediately south of Interstate 84. |
| Certificate Holder: | Boardman Solar Energy LLC, (Invenergy LLC) |
| Status: | Not yet constructed |

Boardman Solar Energy Facility RFA 1

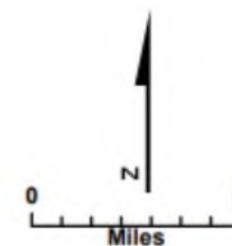
Amendment Request: -Extend both the construction commencement and completion deadlines by three years.
 -Type B review

Amendment Status: Proposed Order issued and Type B review determined justified.



LEGEND

- Facility Site Boundary
- City
- Major Highway
- Highway
- Major Road
- Local Road
- Creek
- Water
- County Boundary
- State Boundary



Stateline Wind Project RFA 6

| | |
|----------------------------|---|
| Approved Facility: | 222 MW wind energy generation facility made up of two units Stateline 1 & 2: 123 MW Vansycle II: 99 MW |
| Location: | Northern Umatilla County, near Helix |
| Certificate Holder: | FPL Energy Vansycle, LLC (Stateline 1&2) and FPL Energy Stateline II, Inc. (Vansycle II), subsidiaries of NextEra Energy Resources LLC. |
| Status: | Operating |

Stateline Wind Project RFA 6

Amendment Request:

- Add 50 MW of battery storage
- Three options which include some combination of adding turbines, replacing turbines and repowering turbines. Height would be increased from 440 feet to a maximum of 489 feet. Ground clearance would be reduced from 85 feet to no less than 59 feet.
- Type B review

Amendment Status: Reviewing preliminary amendment request for completeness and Type B review request.

Stateline Wind Project
Request for Amendment 6

Vansycle II

Figure 1
Project Location

UMATILLA COUNTY, OR AND
WALLA WALLA COUNTY, WA

- Project Boundary
- Interstate Highway
- Primary Highway
- Secondary Highway
- Secondary Road
- Stream
- Stream Intermittent
- State Boundary
- County Boundary

TETRA TECH



Z:\GIS\env\ITL_Portland\VansycleII_State\env\ITL\MOX\Fig_1_RFAG_Project_Location_20210423.mxd

1:316,800 NAD 1983 StatePlane Oregon North FIPS 3601 Feet

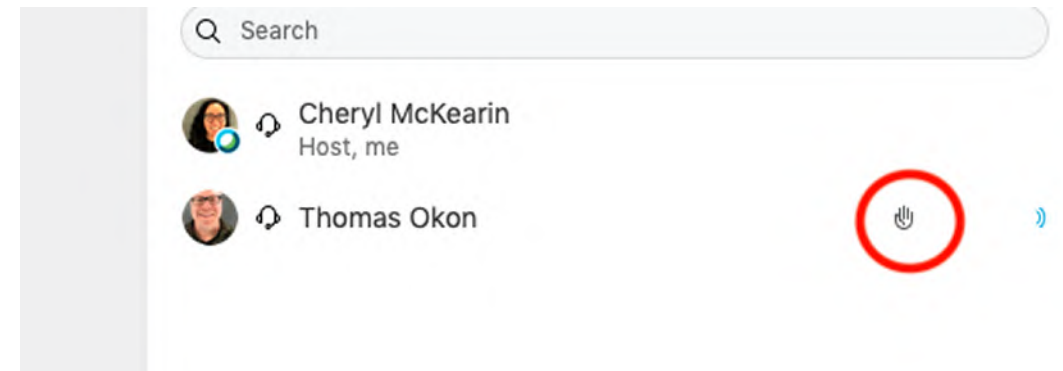
0 2.5 5 10 15 20 25 Miles

Agenda Item E

PUBLIC COMMENT

Phone Commenters: Press *3 to raise your hand to make comment, and *3 to lower your hand after you've made your comment.

Webinar Commenters: Open the Participant list, hover over your name and click on the “Raise Your Hand icon”.



How to Raise Your Hand in Webex:

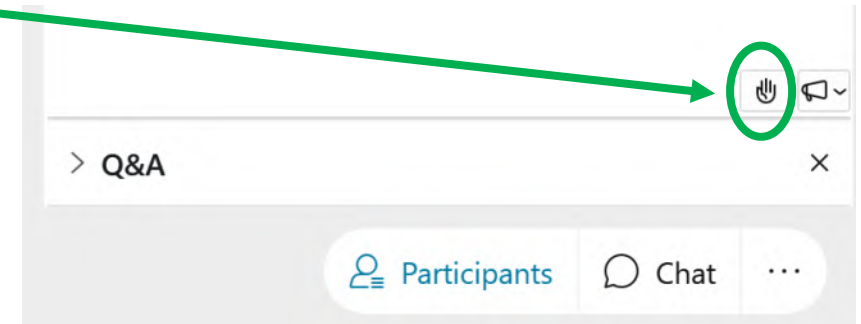
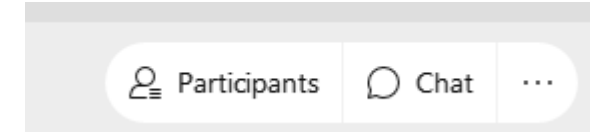
Webinar Participants

The bottom right of the main window is a set of icons:

Click on “Participants”

The bottom right of the participant window is a hand icon, click on the hand:

Clicking on it again will lower your hand.



Phone Participants

Press *3 on your telephone keypad to raise your hand.

Press *3 again on your telephone keypad to lower your hand.



OREGON
DEPARTMENT OF
ENERGY

EFSC Meeting On Break - Meeting Resumes at 12:15 a.m.



Agenda Item F (Informational Item)

Retirement and Financial Assurance Standard Overview, Part I of II (Information Item)

August 27, 2021

**Sarah Esterson, Senior Policy Advisor
Chase McVeigh-Walker, Senior Siting Analyst**

Overview/Goals

Overview

Council will review:

- Purpose of the standard
- Regulatory History
- Substantive Requirements
- Information Requirements
- Compliance Evaluation

Goals

- Inform/educate, address questions
- Discuss type/form of evidence typically evaluated
- Discuss improvements (policy or rulemaking)

Retirement and Financial Assurance Standard

OAR 345-022-0050:

“To issue a site certificate, the Council must find that:

- (1) The site, taking into account mitigation, can be restored adequately to a useful, non-hazardous condition following permanent cessation of construction or operation of the facility.
- (2) The applicant has a reasonable likelihood of obtaining a bond or letter of credit in a form and amount satisfactory to the Council to restore the site to a useful, non-hazardous condition.”

Purpose of the Standard

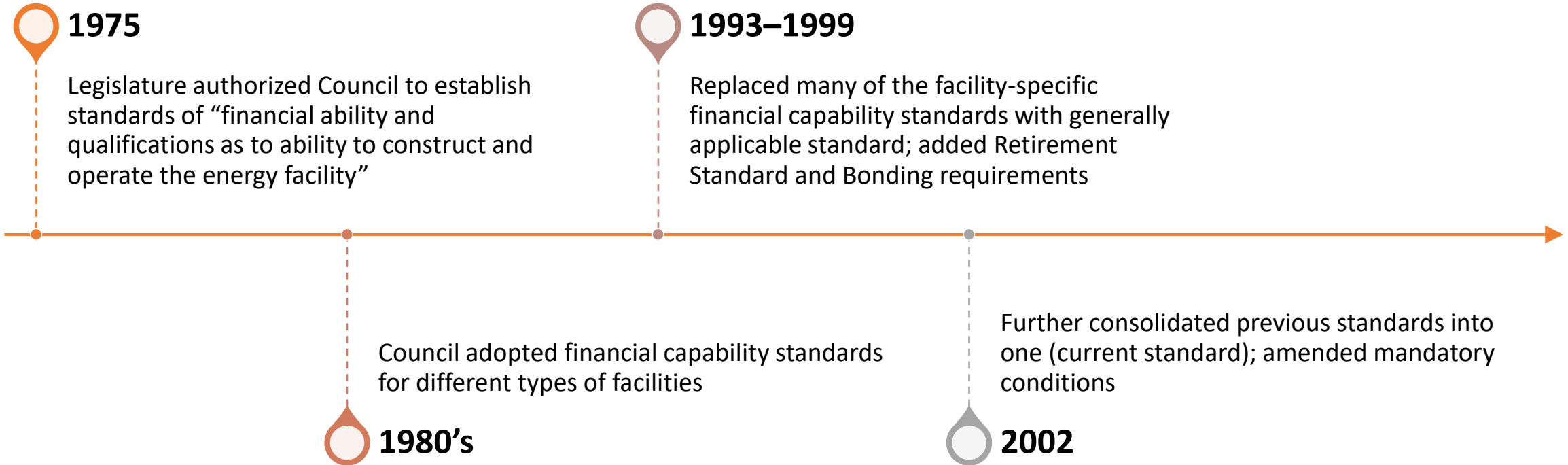
Upon cessation of operation or construction:

- Ensure that the certificate holder has an ability to decommission/restore facility site consistent with zone, landscape and landowner input.

