

Oregon Department of **ENERGY**

Energy Facility Siting
Council Meeting

Virtual Meeting

April 22, 2022
8:30 am



Opening Items:

- Call to Order
- Roll Call
- Announcements

Announcements:

- Reminder that this meeting is being held in its entirety via teleconference and webinar.
- Reminder to Council and to anyone addressing the Council to please remember to state your full name clearly, and do 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

April 22, 2022

- February Meeting Minutes
- Council Secretary Report

Agenda Item B (Information Item)

Public Comments Portal

April 22, 2022

Wally Adams, ODOE Operations and Policy Analyst

Topics

- Background, Purpose and Scope
- Demo of Comment Portal for a DPO
- Demo of Docket

Business Problem

- Public comment periods are required by statute and administrative rules to occur at several points in the Site Certificate process as well as the Rulemaking process. Comments are currently captured in several channels: emails are most common, but also by written letter, fax and verbally. There is no online system for submitting comments.
- Comments that are received are not readily available to view by the public. They are only available through a public records request or once a comment summary is published.
- Comments must be processed after they are received, meaning that they are catalogued in a single .pdf file with an index. Any attachments received must be included with the comments. In some cases – generally when a large number of comments are received – a summary of the issues must be generated. An index of comments must be generated manually.

Objectives

The primary objective of the project was to create an online comment portal to capture and display comments submitted by the public. Other objectives included:

- Use existing software platforms for which the State already has licenses and in-house IT resources to develop the system, thereby keeping our costs low.
- Provide people who submit comments with an email acknowledgement.
- Have the ability to generate an index of comments received.
- Have the ability to generate a list of comments in pdf format.
- **Create a docket to provide public access to the comments received for a particular project.**

Objectives (Continued)

- Through the web-based input form, enable the commenter to associate their comments with specific citations to Council standards, application or DPO sections and page references. The intent is for the system to improve the ability of citizens to provide meaningful content that Staff, the Council, and Applicants can utilize, without crossing the line of providing legal advice.
- Scope:
 - NOI
 - DPO
 - DPO – Type A Amendment
 - DPO – Type B Amendment
 - Formal Rulemaking
 - Informal Rulemaking

Comment Portal and Docket Demo

- The Siting Comments Portal can be found here:

<https://odoe.powerappsportals.us/en-US/SitingPublicComment/>

- The Siting Docket can be found here:

<https://odoe.powerappsportals.us/en-US/sitingdocket/>

Agenda Item C (Action Item)

Protected Areas, Scenic Resources, and Recreation Standards Rulemaking

April 22, 2022

Christopher M. Clark, ODOE Senior Site Analyst and EFSC Rules Coordinator

Presentation Overview

- Background and Procedural History
- Overview of Recommendations
- Discussion of Stakeholder Feedback & Recommended Responses
- Fiscal and Economic Impacts
- Council Consideration of Proposed Rules

Background

- **Scope:** Address issues related to the Protected Areas, Scenic Resources, and Recreation Standards and associated rules.
- **Objectives:**
 - Ensure that the standards clearly identify the resources and values they are intended to protect.
 - Ensure that the standards are consistent with ORS 469.310.
 - Improve efficiency and effectiveness of Council's review processes and procedures by resolving ambiguity, lack of clarity, and inconsistency in rule.

Procedural History

Item	Date
Council initiates rulemaking	October 22, 2020
Staff solicits written comments	November 6, 2020
Council review of preliminary feedback	April 23, 2021
Staff Conducts Rulemaking Workshops	July 28, 2021
	August 18, 2021
	October 14, 2021
Council provides feedback on preliminary analysis and recommendations	February 25, 2022
Staff solicits additional feedback on revised draft rules	March 7, 2022
Council considers proposed rules	April 22, 2022

Rulemaking Process



Summary of Issues & Recommendations

#	Description	Staff Recommendation
1	Rules do not require the department or applicant to give notice to or request comment from the manager of a protected area that may be affected by a proposed facility.	Require public notice to be sent to Protected Area Managers. Amend NOI and ASC rules to require Applicant to identify protected area managers.
2	The Scenic Resources and Recreation Standards limit the scope of Council's findings to resources in the appropriate analysis area identified in the project order. This is inconsistent with the Protected Area Standard, which contains no similar limitation.	Amend the Recreation and Scenic Resources Standards to allow the Council to consider evidence related to resources outside the analysis area.

Summary of Issues & Recommendations

#	Description	Staff Recommendation
2.1*	Some stakeholders recommend that the study areas for impacts to Protected Areas, Recreation, and Scenic Resources are too large, especially for renewable energy facilities.	Make no changes at this time.
2.2*	A stakeholder recommended that the Council limit study areas for impacts to Protected Areas, Recreation, and Scenic Resources to areas within the borders of Oregon.	Make no changes at this time

*Issue raised in whole or part by stakeholders

Summary of Issues & Recommendations

	Description	Staff Recommendation
3	The Protected Areas standard refers to “designations in effect as of May 11, 2007.” A number of new areas have been designated for protection since that time.	Remove the effective date for designations, require evaluation of impacts to protected areas that are designated before the complete application is filed.
4	The Protected Areas standard contains a list of designation categories and specific protected areas that may be incomplete or out of date.	Update and simplify the list and remove specific examples to reduce the need for future rulemaking.

Summary of Issues & Recommendations

	Description	Staff Recommendation
5	The Protected Areas standard does not list Outstanding Resource Waters as Protected Areas.	Make no changes
6	The current rule may permit a transmission line or natural gas pipeline to be sited in a protected area when other lesser impact alternatives are available.	Amend rule to clarify OAR 345-022-0040(2)
7	The Scenic Resources standard does not specify that resources and values identified as significant or important in state land management plans are protected.	Amend standard to require assessment of visual impacts to State Scenic Resources.

Summary of Issues & Recommendations

	Description	Staff Recommendation
8*	The application of new rules or standards to an application for Site Certificate that is under review on or before the effective date of the rules could prejudice the applicant.	Specify that amended standards will only apply to applications or requests for amendment filed on or after the effective date of the rules.
9*	More specificity may be needed in how the Council evaluates visual impacts.	Consider in future rulemaking
10*	A stakeholder recommended the Council clarify the criteria for identifying important recreational opportunities.	Make no changes at this time

*Issue raised in whole or part by stakeholders

Comments Received After Feb. 25

- As of April 14, the following organizations and individuals provided comment in response to the Department's March 7 request:
 - Avangrid Renewables
 - Idaho Power Company
 - Jim and Fuji Kreider
 - New Sun Energy
 - Oregon Natural Desert Association
 - Susan Geer
 - Obsidian Renewables
 - Renewable Northwest and Oregon Solar + Storage Industries Association
 - Meg Cooke
 - Aric Johnson

Staff will update this slide if additional comments are received before the April 22, 2022 Council meeting.

Summary of Comments

Issue 1:

- Several commenters generally supported staff recommendation to give notice to protected areas managers.
- Some commenters opposed requiring applicant to provide contact information, others recommended that the Department should make maps and lists available to ease administrative burdens.
- Some commenters recommended that protected areas managers be provided with opportunity to become reviewing agency.
- Some commenters recommended that proposed rules should also ensure notice is given to the owner or protected area located on private land.

Summary of Comments

Issue 2:

- Several commenters were generally supportive of staff's recommendation to remove the reference to analysis areas in the Scenic Resources and Recreation Standards.
- Several commenters recommended that the Council should make no changes or amend Protected Areas Standard to include reference to analysis areas instead.

Issue 2.1:

- Comments related to the appropriateness of current study area sizes, were mixed.
- Some commenters also noted that greater clarity and transparency is needed in the process for establishing analysis areas.

Summary of Comments

Issue 3:

- Several commenters recommended that only protected areas designated before submittal of the preliminary application or request for amendment should be evaluated and considered. Others recommended the goal post be set by the date of the initial project order.
- Several commenters recommended that any goal post is inappropriate, and that all protected areas designated at the time the Council makes its final decision should be protected by the standard.

Issue 4:

- Most commenters supported updating the list; however, some took exception to specific changes. Some commenters recommended that terms such as “component”, “potential” and “managed” created unacceptable ambiguity and proposed alternative language.

Summary of Comments

Issue 4 (cont'd):

- Some commenters recommended that local and tribal parks, monuments, waysides, refuges, recreation areas and private lands under conservation easement should be included as protected areas.
- One commenter recommended including BLM inventoried “Lands with Wilderness Characteristics” as protected areas. This commenter also recommended that the Council address federally designated Critical Habitat, State Conservation Opportunity Areas, and other wildlife conservation areas established in federal land management plans (e.g., BLM Sagebrush Focal Areas and U.S. Forest Service Late Successional Reserves).
- Some commenters recommended that the Department should be required to provide maps and lists of all protected areas, either in rule or as separate resource.

Summary of Comments

Issue 6:

- Some commenters recommended that rule should specify that more than 2 alternatives must be considered for linear facility proposed to be located in protected area, and that any alternatives approved in NEPA process should be included.

Issue 7:

- Several commenters recommended that in addition to requiring review of state land management plans to identify significant or important, rule should require review of plans developed by private land trusts and conservancies.
- Several commenters recommended that there should be a process for the public to nominate significant or important scenic resources.
- One commenter recommended that including state scenic resources in standard may limit renewable energy development.

Summary of Comments

Issue 8:

- Several commenters recommended that only rules and standards in place at the time a preliminary application or request for amendment is submitted should apply to the review of a proposed facility. Others thought any goal post is inappropriate.

Issue 9:

- One commenter recommended that the Council should address visual impacts assessment methodologies in this rulemaking but provided specific recommendations for information requirements if Council approves proposed rules.

Other comments:

- One commenter recommended that the Council terminate rulemaking due to lack of need and potential impacts to renewable energy siting.