Certificate holder ability is based on:

- Decommissioning estimate, based on verified methods/tasks/actions assumptions
- Decommissioning experience
- Ability to obtain a bond or letter of credit equal to decommissioning estimate
- Preconstruction requirements to submit to ODOE bond or letter of credit

Statute and Rule History



Standard and Rule Cross-Over

Organizational Expertise (OAR 345-022-0010(1))

Council must find that applicant has:

- Organizational expertise to retire the facility
- Demonstrated the ability to restore the site to a useful, nonhazardous condition

Mandatory Site Certificate Conditions (OAR 345-025-0006(3), -(8), -(9), -(16))

All certificate holders must:

- Retire facility substantially as described in site certificate
- Submit bond or letter of credit to ODOE in form and amount satisfactory to Council
- Retire facility in accordance with Council approved Retirement Plan

Exhibit W

Division 21 Information Requirements

Estimated useful life of the proposed facility

Specific actions and tasks to restore the site

An estimate, in current dollars, of total and unit costs to restore the site

Discussion and justification of methods and assumptions

Proposed monitoring plan for facilities that might produce site contamination

Examples

[PLACEHOLDER SLIDE – SHOW EXHIBIT W for Bakeoven, Madras and Carty]

Exhibit M

Division 21 Information Requirements

Legal opinion letter

Type and \$ amount for
facility decommissioning

Evidence of ability to obtain
a bond or letter of credit

Examples

[PLACEHOLDER SLIDE – SHOW EXHIBIT M for Bakeoven, Madras and Carty]

Application of Standard – Life of Facility

Pre-Site Certificate Approval

Application Phase

- Description of tasks/actions
- Decommissioning Cost Estimate
- Evidence to support finding of ability to obtain bond or letter of credit

Application of Standard – Life of Facility

Site Certificate Approval

Pre-Construction

- True-up/final evaluation of cost estimate, using previously approved methods/base unit costs
- Bond or letter of credit, Council approved form and amount

Operation

- Annual adjustment of bond or letter of credit (inflation)

Decommissioning

- Obtain Council approval of a decommissioning plan
- Council review of compliance with decommissioning plan required for site certificate termination

Or

- If Certificate Holder fails to meet decommissioning obligation, Council uses financial surety to pay for decommissioning



Council Questions/Deliberation

Agenda Item G (Action Item)

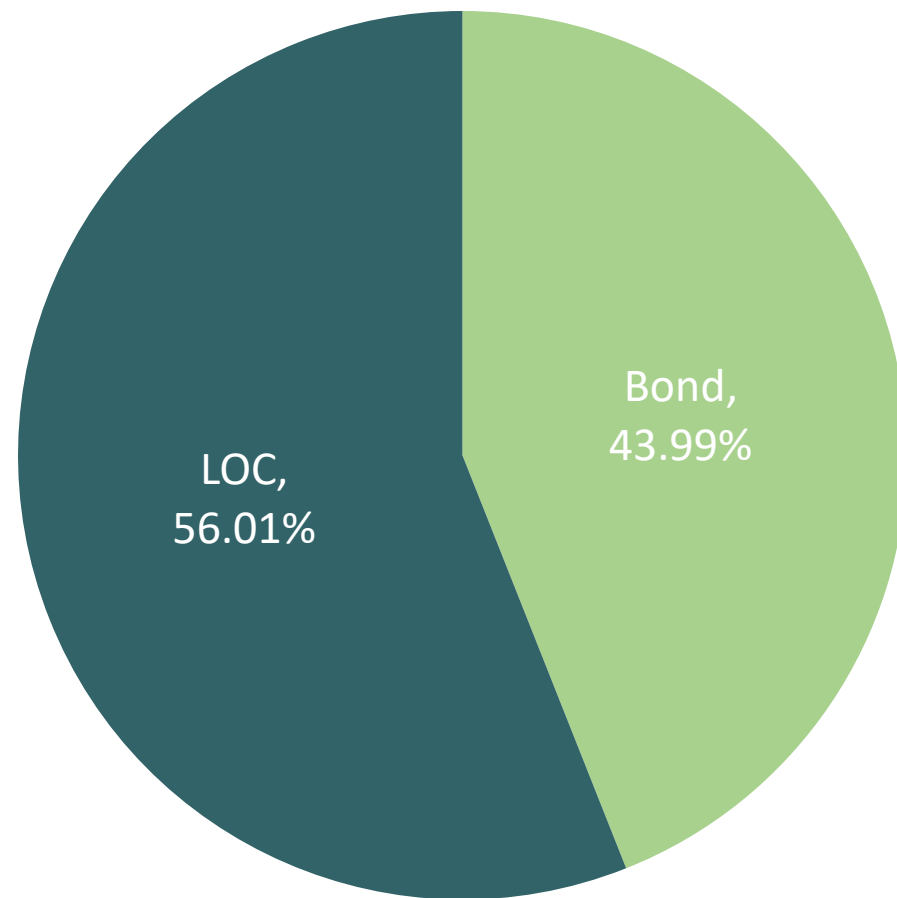
Financial Assurance Update (Action Item)

August 27, 2021

Christopher M Clark, ODOE Siting Policy Analyst & EFSC Rules Coordinator

Background

- Before beginning construction, each certificate holder must provide a surety bond or letter of credit in a form and amount satisfactory to the Council to restore the site.
- The bond or letter of credit must be maintained at all times until the facility has been retired.
- The Council currently has approximately \$168.2 million on file.
 - Around \$74 million is provided in Bonds
 - Around 94.2 million is provided in LOCs



Surety Bonds

Principal purchases bond and agrees to comply with terms of contract.



Surety guarantees that principal will abide by contract. Provides funds to Obligee when breach is documented



Obligee establishes bonding requirements as condition of contract. Monitors for compliance.