Fiscal and Economic Impacts

- Because the proposed rules would only apply to applications submitted on or after the effective date of rules, no direct fiscal impacts or costs of compliance are expected.
- Some indirect impacts could result from protection of additional designated areas, scenic resources, and recreational opportunities.
- No small businesses are likely to be affected by the proposed rules

Staff Recommendations

- Staff recommends Council approve the proposed rules provided in Attachment 2 and authorize staff to issue a Notice of Proposed Rulemaking.
- Staff recommends Council schedule a rulemaking hearing for June 23, 2022.

Next Steps

Item	Date
Council considers proposed rules and Authorizes NOPR	April 22, 2022
Staff Issues NOPR	April 29, 2022
Rulemaking Hearing & Last Day for Public Comment	June 23, 2024
Council Consideration of Permanent Rules	June 24, 2022

Council Decision on Proposed Rules

Option 1

Authorize staff to issue Notice of Proposed Rulemaking to adopt rule changes presented by staff

Option 2

Authorize staff to issue Notice of Proposed Rulemaking to adopt rule changes presented by staff, with modifications

Option 3

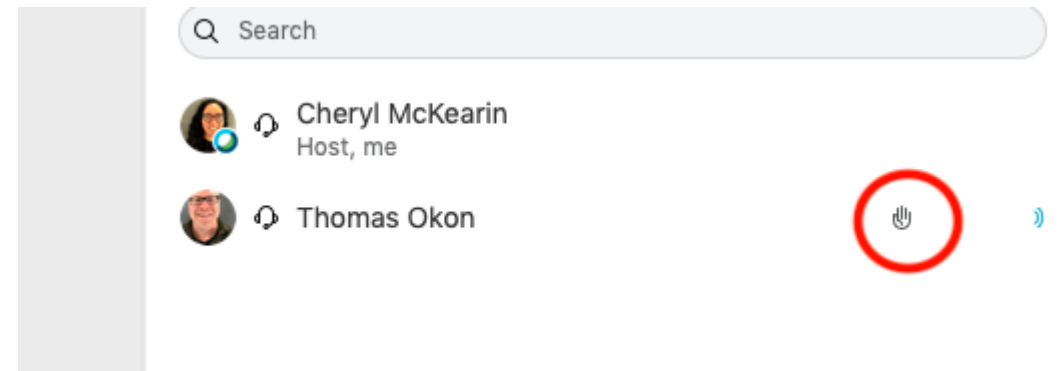
Deny staff request for authorization.

Agenda Item D

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:

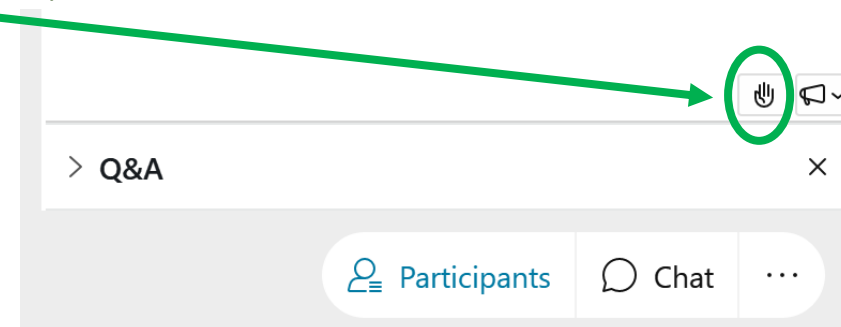
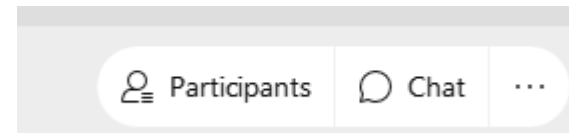
Webinar Participants

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.

BREAK

Agenda Item E (Action Item)

Carbon Dioxide Emissions Standards Rulemaking 2022

April 22, 2022

Christopher M. Clark, ODOE Senior Site Analyst and EFSC Rules Coordinator

Presentation Overview

- Background and Procedural History
- Need and Authority to Conduct Rulemaking
- Scope and Objectives of Rulemaking
- Overview of Staff Analysis & Recommendations
- Fiscal and Economic Impact Statements
- Council Consideration of Proposed Rules

Background

- To be issued a site certificate, applicants proposing to develop a carbon dioxide emitting energy facility must demonstrate compliance with the applicable Carbon Dioxide Emissions Standard.
- Most applicants demonstrate compliance by agreeing to provide funds to The Climate Trust (TCT) in “an amount deemed sufficient to produce any necessary reduction in greenhouse gas emissions.”
- The amount is determined using the Monetary Offset Rate in OAR 345-024-0580. Council may increase or decrease the monetary offset rate by up to 50 percent in any two year period based on:
 - Empirical evidence of the cost of offsets; and
 - Council’s finding that the standard will be economically achievable with the modified rate.

Procedural History

Item	Date
Legislature enacts Carbon Dioxide Statutes	June 26, 1997
Legislature passes HB 2021	June 25, 2021
New standards for fossil-fueled power plants take effect	September 25, 2021
Council initiates rulemaking & authorizes NOPR	April 22, 2022

Rulemaking Process



Need and Authority for Rulemaking

HB 2021 establishes new requirements for new and amended site certificates for fossil-fueled power plants.

ORS 469.413. Notwithstanding ORS 469.320 and 469.405, the Energy Facility Siting Council may not:

(1) Issue a site certificate for a new generating facility that produces electric power from fossil fuels * * * unless the council determines that a new generating facility will generate only nonemitting electricity as defined in ORS 469A.400; or

(2) Approve the amendment of a site certificate for an energy facility described under subsection (1) * * * in a manner that would significantly increase the gross carbon dioxide emissions that are reasonably likely to result from the operation of the energy facility.

Need and Authority for Rulemaking

- New law is effective without further Council action, but rulemaking is needed to clarify relationship between new requirements and existing standards.
- Legislature did not define what level of change would “significantly increase the gross carbon dioxide emissions” likely to result from operation of an existing facility. Resolving this ambiguity through rulemaking may provide certificate holders with additional certainty and provide stakeholders with an opportunity to provide input outside of a project-specific context.
- While future applicability of existing standards may be limited, they may still be used in limited circumstances, which staff recommends justifies at least one additional update of the emissions standards and carbon monetary offset rate.

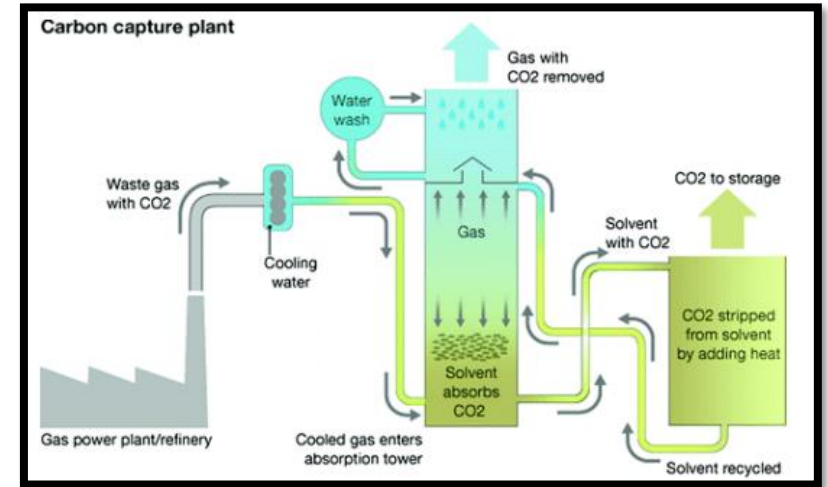
Issue 1: Standard for New Fossil-Fueled Power Plants

Issue Summary:

- ORS 469.413(1) prohibits the Council from approving a new site certificate for a fossil-fueled power plant unless the Council determines that the facility “will generate only nonemitting electricity as defined in ORS 469A.400.”
- As defined in ORS 469A.400(7), “nonemitting electricity” means electricity “that is generated and may be stored in a manner that does not emit greenhouse gas into the atmosphere.”

Issue 1: Standard for New Fossil-Fueled Power Plants

- Fossil-fueled power plants that can avoid 100% of greenhouse gas emissions through carbon capture, sequestration, and storage are likely still allowed to be sited in Oregon. Offsets or other indirect mitigation of emissions can likely not be considered.
- Thermal-power plants, combustion turbines, and other technologies like fuel-cells that generate electricity from hydrocarbon fuels derived from renewable sources are also likely still allowed.
- Hydrogen and natural gas can be derived from either fossil or renewable sources. Some additional information may be needed to determine if a facility qualifies as nonemitting or not.



Source: USDOE. Carbon Capture, Transport, & Storage Supply Chain Deep Dive Assessment. Feb. 24, 2022.



Hanwha Energy Hydrogen Fuel Cell Plant, Daesan, South Korea.
Source: Koreaherald.com.

Issue 1: Standard for New Fossil-Fueled Power Plants

Alternatives:

1. Make No Changes
2. Adopt New Rules implementing ORS 469.413(1)

Recommendations:

- Amend OAR 345-024-0500 to incorporate the new requirements of ORS 469.413(1) and clarify what standards are applicable to the review of an application for a new fossil-fueled power plant.
- Amend OAR 345-020-0011 and 345-021-0010 to clarify information requirements for thermal power plants.

Issue 2: Standard for Changes to Existing Fossil-Fueled Power Plants

Issue Summary:

- ORS 469.413(2) provides that the Council may not approve the amendment of an existing site certificate if it “would significantly increase the gross carbon dioxide emissions that are reasonably likely to result from the operation of the energy facility.”
- Neither ORS chapter 469 or HB 2021 define what constitutes a “significant increase” in gross carbon dioxide emissions.

Issue 2: Standard for Changes to Existing Fossil-Fueled Power Plants

Project Name	Status	Date Site Certificate Issued	Carbon Standard Applicable
Boardman Coal	Decommissioned	2/27/1975	No
Hermiston Generating Plant	Operational	3/11/1994	No
Coyote Springs Unit 1	Operational	9/16/1994	No
Coyote Springs Unit 2	Operational	9/16/1994	Yes
Hermiston Power Project	Operational	3/26/1996	Yes
Klamath Cogeneration	Operational	8/15/1997	Yes
Port Westward Generating Unit 1	Operational	11/8/2002	Yes
Port Westward Generating Unit 2	Operational	11/8/2002	Yes
Klamath Generating Peakers	Operational	9/27/2005	Yes
Carty Generating Station Unit 1	Operational	7/2/2012	Yes
Perennial Windchaser Station	In Construction*	9/23/2015	Yes



*On Feb 2, 2022, Perennial Power Holdings issued a press release indicating they would terminate their site certificate for the Perennial Wind Chaser Station, but they have not yet submitted their proposed retirement plan or request to terminate their site certificate.

Issue 2: Standard for Changes to Existing Fossil-Fueled Power Plants

Alternatives:

1. Interpret “significant increase” as an increase that exceeds a set amount of CO₂
2. Interpret “significant increase” as an increase that exceeds a set percentage of the gross CO₂ emissions estimated for the facility
3. Interpret “significant increase” as any net increase in gross CO₂ resulting from a change in facility design or operation that requires an amendment.

Recommendation:

- Amend OAR 345-027-0375 to specify that a certificate holder must demonstrate that a change in facility design or operation will not result in a net increase in gross carbon dioxide emissions, consistent with Alternative 3.

Issue 2: Standard for Changes to Existing Fossil-Fueled Power Plants

OAR 345-027-0375(2)(d):

For a request for amendment to a site certificate for a fossil-fueled power plant, the proposed change will not result in a significant increase in the gross carbon dioxide emissions that are reasonably likely to result from the operation of the facility. For the purposes of this subsection, an incremental increase in capacity or heat rate resulting from changes that otherwise falls within the limits of OAR 345-027-0353(1) does not significantly increase the gross carbon dioxide emissions that are reasonably likely to result from the operation of the energy facility.

Issue 2: Standard for Changes to Existing Fossil-Fueled Power Plants

345-027-0353 - Changes Exempt from Requiring an Amendment

An amendment to a site certificate is not required for a proposed change in the design, construction or operation of a facility that is in substantial compliance with the terms and conditions of the site certificate, and is a change:

(1) To an electrical generation facility that would increase the electrical generating capacity and would not increase the number of electric generators at the site, change fuel type, increase fuel consumption by more than 10 percent or enlarge the facility site;

Issue 3: Updates to CO2 Emissions Standards

Issue Summary:

- Council may reset the carbon dioxide emissions standard for base load gas plants to 17 percent below the emissions rate of the most efficient combined cycle combustion turbine plant that is commercially demonstrated and operating in the United States.
- The current standard of 0.614 lbs CO₂/kWh was set in 2018 based on performance test data from the Grand River Energy Center Unit 3 (GREC), which includes one MHI M501J gas turbine in a 1x1 combined cycle configuration.
- Several new combined cycle combustion turbine plants have been commissioned since 2018, and if they are more efficient than the GREC facility, the Council may reset the emissions standard.
- Council rules specify that Council may amend standards for non-base load power plants and nongenerating facilities to remain equivalent with base-load standard.

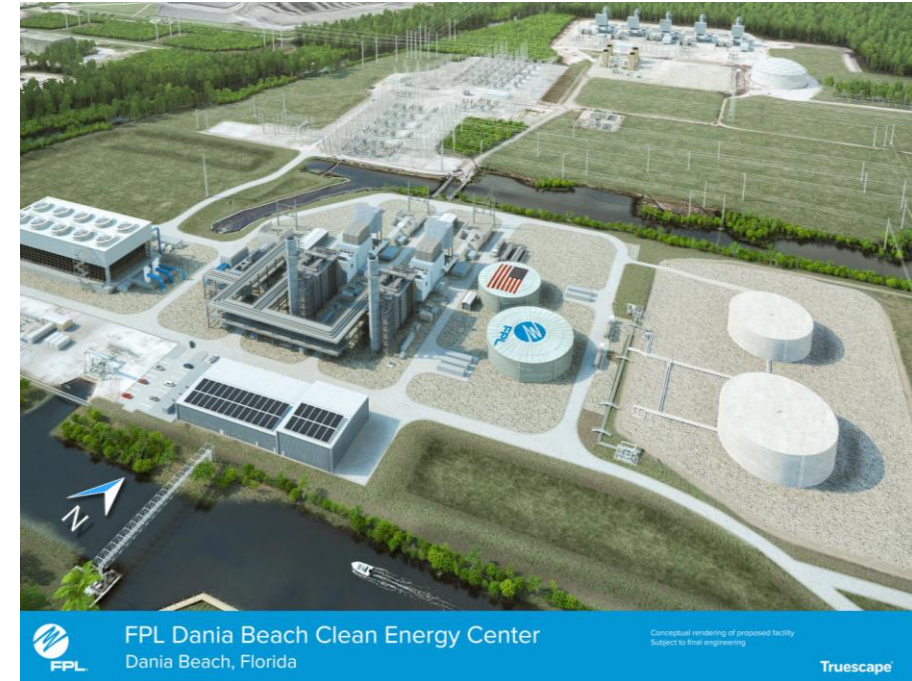
Issue 3: Updates to CO2 Emissions Standards

Facility	Turbine	Combined-Cycle Configuration	Commercial Operation Date	Heat Rate - Manufacturer Specification (btu/kWh HHV)	Heat Rate - Field Test Data (btu/kWh HHV)
Grand River Energy Center Unit 3 Mayes County, OK	MHI M501J	1x1	2017	6,098	6,321
Allen Combined-Cycle Power Plant Shelby County, TN	GE 7HA.02	2x1	2018	5,944	N/A
Dania Beach Clean Energy Center Broward County, FL	GE 7HA.03	2x1	June 2022 (expected)	5,907	N/A

Issue 4: Updates to CO2 Emissions Standards

Recommendation:

- Reset base load standard to 17 percent below emissions rate for the Dania Beach Clean Energy Center using manufacturer specifications
- If directed by Council, staff will request field test data from Florida Power & Light/NextEra.
- Reset non-base load standard to be equivalent. Request input on the 13 principles in formal comment period.
- Reset nongenerating standard to be equivalent.



Issue 4: Updates to CO₂ Emissions Standards

Step 1. Convert heat rate to emissions rate:

$$5,907 \text{ btu/kWh} * 0.000117 \text{ lbs. CO}_2/\text{btu} = 0.691 \text{ lbs. CO}_2/\text{kWh}$$

Step 2. Set to 17 percent below emissions rate for generating facility standards:

$$0.691 \text{ lbs. CO}_2/\text{kWh} * 0.83 = 0.574 \text{ lbs. CO}_2/\text{kWh}$$

Step 3. Convert to lbs CO₂/Horsepower hour for nongenerating facility standard:

$$0.574 \text{ lbs CO}_2/\text{kWh} * 0.746 = 0.428 \text{ lbs CO}_2/\text{hp-h}$$

Issue 4: Updates to CO2 Emissions Standards

Principles for adopting new emissions standards:

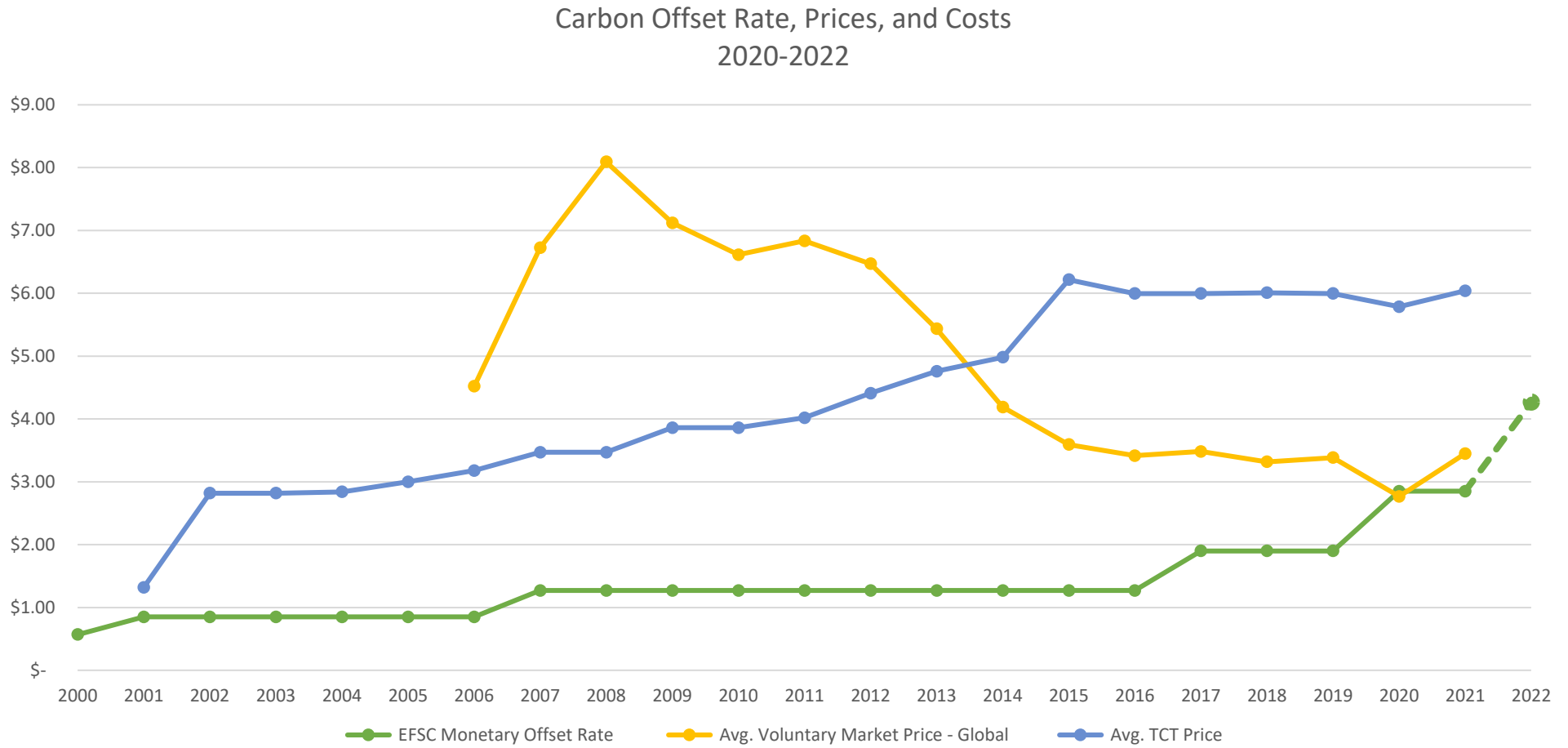
- Promote facility fuel efficiency;
- Promote efficiency in the resource mix;
- Reduce net carbon dioxide emissions;
- Promote cogeneration that reduces net carbon dioxide emissions;
- Promote innovative technologies and creative approaches to mitigating, reducing or avoiding carbon dioxide emissions;
- Minimize transaction costs;
- Include an alternative process that separates decisions on the form and implementation of offsets from the final decision on granting a site certificate;
- Allow either the applicant or third parties to implement offsets;
- Be attainable and economically achievable for various types of power plants;
- Promote public participation in the selection and review of offsets;
- Promote prompt implementation of offset projects;
- Provide for monitoring and evaluation of the performance of offsets; and
- Promote reliability of the regional electric system.