Termination of Bond Obligations

- Completion of Retirement and Site Restoration
- Replacement
- Expiration
- Cancellation

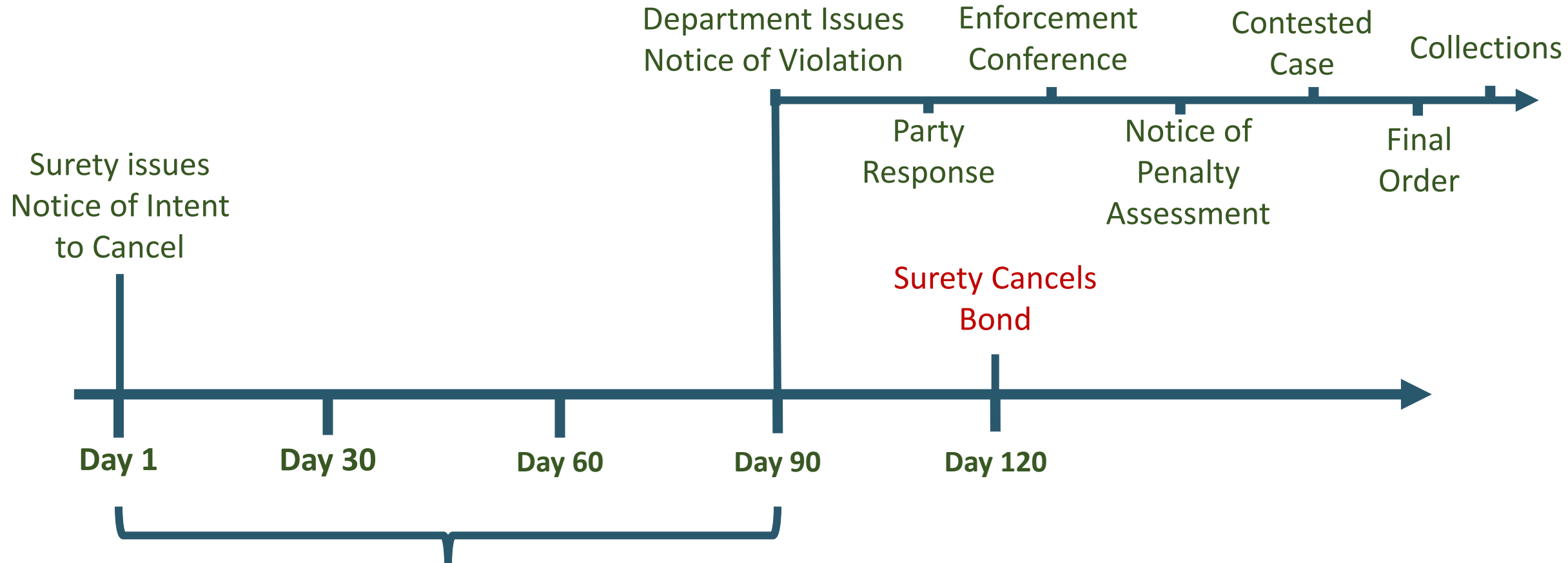
Existing Bond Template Language

5. The Surety may cancel this bond at any time by giving the Principal and Obligee one hundred twenty (120) days written notice of the Surety's intent to cancel this bond. * * *

* * *

6. If the Surety cancels the bond prior to the Principal fulfilling its obligation to retire the facility and restore the site, but Principal does not provide alternate financial assurance approved by the Council within 90 (ninety) days after the date of notice of cancellation is received by the Obligee from the Surety, *the Oregon Department of Energy may take enforcement measures as described in OAR 345-029-0000 through OAR 345-029-0100.*" (Emphasis added.)

Enforcement Procedures



Proposed Bond Template Language

5. The Surety may cancel this bond at any time by giving the Principal and Obligee one hundred twenty (120) days written notice of the Surety's intent to cancel this bond. * * *

* * *

6. If the Surety ~~cancel~~s the provides notice of intent to cancel this bond prior to the Principal fulfilling its obligation to retire the facility and restore the site, but Principal does not provide alternate financial assurance approved by the Council within 90 (ninety) days after the date of the notice of intent to cancellation is received by the Obligee from the Surety, the ~~Oregon Department of Energy may take enforcement measures as described in OAR 345-029-0000 through OAR 345-029-0100.~~ Surety will be obligated to pay monies to the Obligee, limited to the penal sum of this bond, upon demand by the Obligee prior to the effective date of the cancellation.

Council Options

Option 1

Amend Surety Bond
Template as proposed in
Attachment 1
(staff recommendation)

Option 2

Amend Surety Bond
Template with other
specified changes

Option 3

Do not amend Surety
Bond Template

Agenda Item H (Action Item)

Initiation Of Radioactive Waste Materials Rulemaking (Action Item)

August 27, 2021

Christopher M Clark, ODOE Siting Policy Analyst & EFSC Rules Coordinator

Maxwell Woods, ODOE Assistant Director for Nuclear Safety and Emergency Preparedness

Jeff Burrigh, ODOE Radioactive Waste Remediation Specialist

Overview

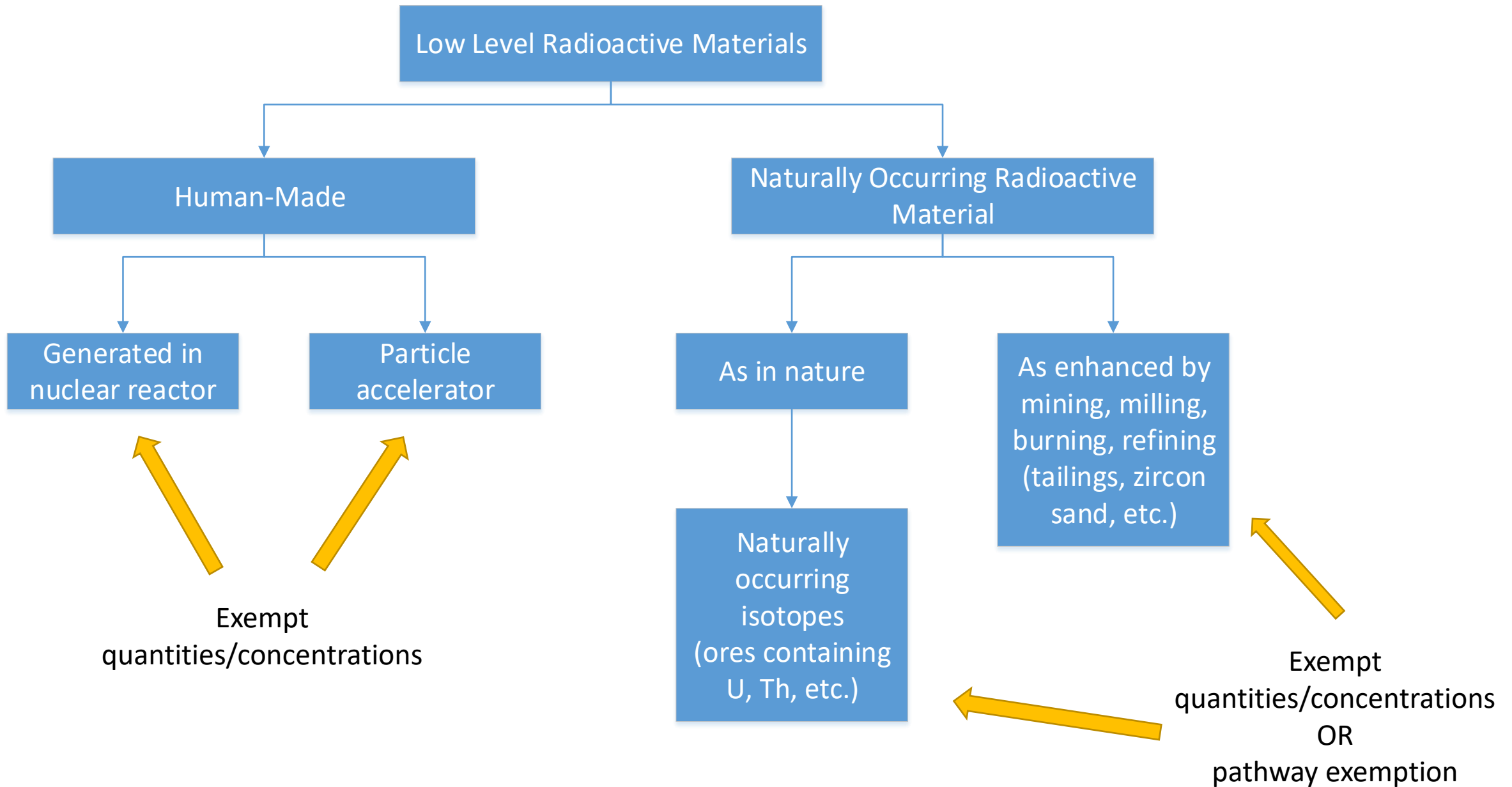
- Background
- Need and Authority for Rulemaking
- Objectives and Scope
- Potential Impacts on Stakeholders
- Recommended Method for Obtaining Public Input
- Projected Timeline
- Council Deliberation

Background

- SB 246 (2021):
 - Mandates that Council adopt standards and rules as necessary to prevent disposal of radioactive waste in Oregon.
 - Provides Council with additional authority to modify the types of materials that are considered to be radioactive waste under state law.
 - Expands authority to investigate and enforce violations involving radioactive materials and wastes.
- The bill is effective January 1, 2022.

Need and Authority for Rulemaking

- ORS 469.525 prohibits the establishment, operation, or licensure of any radioactive waste disposal facility in Oregon.
- Materials containing isotopes and concentrations identified in OAR 345-050 are not “radioactive waste” under the law.
 - The current law references rules adopted in 1978.
 - SB 246 removes this language, allowing the Council to identify additional isotopes and concentrations that may present significant danger to public health and safety.
- SB 246 also expands prohibition on “disposal” to include the:
 - Arrangement for disposal of radioactive waste
 - Transport of radioactive wastes for disposed for disposal.



Objectives and Scope

- Evaluating whether changes to OAR 345-050-0006 to 345-050-0038 are needed to protect public health and safety.
- Considering what standards and rules are necessary to prevent the disposal of radioactive waste in Oregon.
- Making any other conforming changes to rules in OAR chapter 345 needed to implement SB 246 or new rules.

Potential Impacts & Public Input

- Rulemaking could result in increased costs of compliance for industries that produce, handle, or dispose of radioactive materials.
- Due to potential for impacts and high interest in the subject matter, staff recommends Council appoint a Rulemaking Advisory Committee.
- If approved, Staff requests the Council delegate authority to add RAC members to the Department.

ODOE Recommendations for Rulemaking Advisory Committee Composition

Regulated
Waste Disposal
Organizations

Radiation Health
Professionals

Environmental
Justice Council

Historical
Perspectives

Federal
Consistency
Consultation

Regulated Waste
Generator
Industries

Other Agencies
(OHA, DEQ)

Environmental /
Public Interest
Groups

Tribal
Government

Statewide
Counties
Representative

Complementary
Tribal
Government
Coordination

Public At-Large

ODOE Recommendations for Rulemaking Advisory Committee Appointees

- Association of Oregon Counties*
- Confederated Tribes of the Umatilla Indian Reservation
- Dave Smith
- Gilliam County
- League of Women Voters of Oregon
- Oregon Business & Industry
- Oregon DEQ
- Oregon Health Authority, Radiation Protection Services
- Oregon Metro
- Oregon Refuse and Recycling Association
- Oregon State University
- Physicians for Social Responsibility
- Waste Management
- Wayne Lei, PhD, CHP

Projected Rulemaking Timeline

| | |
|---|--------------------------------|
| Council initiates permanent rulemaking | August 27, 2021 |
| Staff convenes Rulemaking Advisory Committee | September 2021 - February 2022 |
| Staff prepares draft proposed rules | February – March 2022 |
| Council considers draft proposed rules/ issues Notice of Proposed Rulemaking | April 2022 |
| Public Comment Period/ Rulemaking Hearing | May-June 2022 |
| Council Consideration of Permanent Rules | July 2022 |

Item 1

Initiation of Rulemaking

Approve

Initiate Rulemaking and
Appoint RAC as
Recommended

Modify

Initiate Rulemaking and
Appoint RAC
with modifications

Reject

Reject Recommendation
to Initiate Rulemaking

Item 2

Delegation of Authority to Add RAC Members

Approve Request

Authorize Department to
add RAC members as
needed.

Deny Request

Retain sole authority over
all decisions regarding
RAC membership.

Agenda Item I (Action Item)

Initiation of Application Review Process Rulemaking (Action Item)

August 27, 2021

Christopher M Clark, ODOE Siting Policy Analyst & EFSC Rules Coordinator

Overview

- Background
- Need and Authority for Rulemaking
- Objectives and Scope
- Potential Impacts on Stakeholders
- Recommended Method for Obtaining Public Input
- Projected Timeline
- Council Deliberation

Background

- The Council has adopted 14 general siting standards and additional specific standards. Over time, the relationship between these standards and some specific application requirements have become unclear.
- Council authorized staff to begin preliminary work on a multi-phase rulemaking project to update, clarify, and simplify its rules for the site certificate application review process as part of its 2021 to 2023 Rulemaking Schedule.
- The project was also identified in the Department's EO 20-04 Implementation Plan as a possible means to accelerate reductions in GHG emissions.

Need and Authority

- ORS 469.470 authorizes the Council to adopt standards and rules for the siting of energy facilities and for the implementation of Oregon's energy policy.
- Rulemakings are needed to:
 - Clarify and simplify application requirements
 - Improve consistency and standardization in the review process
 - Make the process clearer and more understandable for applicants, reviewing agencies, and interested members of the public.
- Rulemakings are intended to create efficiencies and reduce the time and costs associated with state jurisdictional reviews while having no negative effect on public participation.

Application Process Review Rulemaking

Phase 1

Separate procedural and substantive rules, simplify or clarify procedures where practicable.

Phase 2

Align information requirements with standards

Phase 3

Adjust substantive requirements for different types of facilities (i.e. renewable energy facilities), if warranted.

Scope and Objectives of Phase 1

- **Scope:** Reorganize rules in divisions 015 to 026 to create clear separation of procedural and substantive provisions in rules and simplify or clarify procedures for review where practicable.
- **Sub-Objective 1: Separate procedural and substantive rules**
 - Reorganize rules to clearly identify substantive requirements and separate them from administrative procedures
- **Sub-Objective 2: Simplify or clarify procedures.**
 - Eliminate duplicative procedural requirements
 - Consolidate procedures that are repeated in multiple points in the process
 - Identify and address procedural gaps and unclear processes

Substantive Requirements

A **substantive rule** establishes a right, duty, or obligation for an applicant or certificate holder. Examples of substantive rules include:

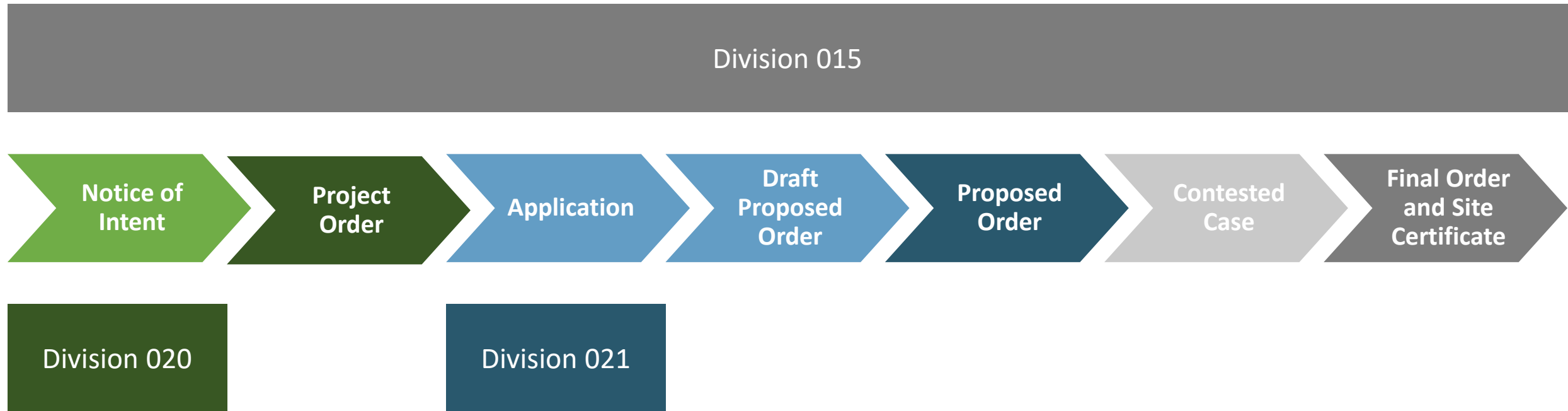
- An **information requirement** that establishes the information or evidence that must be provided for the Council to evaluate compliance with a standard.
- A **standard** that establishes the “yardstick by which the evidence will be evaluated.”
- A **condition** or **obligation** that describes specific rights, duties, and obligations for a certificate holder.