Issue 4: Updates to Monetary Offset Rate

Issue Summary:

- The current standards require most proposed facilities to reduce a portion of the gross carbon dioxide emissions the facility is projected to produce over an assumed 30-year life span by avoiding, displacing, or sequestering a sufficient amount of carbon dioxide or certain other greenhouse gasses.
- All applicants have elected to use the “monetary pathway” to comply with these standards. The monetary pathway uses an assumed monetary offset rate to determine the amount of funds that is sufficient to produce the equivalent of a one-ton reduction in carbon dioxide emissions.
- The legislature authorized the Council to change the rate by no more than fifty percent in any two-year period. Any change must be based on empirical evidence of the cost of offsets and the council’s finding that the standard will be economically achievable with the modified rate for natural gas-fired power plants.
- The Council has increased the rate four times, most recently on June 29, 2020, when the Council set the current rate of \$2.85 per ton of carbon dioxide.

Issue 4: Updates to Monetary Offset Rate



Issue 4: Updates to Monetary Offset Rate

- If the monetary offset rate were increased by fifty percent, the maximum allowable amount, the resulting rate would be \$4.27 per ton of carbon dioxide.
- There is sufficient empirical evidence to support findings that this rate would be comparable to average prices in the global voluntary market, and substantially below the average price for offsets derived from North American offset projects, and below the average price negotiated by The Climate Trust.
- Staff estimates that the new rate, with the modified emissions standards, would increase the costs of developing a new fossil-fueled power plant by approximately 3.9%. Staff recommends this increase is attainable and economically achievable for various types of power plants.

Issue 4: Updates to Monetary Offset Rate

Alternatives:

1. Make no changes
2. Increase monetary offset rate by maximum allowable amount, to \$4.27 per ton of carbon dioxide
3. Increase monetary offset rate by a smaller amount

Recommendation: Amend OAR 345-024-0580 to increase the monetary offset rate to \$4.27 per ton of carbon dioxide.

Housekeeping Changes

- Staff recommends that the Council make other changes to reflect the limited future applicability of the carbon dioxide standards and expectation that the Council will receive few or no applications for fossil-fueled power plants in the foreseeable future.
- Housekeeping changes include, but are not limited to:
 - Amending OAR 345-024-0500 to specify applicability of CO2 standards
 - Deleting provisions of rule that unnecessarily restate statute
 - Amending OAR 345-001-0010 to adopt definitions in ORS 469.300 and 469.503(2) by reference
 - Adopting new rule for other carbon specific definitions

Statements of Need and Fiscal Impact

- The programs and policies implemented by HB 2021 are likely to have broad impacts on Oregon's energy sector, and the public at large; however, no fiscal impacts are attributable to rule changes that merely implement the new law.
- Some increased costs of compliance may result from the changes to the emissions standards and monetary offset rates, but these costs would only be realized under very limited circumstances. As a result, the magnitude of impact is expected to be small and would also likely be mitigated by the public benefits of reducing carbon dioxide emissions.
- These changes are not expected to affect any small businesses.

Staff Recommendations

- Staff recommends Council approve the proposed rules provided in Attachment 2 and authorize staff to issue a Notice of Proposed Rulemaking.
- Staff recommends Council solicit feedback on the proposed rule changes based on the 13 principles found in ORS 469.503(2)(b) in formal rulemaking proceedings.
- Staff recommends Council schedule a rulemaking hearing for June 23, 2022.

Next Steps

Item	Date
Council considers proposed rules and Authorizes NOPR	April 22, 2022
Staff Issues NOPR	April 29, 2022
Rulemaking Hearing & Last Day for Public Comment	June 23, 2024
Council Consideration of Permanent Rules	June 24, 2022

Council Decision on Proposed Rules

Option 1

Authorize staff to issue Notice of Proposed Rulemaking to adopt rule changes presented by staff

Option 2

Authorize staff to issue Notice of Proposed Rulemaking to adopt rule changes presented by staff, with modifications

Option 3

Deny staff request for authorization.

LUNCHBREAK



Agenda Item F (Action Item)

Letter of Credit and Bond Claims Process and Bond Template Review

April 22, 2022

Sisily Fleming, ODOE Fiscal Analyst

Drawing on a Letter of Credit

Present the following documents to the issuing bank:

- Original Letter of Credit (LOC) and all subsequent amendments
- A Sight Draft drawn on issuing bank from the Council
- A dated Draw Certificate in the form of one of the LOC exhibits

Bank is expected to honor the draft by the 3rd business day

Surety Bond Claims

- File Claim with Surety
- Surety Completes Investigation
- Once claim is validated, Surety offers Site Certificate Holder opportunity to pay directly
- If Site Certificate Holder fails to pay, Surety issues payment

Surety Bond Template Review

Bond Template – Page 1

(4) WHEREAS the Principal is required to retire the facility and restore the site according to a final retirement plan approved by the Council under Condition (Number) of the Site Certificate.

(5) THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH that if the said Principal complied with the conditions of the Site Certificate referenced above, OR, if the Principal obtains and provides alternate financial assurance approved by the Council then this obligation shall be void, otherwise this obligation will remain in full force and effect.

Surety Bond Template Proposed Edits

Bond Template – Page 1 – Paragraph 6

The Surety shall become liable on this bond obligation if the Principal fails to fulfill its obligations to comply with the conditions of the Site Certificate referenced above. Upon notification by the Obligee that the Principal has failed to perform as guaranteed by this bond, the Surety will be obligated to pay monies to the Obligee, limited to the penal sum of this bond, **within 90 days.**

Agenda Item G (Information Item)

Industry Renewable Project Timelines

April 22, 2022

Max Greene, Deputy Director, and
Diane Brandt, Oregon Policy Manager,
Renewable Northwest

Renewable Energy Facility Permitting in Context

Max Greene, Deputy Director
Diane Brandt, Oregon Policy
Manager

Energy Facility Siting
Council Meeting

April 22, 2022



RENEWABLE
NORTHWEST

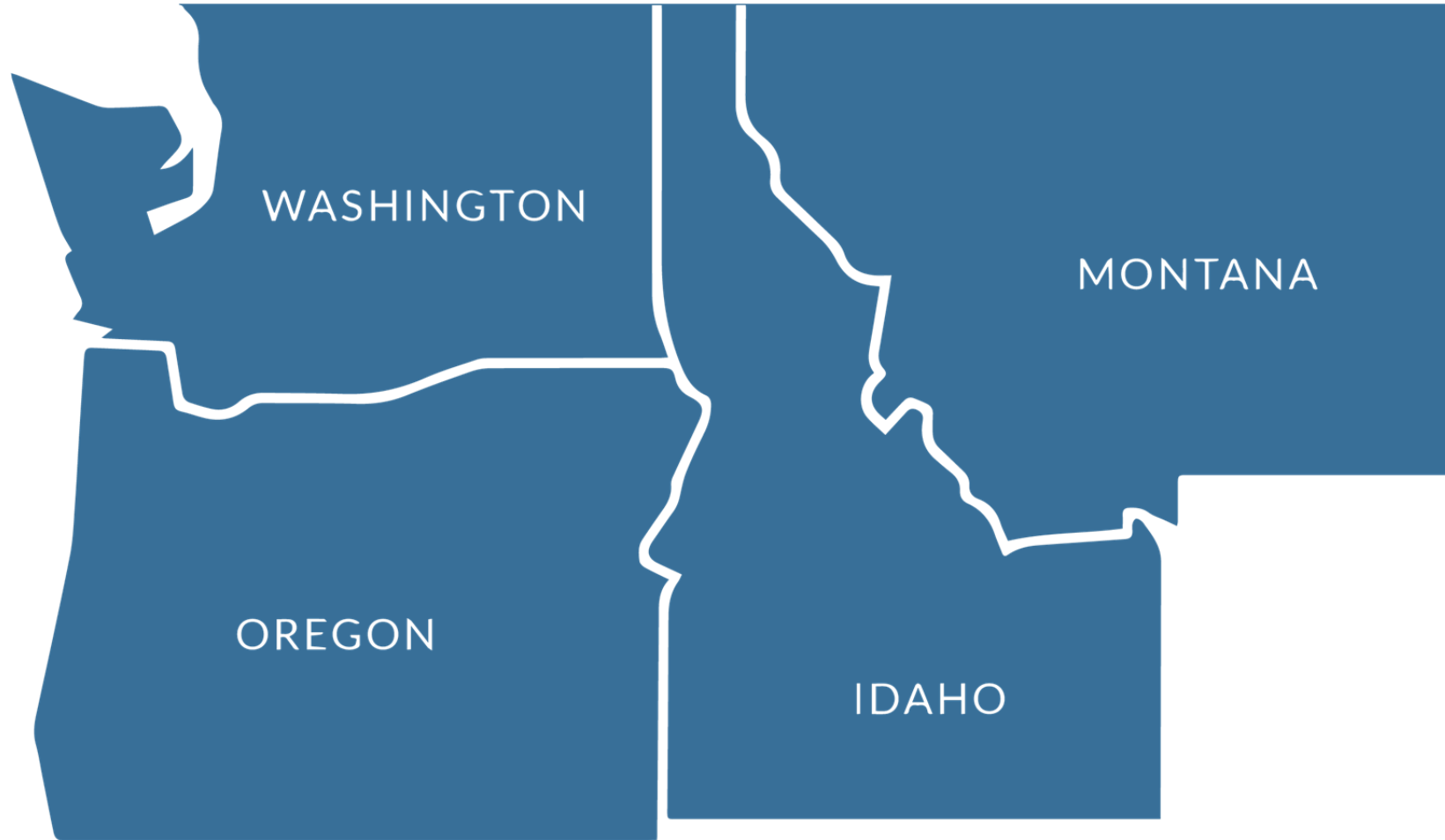




MISSION

Our mission is to decarbonize the region by accelerating the transition to renewable electricity.

GEOGRAPHY



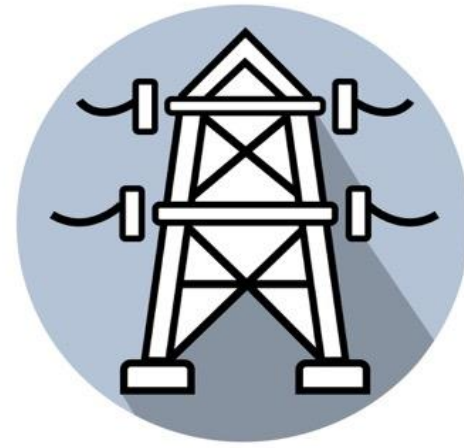
OUR WORK



PLANNING



POLICY



**MARKETS +
TRANSMISSION**



ROADMAP

- Why so much development?
- Timeline: Development and Permitting
 - Examples Included as Applicable
- Questions*

** While there will be time at the end, please feel free to ask questions along the way.*

An aerial photograph of a large-scale solar farm. The solar panels are arranged in neat, parallel rows across a vast, green, grassy field. The perspective is from a high angle, looking down at the panels. The rows of panels recede into the distance, creating a strong sense of depth and scale. The lighting is bright, casting soft shadows from the panels onto the grass. In the background, there are some trees and a fence line, suggesting a rural or agricultural setting. The overall scene conveys a sense of large-scale infrastructure development in a natural environment.

WHY SO MUCH DEVELOPMENT?

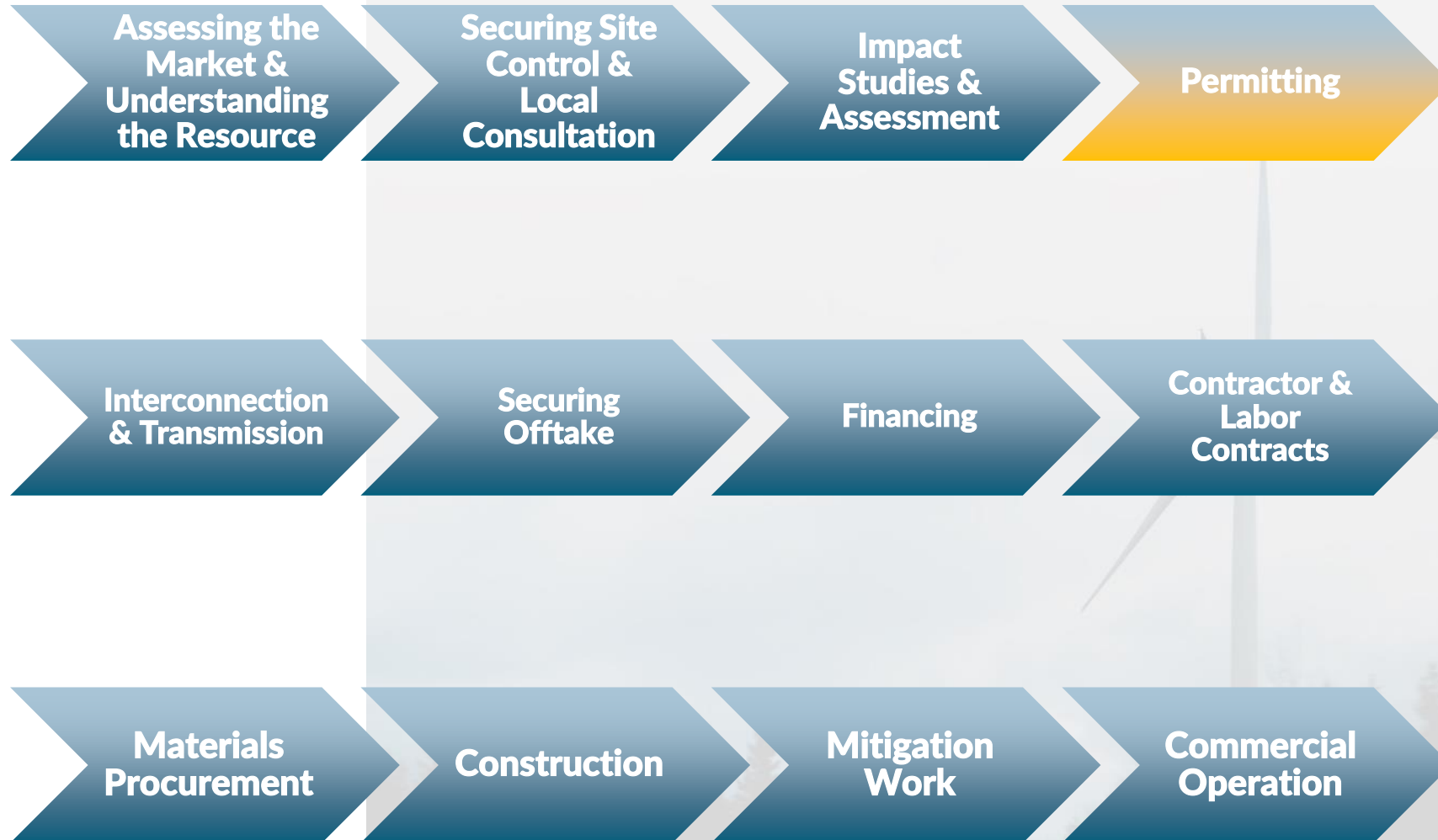
DRIVERS FOR DEVELOPMENT

- Policy
 - HB2021
 - In-state mandate, as practicable
 - Neighboring state mandates, eg. CETA
- Climate Change Mitigation Efforts
 - Voluntary renewable programs
 - Replacing existing emitting generation facilities
 - Increasing electricity demand (electrification)
- Market Conditions
 - Decrease in cost of renewables – least-cost resource