Procedural Requirements

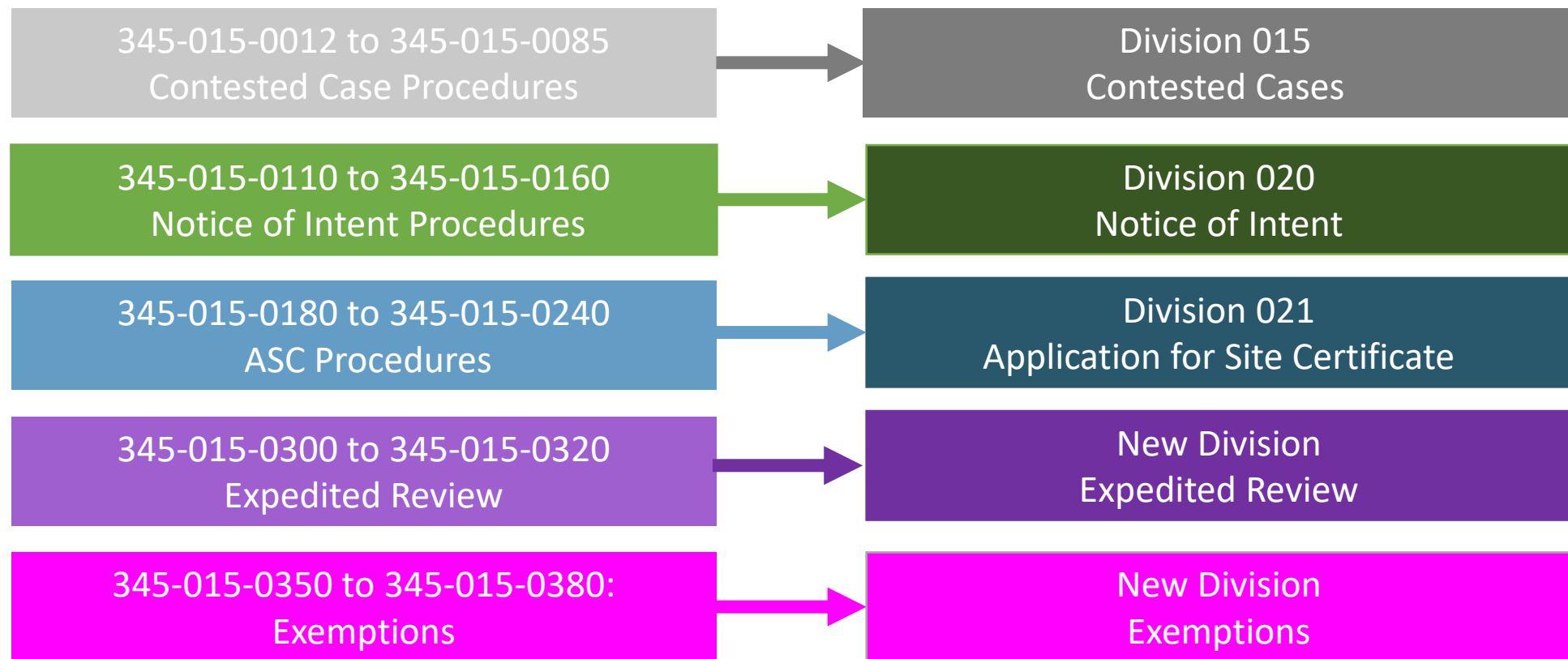
A **procedural rule** prescribes the steps that must be taken and methods that must be used to implement a substantive rule. Examples include:

- Submission and noticing requirements.
- Deadlines and timing considerations.
- Procedures for agency coordination, public meetings, and public hearings.
- Evidentiary rules.

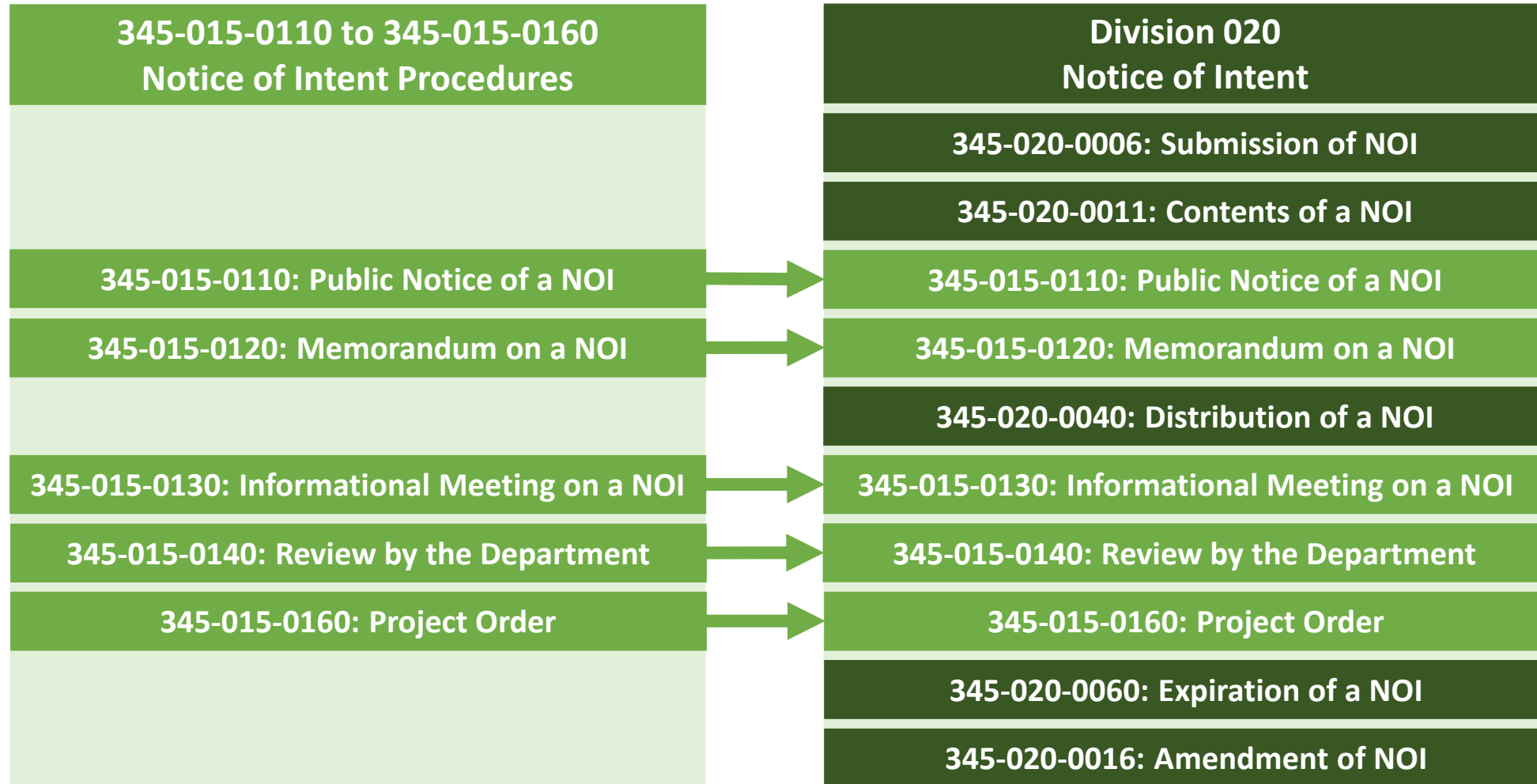
Siting Procedures



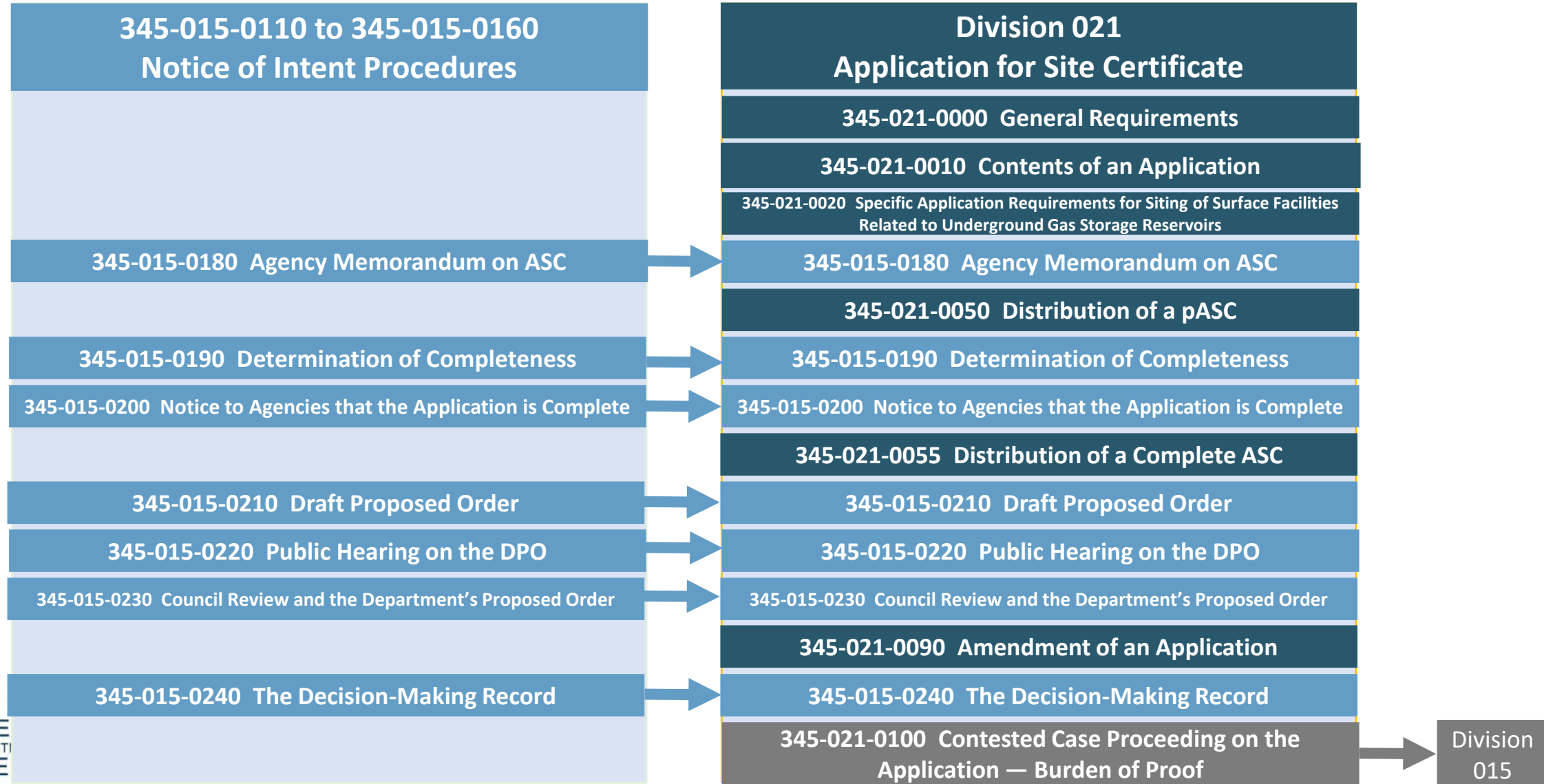
Example Reorganization of Division 015



Example: Division 015 to 020



Example Division 015 to 021



Application Requirements

OAR 345-021-0010

Exhibit A – Applicant Information

Exhibit H – Geologic Report

Exhibit P – Fish and Wildlife Habitat

Exhibit X - Noise

Exhibit B - Proposed Facility Description

Exhibit I – Soils

Exhibit Q – T&E Species

Exhibit Y – Carbon Emissions

Exhibit C - Proposed Facility Location

Exhibit J – State Waterways

Exhibit R - Scenic Recourses

Exhibit Z – Condensate Plumes

Exhibit D – Organizational Expertise

Exhibit K – Land Use

Exhibit S – Historic, Cultural,
Archaeological Resources

Exhibit AA – EMG Fields

Exhibit E - Permits

Exhibit L - Protected Areas

Exhibit T - Recreation

Exhibit BB – Other Information

Exhibit F – Property Owner Lists

Exhibit M – Financial Capability

Exhibit U – Public Services

Exhibit CC – Legal Authorities

Exhibit G – Materials Analysis

Exhibit N – Need Standard

Exhibit V - Waste

Exhibit DD –Specific Standards

Exhibit O - Water Use

Exhibit W – Site Restoration

Applicant/Facility Information

| | | | |
|---|----------------------------------|--|--------------------------------|
| Exhibit A – Applicant Information | Exhibit H – Geologic Report | Exhibit P – Fish and Wildlife Habitat | Exhibit X - Noise |
| Exhibit B - Proposed Facility Description | Exhibit I – Soils | Exhibit Q – T&E Species | Exhibit Y – Carbon Emissions |
| Exhibit C - Proposed Facility Location | Exhibit J – State Waterways | Exhibit R - Scenic Recourses | Exhibit Z – Condensate Plumes |
| Exhibit D – Organizational Expertise | Exhibit K – Land Use | Exhibit S – Historic, Cultural, Archaeological Resources | Exhibit AA – EMG Fields |
| Exhibit E - Permits | Exhibit L - Protected Areas | Exhibit T - Recreation | Exhibit BB – Other Information |
| Exhibit F – Property Owner Lists | Exhibit M – Financial Capability | Exhibit U – Public Services | Exhibit CC – Legal Authorities |
| Exhibit G – Materials Analysis | Exhibit N – Need Standard | Exhibit V - Waste | Exhibit DD –Specific Standards |
| | Exhibit O - Water Use | Exhibit W – Site Restoration | |

Information about Impacts/Resources

| | | | |
|---|----------------------------------|--|--------------------------------|
| Exhibit A – Applicant Information | Exhibit H – Geologic Report | Exhibit P – Fish and Wildlife Habitat | Exhibit X - Noise |
| Exhibit B - Proposed Facility Description | Exhibit I – Soils | Exhibit Q – T&E Species | Exhibit Y – Carbon Emissions |
| Exhibit C - Proposed Facility Location | Exhibit J – State Waterways | Exhibit R - Scenic Recourses | Exhibit Z – Condensate Plumes |
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Procedural Information

| | | | |
|---|----------------------------------|--|--------------------------------|
| Exhibit A – Applicant Information | Exhibit H – Geologic Report | Exhibit P – Fish and Wildlife Habitat | Exhibit X - Noise |
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Impacts

- Phase 1 is not expected to create any new substantive or procedural requirements.
- Overall, the project is intended to reduce the overall net costs of the siting review process by reducing time and administrative burdens.
- Some individual changes may increase costs by increasing the amount of information required to demonstrate compliance with individual standards or may enhance opportunities for public participation and engagement.

Public Input

- Phase 1 has narrow scope, but overall project project has broad policy implications, complex issues with multiple alternatives, and a high level of anticipated interest due to subject matter.
- Staff recommends that use of a Rulemaking Advisory Committee to assist in development of rule changes is appropriate.
- Preliminary scoping activities will help identify interested stakeholders and provide general direction on rulemaking prior to appointment of RAC.

Potential Scoping Questions

- What are your top priorities for making the siting review process more efficient and effective?
- What are the most important informational elements of an Application for Site Certificate? How could the contents or format of applications be improved?
- How can opportunities for public participation in the siting review process be enhanced?
- What are your other comments or concerns about this rulemaking?