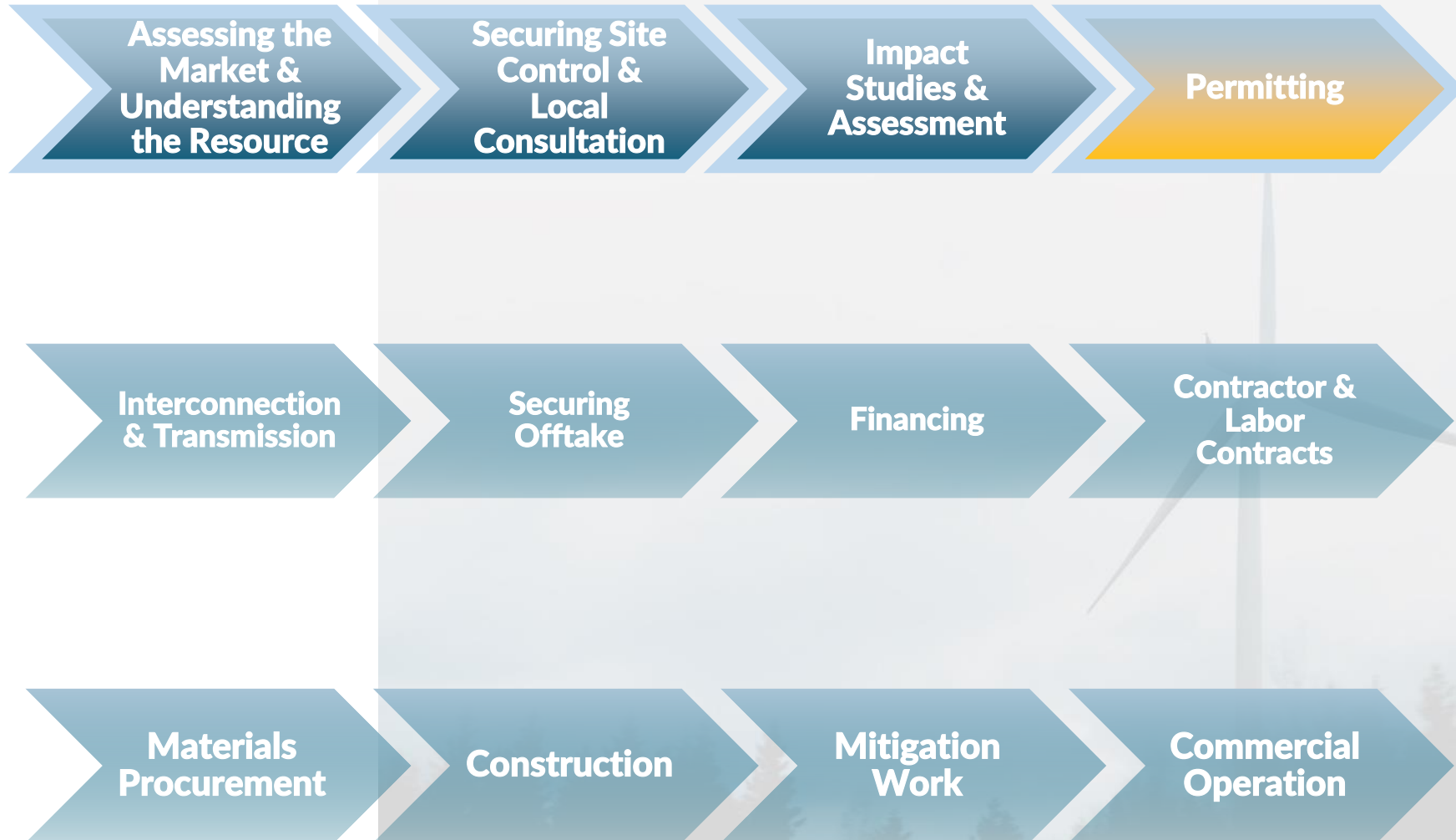
TIMELINE: DEVELOPMENT AND PERMITTING



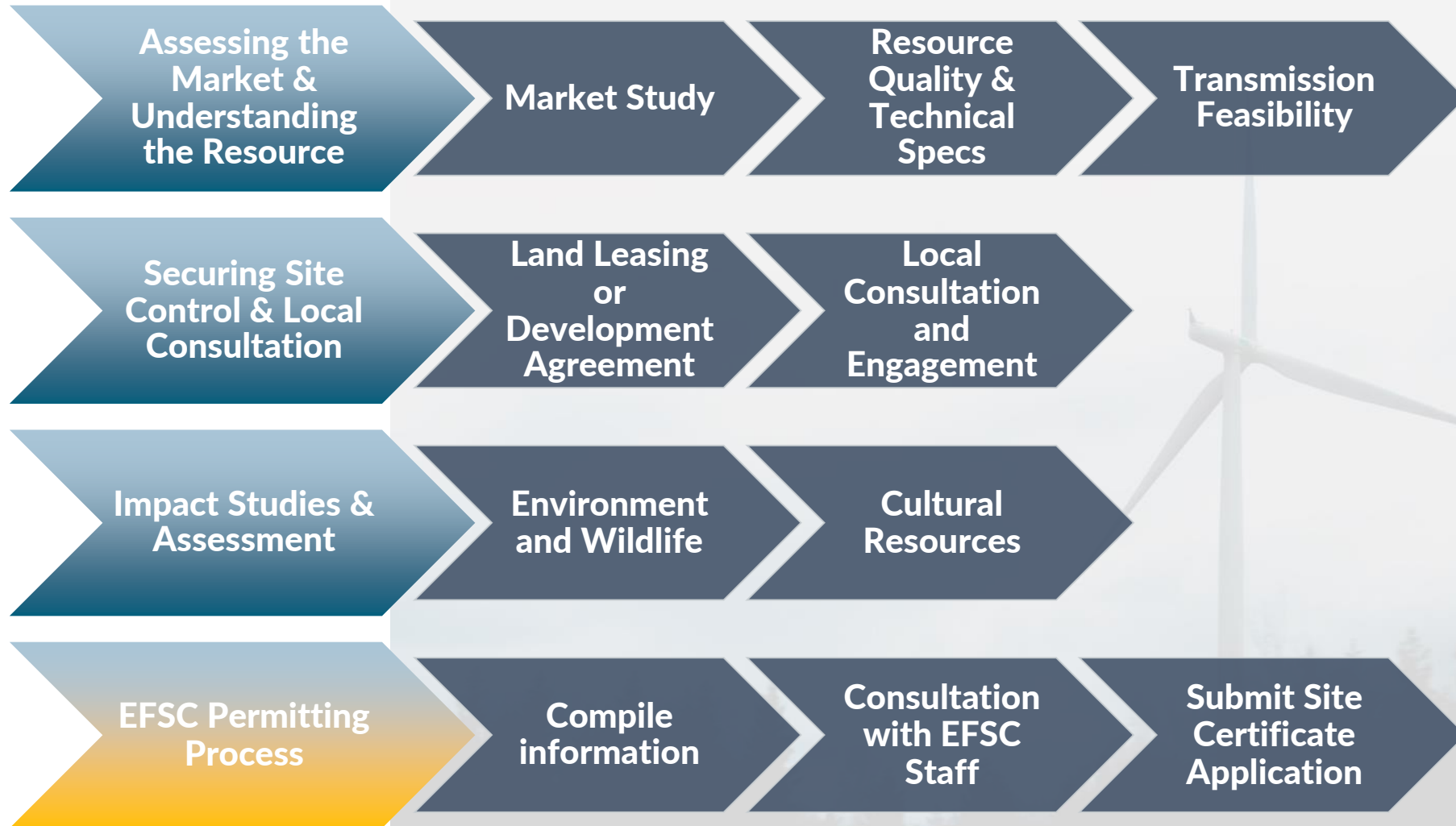
DEVELOPMENT TIMELINE



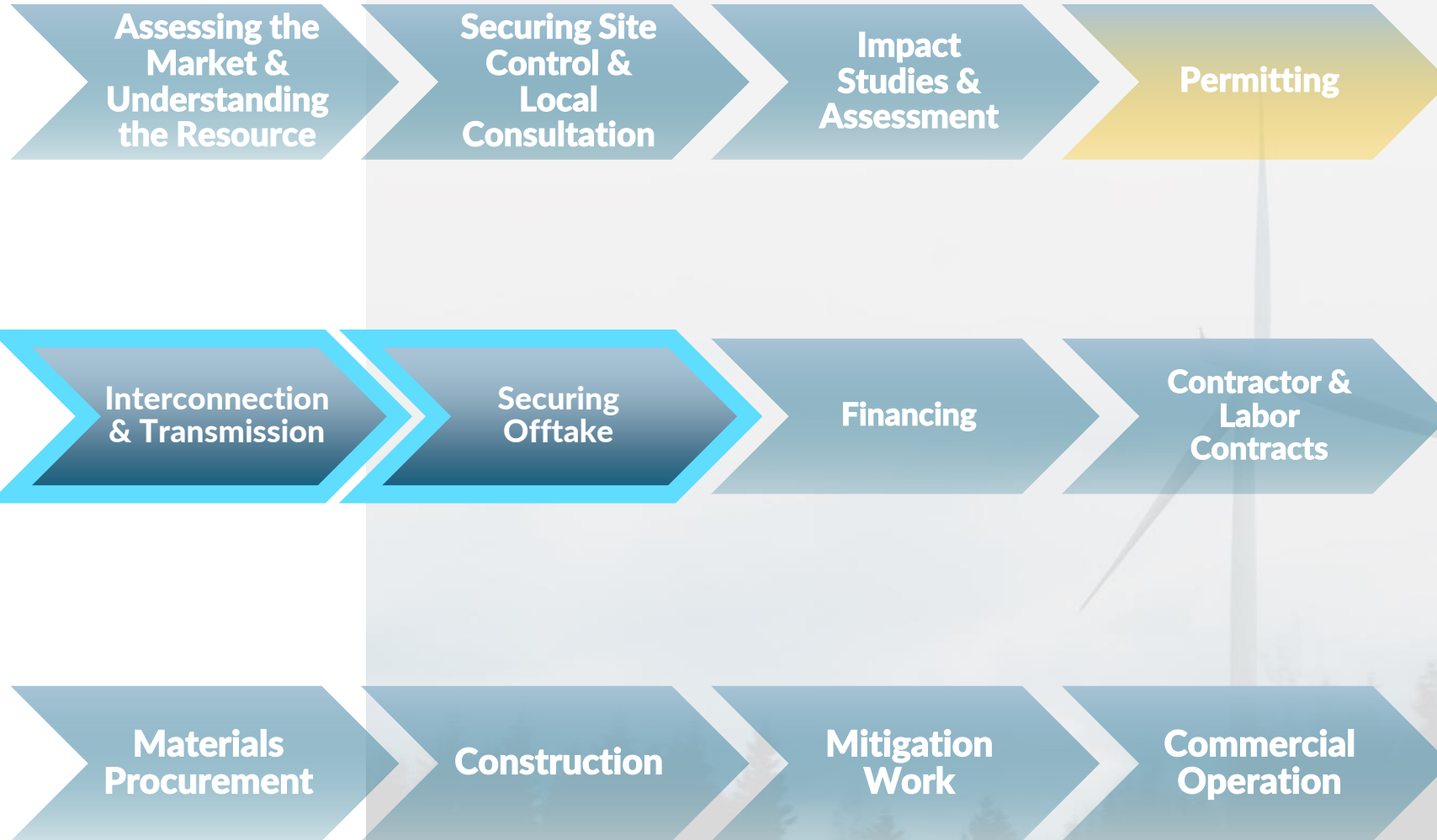
DEVELOPMENT TIMELINE



DEVELOPMENT: EXPLORATORY & PERMITTING



DEVELOPMENT TIMELINE

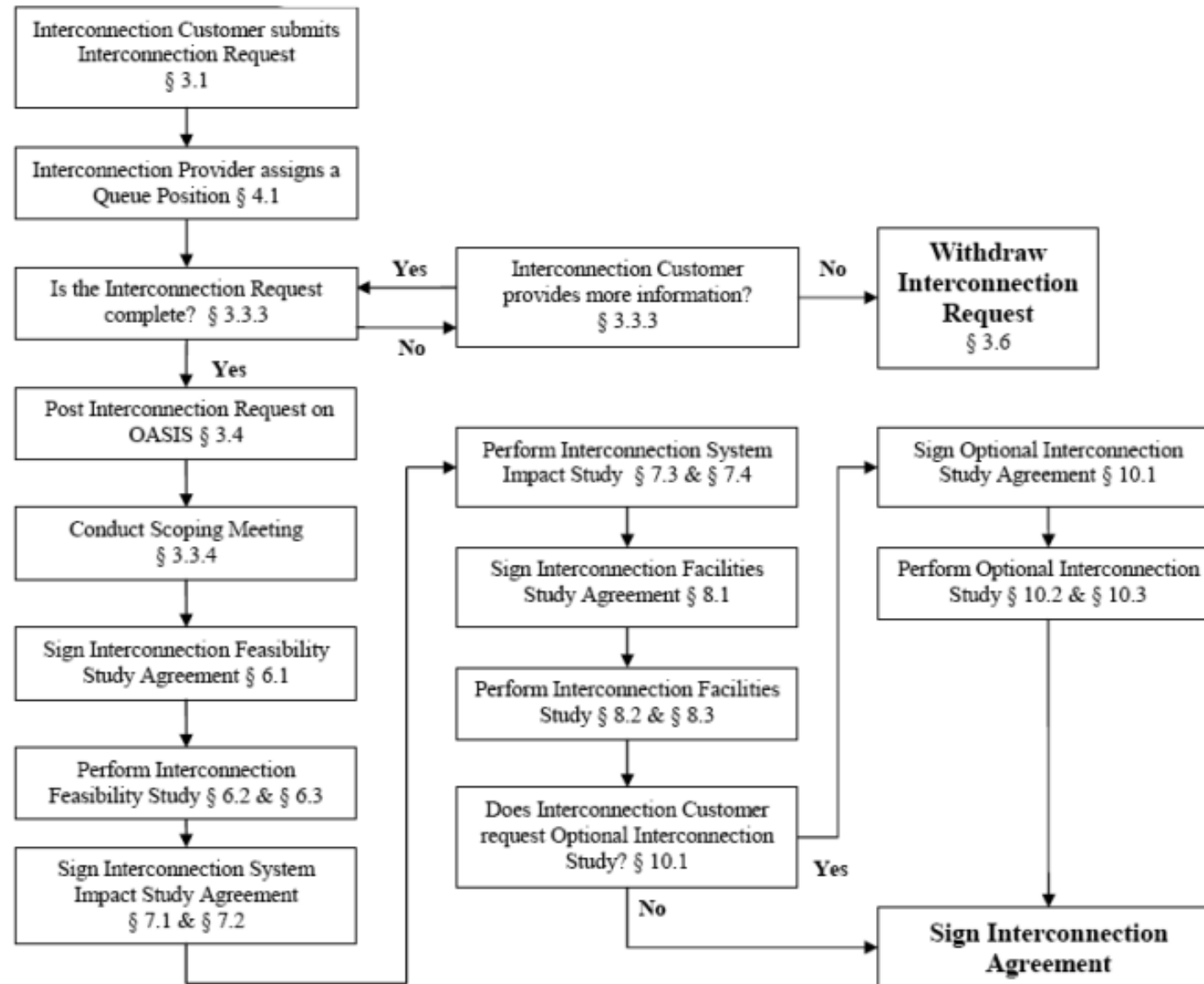


DEVELOPMENT: INTERCONNECTION & TRANSMISSION

**Interconnectio
n &
Transmission**

- **Limited Availability**
- **Subject to FERC-jurisdictional OATTs**
- **Request -> Study Process -> Interconnection Agreement/ Transmission Rights**

Flow Chart of the Large Generating Facility Interconnection Process



DEVELOPMENT: SECURING OFFTAKE

Securing Offtake

- **Primarily via RFP**
- **OPUC Rules**
- **Competitive & Lengthy Process**
- **Requires Site Control, Permit, Tx & Ix benchmarks**
- **Final Decisions Based on Portfolio Modeling**
- **Minimizing Risk***



DEVELOPMENT: SECURING OFFTAKE

Example: PAC 2020 All-Source RFP

- Sought total of:
 - ~1,800 MW solar co-located with ~600 MW battery
 - AND
 - ~1,900 MW wind
- Preferred portfolio included 500 MW solar co-located with 125 MW battery in Oregon

DEVELOPMENT: SECURING OFFTAKE

Example: PAC 2020 All-Source RFP

- Bidders were strongly incented to be far along in the permitting/site certificate process:

Bid provided sufficient detail, including schedule(s) and documentation, to demonstrate the ability of meeting all of the project's environmental compliance, studies, permits such that the December 31, 2024 COD is met (or a potential later date in the case of PSH resources)	Major studies & permits not started = 0% 50% of major studies & permits complete = 3% 100% of major studies & permits complete = 6%