Projected Rulemaking Timeline

| | |
|--|-----------------------|
| Council initiates rulemaking | August 2021 |
| Staff distributes scoping survey | October-November 2021 |
| Staff presents preliminary recommendations to Council, Council appoints RAC | January 2022 |
| RAC meetings & development of draft proposed rules | January - March 2022 |
| Council considers draft proposed rules & issues Notice of Proposed Rulemaking | April 2022 |
| Public comment period on proposed rules | May – June 2022 |
| Rulemaking hearing & consideration of permanent rules | June /July 2022 |

Council Options

Option 1

Initiate Rulemaking as
Proposed By Staff
(staff recommendation)

Option 2

Initiate Rulemaking with
modifications

Option 3

Deny Request to Initiate
Rulemaking

Boardman Decommissioning Update

LENNA COPE

PORTLAND GENERAL ELECTRIC

AUGUST 27, 2021

ENERGY FACILITY SITING COUNCIL MEETING



Boardman History



Site Certificate Application



Site Certificate Application first submitted
February 28, 1973



Site Certificate Approved March 24, 1975



Began commercial operation August 3, 1980



Amended nine times, last time May 2013



Ceased Burning Coal
October 15, 2020

Generated 97,039,654 MWhr
Operated 196,440 hours
Coal burned 56,116,406 tons





Boardman Site

Coal yard reclamation
March 2020 - Oct. 2020
Collection of remaining coal from 100-acre yard to clean soil and avoid waste

End of operations
Oct. 15, 2020
Depletion of coal stockpile and end of coal power generation

Decommissioning
Oct. 2020 - April 2021
Efforts to make site safe for demolition

Carty substation construction
May 2021 - Oct. 2021
Substation construction for back-up power to Carty

**Boardman
Coal Plant
Decommissioning**



Boardman-Carty separation
Feb. 2019 - Oct. 2021
Disconnection from all shared services with Carty Generating Station, a natural gas-fired plant next to Boardman

Last coal train
April 24, 2020
Arrival of final shipment of coal

Ash area disposal closure
May 2021 - July 2021
Installation of a permanent, impermeable cap over ash disposal area

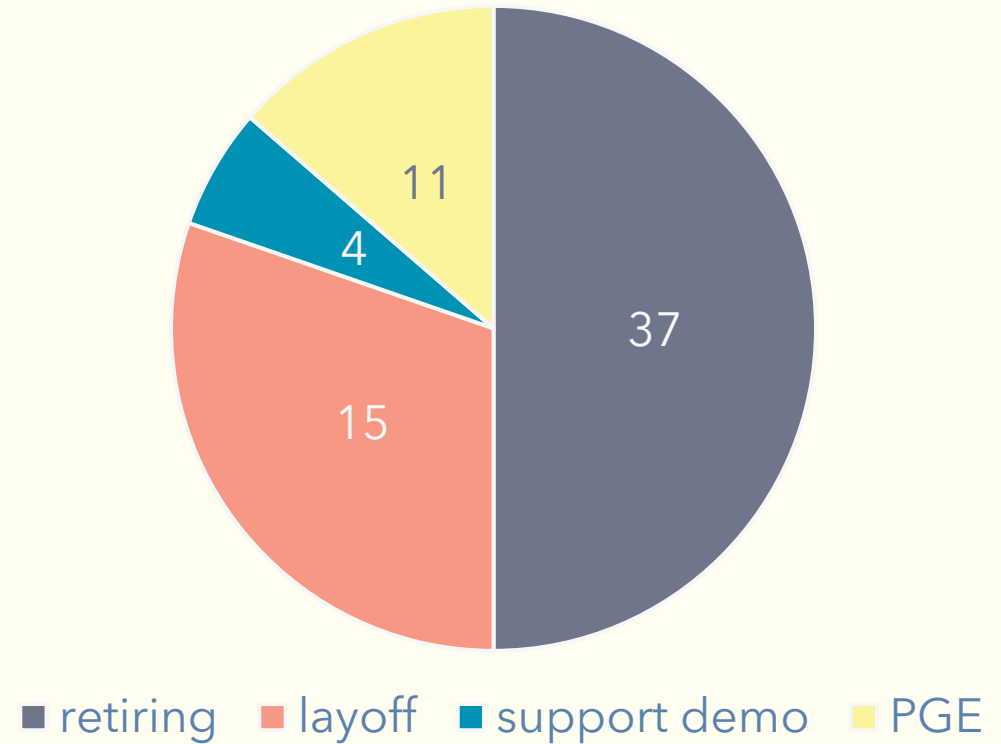
Demolition
Oct. 2021 - Dec. 2022
Deconstruction and removal of plant, including all coal-related distribution, transport, crushing and supply equipment.



Plant Worker Transition

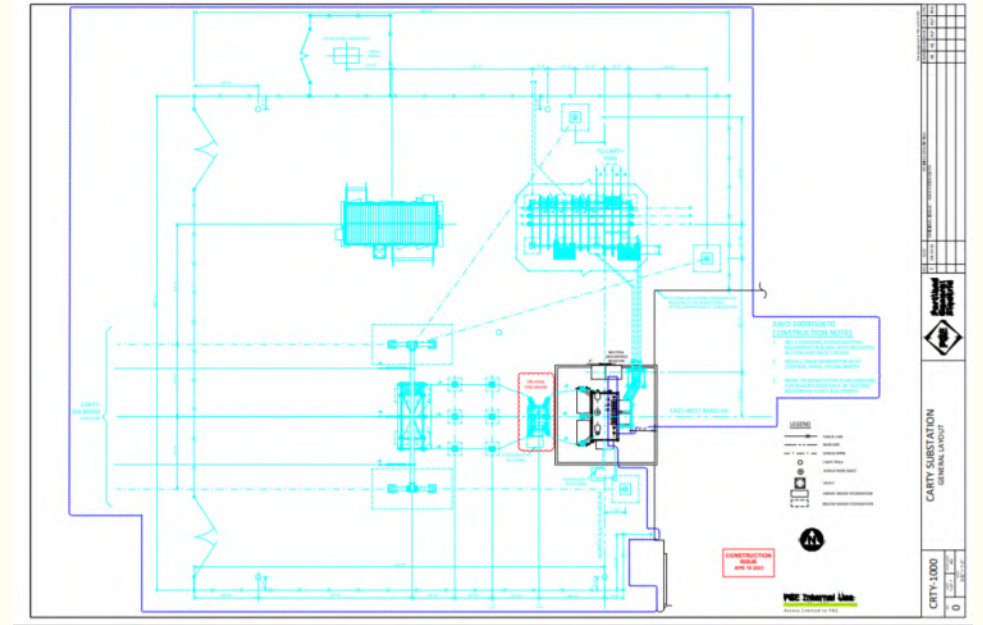
- WARN Act notification issued on September 1, 2020
- 67 employees on October 1, 2020
- 4 remain to support site
- 11 transferred to new roles at PGE
- 37 classified as retired
- 15 terminated

Current Staff Transition



Carty Independence

- Boardman and Carty plants share infrastructure that must be separated prior to demolition
- Work approved as part of Carty Site Certificate Amendment 2
- Carty infrastructure separation includes:
 - Septic
 - Backup power/Carty Substation
 - Install eye wash
 - Fire water line
 - Intake structure
- Carty reservoir operations being evaluated to minimize cost



Coal Yard Reclamation

- Reclamation from March to October 2020
- 40,033 tons of coal reclaimed, used as fuel
- Revegetated in January 2021
- Reclamation returned \$1.8M of coal for fuel and saved \$2.8M in disposal costs