--	---

DEVELOPMENT: SECURING OFFTAKE

Example: PAC 2020 All-Source RFP

But in the end...

- PAC received approx. 98 Oregon bids
- Many were forced out by the interconnection process
- PAC's Final Shortlist included just 2 Oregon projects totaling 210 MW solar + 52.5 MW storage (less than half of what they sought)

DEVELOPMENT: SECURING OFFTAKE

Example: PGE 2021 All-Source RFP

- PGE seeking:
 - ~150 MWa of renewable resources
plus
 - “Sufficient dispatchable capacity resources to meet the remainder of PGE’s 375 MW capacity need.”
- “PGE will explore procuring approximately 65 MWa of additional renewable resources beyond the 150 MWa target... to achieve the HB 2021 2030 goal.”
- Preferred portfolio includes ~160 MW Oregon wind

DEVELOPMENT: SECURING OFFTAKE

Example: PGE 2021 All-Source RFP

- Site Certificate due by final shortlist
- Original date for final shortlist: April 5, 2022
- Current date for final shortlist: April 27, 2022

DEVELOPMENT: SECURING OFFTAKE

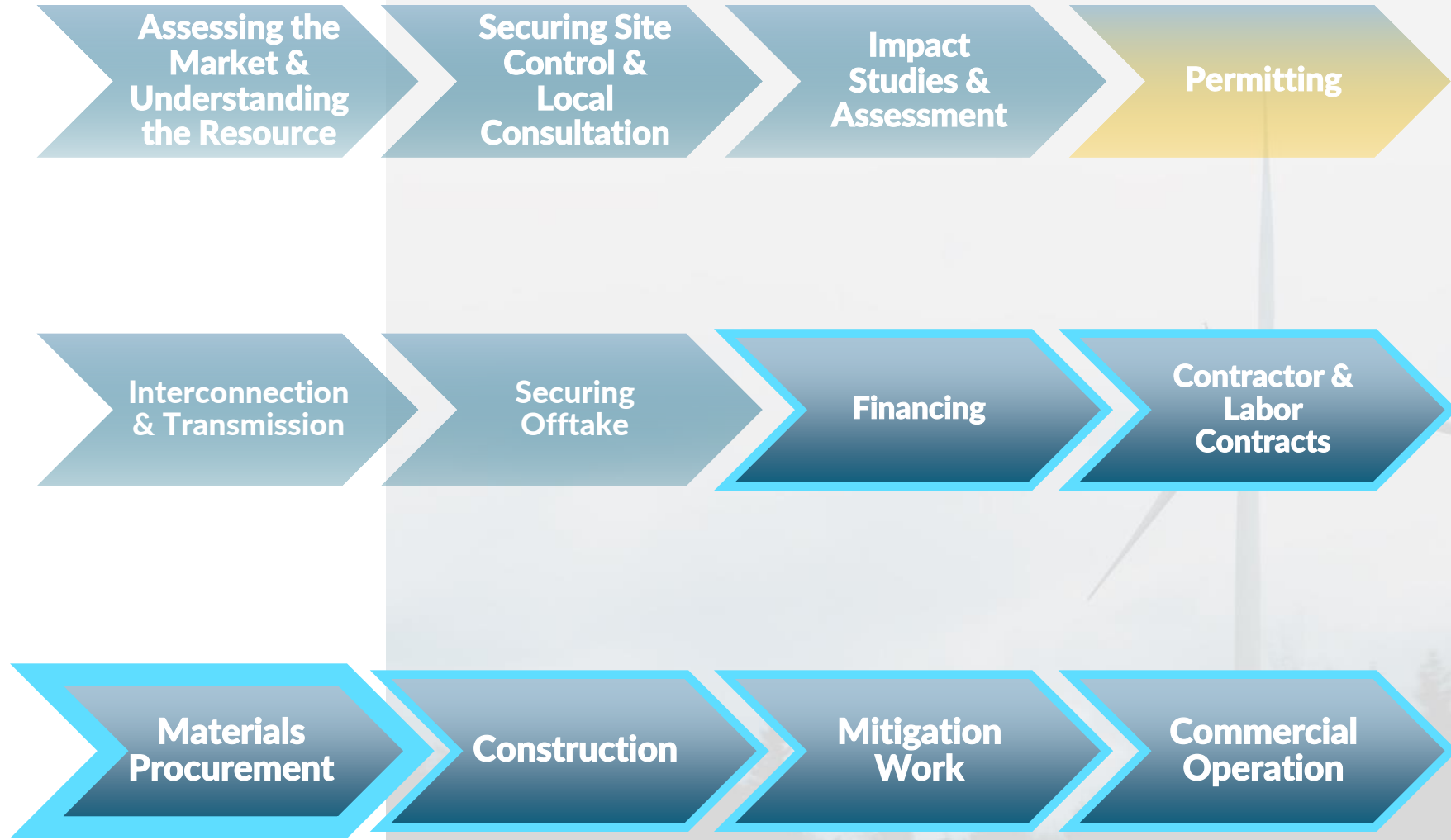
- After RFP selection, contract negotiation
 - Many selected projects may not be contracted
 - Market drivers, permit or site barriers, etc.
- Allocation of risk can be barrier
- **If not successful in an RFP bid, may try again and will need to keep the site certificate “valid”

DEVELOPMENT: SECURING OFFTAKE

Some Takeaways:

- Just to participate in RFPs, developers must simultaneously pursue:
 - Site control
 - Permitting
 - Interconnection
 - Transmission
- All are complex and risky
- Increasingly competitive process – competitive edge from controlling risk
- Utilities select projects based on unpredictable economics
- Selected projects can still fail

DEVELOPMENT TIMELINE



DEVELOPMENT: EVOLVING DYNAMICS

Materials Procurement

- Supply Chain Issues and Tariff Investigations
- Changes in Price – Cost Implications
- Delays



DEVELOPMENT: EVOLVING DYNAMICS



IN THIS LIST

ELECTRIC POWER | ENERGY
TRANSITION | METALS

**US solar industry in
'existential crisis' from
Commerce solar tariff
investigation**

ENERGY | COAL | ELECTRIC POWER |
ENERGY TRANSITION | EMISSIONS |
NATURAL GAS | NATURAL GAS
(NORTH AMERICAN) | OIL | REFINED
PRODUCTS | GASOLINE | METALS |
STEEL

**Market Movers Americas, April
4-9: US oil execs in hot seat
over pump prices; steel keeps
climbing**

ELECTRIC POWER | ELECTRICITY |
ENERGY | ENERGY TRANSITION

**European Long-Term Power
Forecast**

ELECTRIC POWER | ENERGY TRANSITION | METALS — 05 Apr 2022 | 21:33 UTC

US solar industry in 'existential crisis' from Commerce solar tariff investigation

HIGHLIGHTS

Domestic manufacturers expect severe, devastating impacts

The four countries involved provide 84% of US imports

Energy storage components uneconomical without solar



FINAL THOUGHTS



MULTIPLE AUTHORS ▾

05.04.2022 | 2:00pm

IPCC

In-depth Q&A: The IPCC's sixth assessment on how to tackle climate change

still at the lab scale”. As such, it says that we need to learn from the solar model and use public policy to speed up innovation over much shorter time frames, such as 15 years or less.

Innovation in energy technologies is a “key driver” of emissions reductions in model-based scenarios of future emissions, such as [IAMs](#), the report says.

For example, to limit warming to 2C above preindustrial levels, the report says that solar capacity will need to increase by a factor of 15 by 2050 compared to 2020. Meanwhile, a 10-fold increase in wind and 87% phase-out of coal are needed, it adds.

According to the report, many studies suggest that “transformational changes” would be required in many areas of society to limit warming to 2C or below. It outlines the key stages in undertaking such a socio-technical transition:



**ANY
QUESTIONS**

Thank you!

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9+	Expenditure
Site Screening/ Resource Analysis									\$00,000
Interconnection/ Transmission Feasibility Studies									\$00,000
Secure Site Control and Local Engagement									\$00,000
Impact Studies and Assessment									\$00,000
EFSC Permitting/Siting Application (18 mo to 3 years) Extension?									\$000,000
EFSC Permit Issued (3 year validity)									
<i>All of these items need to be in place before the next set of activities can proceed</i>									
Securing Offtake (RFP Bid or Other)*									(Legal fees/ Staff Time?)
Transmission/ Interconnection Queue (1-3 years)									\$000,000
Financing									\$00,000
Contractor, Labor Contracts & Recruitment									\$000,000
Materials **									\$00,000,000
Construction									
Mitigation Work (Ongoing)									\$000,000
									Commercial Operation
* - If RFP bid is unsuccessful, might bid again the following year. Cannot move forward with other pieces until this is secured.									
** - Supply chain issues (impacted by int'l tariffs) and market shifts make this a moving target financially and timing wise									

Agenda Item H (Action Item)

West End Solar Project Officer Appointment

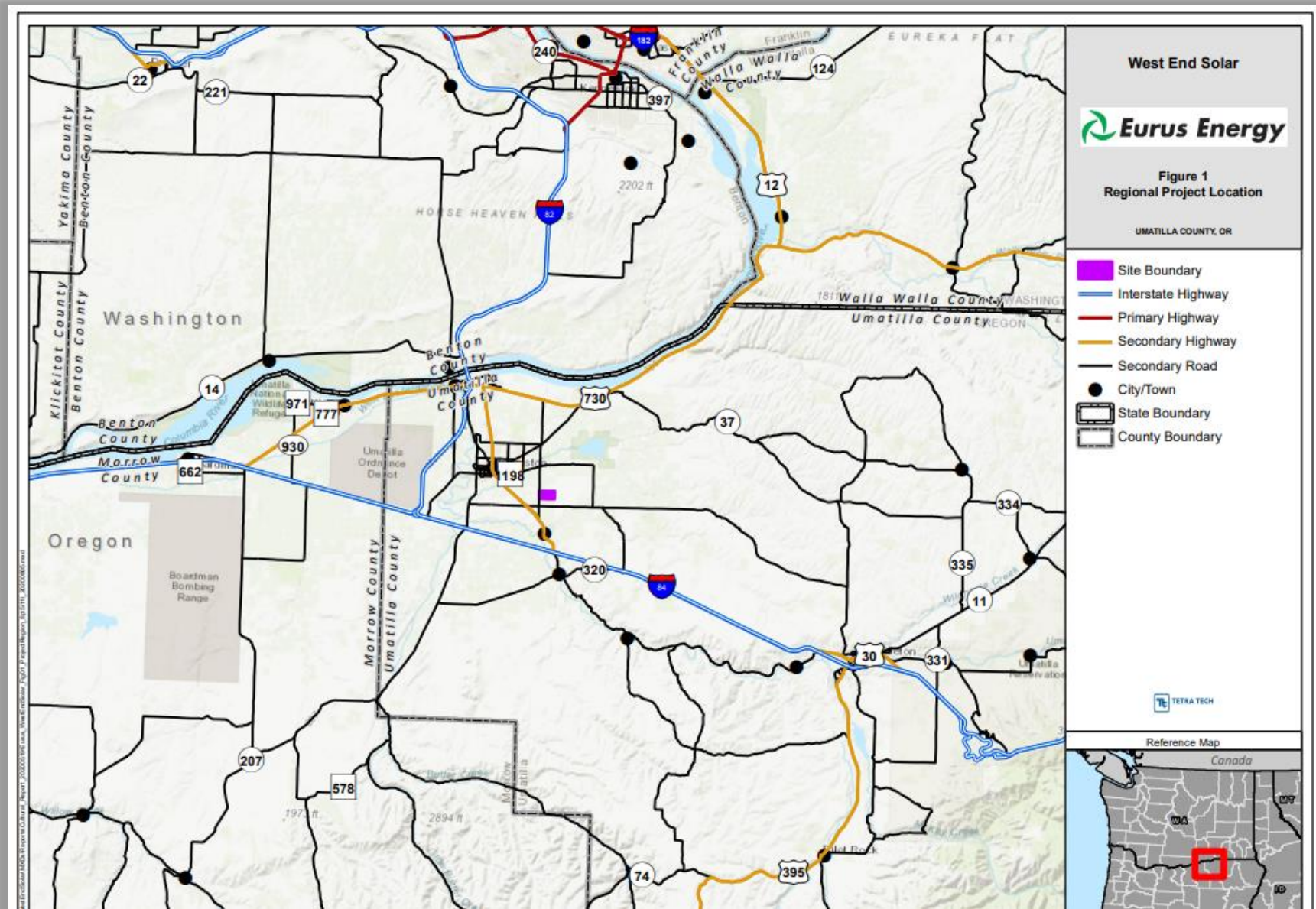
April 22, 2022

Kellen Tardaewether, ODOE Senior Siting Analyst

West End Solar Energy Project

Proposal:	Solar Photovoltaic (PV) Energy Generation Facility with an average generating capacity of 50 megawatts (MW)
Site Boundary:	324 acres zoned Exclusive Farm Use in Umatilla County
Location:	Two miles southeast of the City of Hermiston.
Applicant:	EE West End Solar LLC (applicant), a subsidiary of Eurus Energy America Corporation
Status:	pASC Under Review

West End Solar Energy Project



Oregon Office of Administrative (OAH) Hearings

- Provides an independent and impartial forum for citizens and businesses to dispute state agency actions.
- 65 professional administrative law judges (ALJ) for approximately 70 state agencies.
- ODOE/EFSC is one of the few agencies not required to utilize OAH.
- Entered into agreement with OAH in 2017 based on their expertise in contested cases and the number of ALJ's who could serve as Hearing Officers for EFSC.
- To date EFSC has appointed OAH ALJ's as Hearing Officers for the following projects:
 - B2H Transmission Line – ALJ Allison Greene Webster
 - Obsidian Solar Center – ALJ Joe Allen
 - Bakeoven Solar Project – ALJ Joe Allen
 - Madras Solar Energy Facility – ALJ Joe Allen
 - Eugene to Medford Transmission Line Amendment 4 – ALJ Joe Allen
 - Wagon Trail Solar Project – ALJ Joe Allen
 - Nolan Hills Wind Power Project- ALJ Kate Triana

Staff Recommended Hearing Officer

Allison Greene Webster

- Council-appointed hearing officer presiding over the contested case proceedings for the Boardman to Hemingway Transmission Line, currently under review.
- Oregon State Bar Certified
- Presided over numerous contested case hearings for a variety of state agencies, boards and commissions.
- Juris Doctorate from Loyola Law School in Los Angeles
- Bachelor's degree in Communications from UCLA

Council Options

Option 1

Appoint ALJ Allison
Greene Webster as
Hearing Officer
(staff recommendation)

Option 2

Do not appoint ALJ as
Hearing Officer for
specified reasons

Council Deliberation

Adjourn