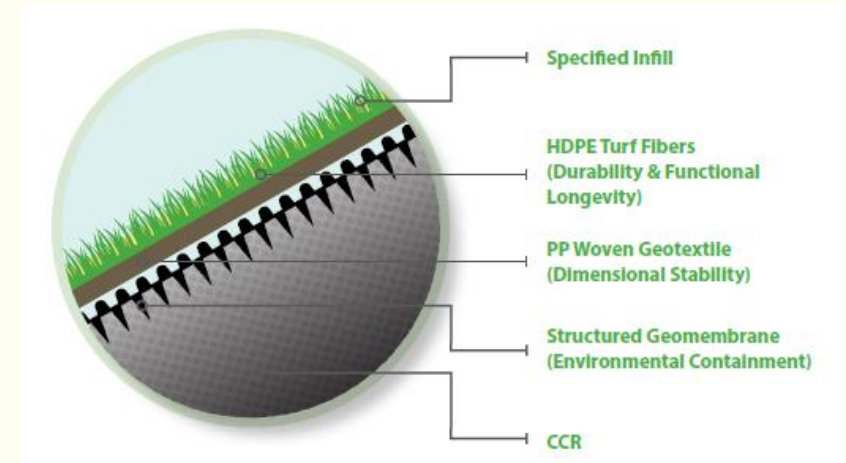


Coal Yard Reclamation



Ash Disposal Area Closure

- Designed using geomembrane cap - ClosureTurf®
- Construction May 2021 to July 2021, small punch list items complete by end of August
- 30 years of groundwater monitoring and O&M
- Radiological readings to be submitted to ODOE for site certificate and OAR 345-050-0030 exemptions



Ash Disposal Area Closure



Ash Disposal Area Closure



Soil Removal

- Berm from excavation of the boiler room
- Small portion previously used as a shooting berm
- Sampled by geo probe and auger to identify possible contamination
- Removed 146 tons of lead contaminated soil



Underground Storage Tank

- Removed one 15,000 gallon diesel tank and one 10,000 gallon gasoline tank
- DEQ notified and provided decommissioning checklist and site assessment report
- Soil above, below, and sides of tanks was sampled and no contamination was identified



Wash Pond Removal



- Lined pond where stormwater drained from fuel island
- Oil hydrocarbons within soil above the liner
- 291 tons of soil was removed
- Soil below liner was sampled and no contamination found

Decommissioning and Asset Disposition

- Decommissioning includes:
 - Draining all fluids and oil from equipment
 - Cleaning and washing the plant, cleaning tanks, removing ash from plant systems
 - Removing universal waste, radioactive sources
 - Removing underground storage tanks
- Asset disposition
 - Other plants identified assets they want
 - Look to scrappers or specific vendors to buy items (~ \$1.7M so far)
 - Remaining material goes to demolition contractor



- Hazardous Waste - 146,576 pounds
- Non-hazardous Waste - 2,750 tons
- Universal Waste - 152 mercury switches
- Oil - 53,690 gallons
- Diesel Fuel - 110,000 gallons

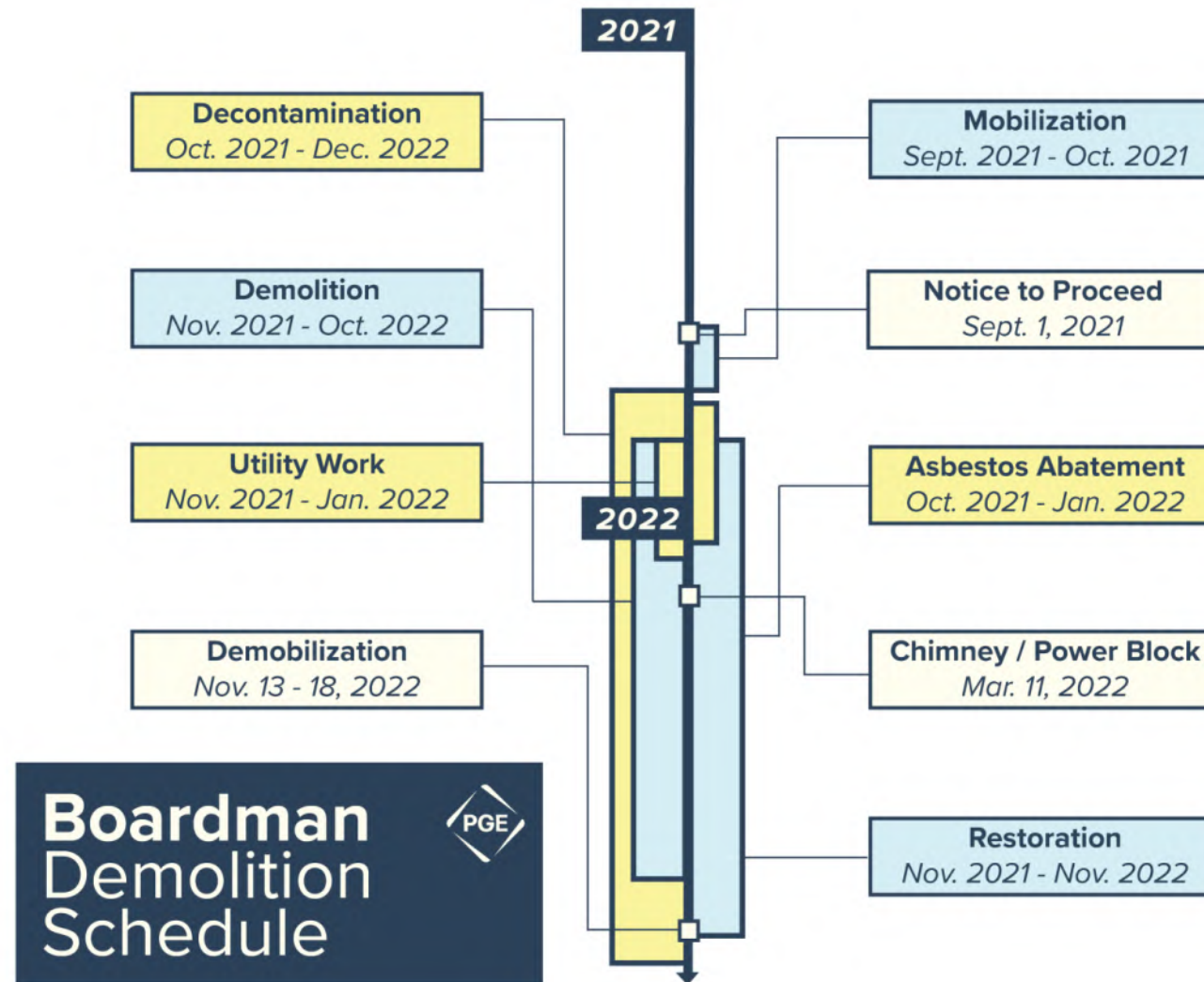


Demolition

- Environmental Regulated Materials assessment
 - Identify asbestos and lead paint
- Make the plant cold, dark and dry during decommissioning
 - Have the plant ready for a demolition contractor to abate and demolish
- Plan and design site demolition
 - Remove buildings and utilities to two feet below grade
 - Abandon utilities deeper than two feet
 - Site restoration
- Currently in negotiations with contractor
- Turn the site over to demolition contractor October 2021
- Stack and boiler imploded end of Q1/2022



Demolition



Fire station
Water tank
Construction Sub
Diesel fuel tank

Rail loop
throughout
site

230kV transformer

Transmission TBD

Parking Lots

Intake Structure

Discharge channel

Buildings/
Items to Remain

Milestones and Costs



| | | |
|---|--|--|
| Employee costs \$14M \$14M | Planning and management \$2.0M \$2.0M | Coal yard \$2.8M \$3.0M |
| Ash disposal area \$8.4M \$7.5M | Decommissioning \$2.5M \$3.5M | Asset write-off \$7.3M \$7.3M |
| Abatement and demolition \$34M \$15M | Long-term site care \$3.8M \$3.8M | Total \$75M \$56.1M |

Top number is previously estimated cost. Bottom number is current estimate.



Summary

- Safety is critical and primary success factor
- Decommissioning activities have gone well so far
- Demolition work through next year and long-term monitoring and maintenance of site





Appendix





Adjourn

