



Oregon

Kate Brown, Governor



550 Capitol St. NE
Salem, OR 97301
Phone: 503-378-4040
Toll Free: 1-800-221-8035
FAX: 503-373-7806
www.oregon.gov/energy

MEMORANDUM

To: Energy Advisory Work Group Members
From: Janine Benner, Director
Date: July 25, 2019
Re: Materials for July 29, 2019 Meeting

I am looking forward to our Energy Advisory Work Group meeting next week. With so much time having lapsed since our last meeting, we have a lot to discuss! Our agenda involves several informational updates, such as two recently released resources at ODOE: the Oregon Local Energy Resilience Guidebook and the Oregon Solar Dashboard. I'm also looking forward to hearing from you during the roundtable. I hope you come prepared to share any reflections on the legislative session, what's happening in your world this summer, and what projects are you working on now or in the near future that ODOE and the EAWG should know about.

There are two topics on the agenda where ODOE is specifically seeking feedback from the EAWG. Earlier this week, we sent out two items for your review. We are eager to hear your recommendations about the agency's strategic planning process and the next Biennial Energy Report. We have included specific questions in each summary document to help guide your thinking and feedback.

In this meeting packet, we have included the following materials:

- Meeting Agenda
- Recent letters regarding the Energy Imbalance Market
- Strategic Planning Summary Document (also sent on Monday for EAWG review)
- Strategic Planning presentation slides
- Handout for the Oregon Guidebook for Local Energy Resilience
- Biennial Energy Report Summary Document (also sent on Monday for EAWG review)

Please don't hesitate to reach out with questions. See you next week.



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AGENDA

Energy Advisory Work Group

Monday, July 29, 2019

1:00 p.m. to 3:00 p.m.

Meitner Conference Room

Introductions	All	5 min
Welcome and Director's Update <ul style="list-style-type: none">Recent ActivitiesBudget	Janine Benner	10 min
EAWG Roundtable and Updates	All	15 min
Update: Post-Legislative Session and Bill Implementation <ul style="list-style-type: none">HB 2618HB 2496SB 1044	Robin Freeman Alan Zelenka	15 min
Feedback from EAWG: Strategic Planning Process	All	20 min
Update: Oregon Guidebook for Local Energy Resilience	Adam Schultz	10 min
Update: Oregon Solar Dashboard	Rob DelMar	10 min
Feedback from EAWG: Next Biennial Energy Report	All	20 min
Update: Federal Grant Application on Renewable Energy	Ruchi Sadhir	10 min
Closing Comments	Janine Benner	5 min

Items and times listed on the agenda are approximate and may change.



Oregon

Kate Brown, Governor

July 22, 2019

Elliot E. Mainzer, Administrator
Bonneville Power Administration, Executive Office
P.O. Box 3621
Portland, Oregon 97208-3621

RE: Western Energy Imbalance Market Letter to the Region

Dear Administrator Mainzer,

Thank you for the opportunity to comment on Bonneville Power Administration's Western Energy Imbalance Market (EIM) Letter to the Region. The Public Utility Commission of Oregon (Commission) and Oregon Department of Energy (Department) are pleased to provide comments on behalf of the State of Oregon. The Department's mission is to lead Oregon to a safe, clean, and sustainable energy future. The Commission is responsible for regulating the state's investor-owned utilities, including PacifiCorp (dba Pacific Power), Idaho Power Company (IPC), and Portland General Electric (PGE). In 2014, PacifiCorp was the first utility to enter into the EIM when the California Independent System Operator expanded its real-time market to PacifiCorp's balancing authority. PGE and IPC followed, entering the market in 2017 and 2018 respectively.

Through robust analysis, the Commission determined that joining the EIM was likely to result in cost savings for customers. Since its regulated utilities began participating in the market, the Commission has been encouraged by the cost-saving efficiencies the EIM has provided utility customers. CAISO estimates that customers of PacifiCorp¹ have received \$199.28 million in gross benefits² from EIM participation, PGE customers have received \$42.14 million, and IPC customers \$35.33 million.

Beyond the cost-saving efficiencies, the EIM also has the potential to increase the dispatch of renewable energy and thereby reduce greenhouse gas emissions, which could help Oregon meet its climate goals. Oregon has a goal to reduce greenhouse gas emissions by 10 percent below 1990 levels by 2020 and 75 percent below 1990 levels by 2050. BPA's participation in the EIM should create new opportunities to monetize the carbon-free flexibility of the federal hydropower system and ultimately help to integrate more wind and solar generation in Oregon at lower cost.

¹ This represents a system-wide number for PacifiCorp customers, not exclusive to its Oregon service territory.

² Western Energy Imbalance Market Benefits,
<https://www.westerneim.com/Pages/About/QuarterlyBenefits.aspx>

In addition, we continue to support exploration of the EIM's governance structure. As the market expands geographically, it is important for individual regions to have ample opportunity to voice perspectives, such as those of public power, specific to their region.

The Commission and the Department are encouraged by Bonneville Power Administration's Proposal to Sign an EIM Implementation Agreement with the CAISO, which, if successful, will further expand the available dispatchable resources and continue to bring benefits to Oregon customers.

Sincerely,



Megan Decker, Chair
Oregon Public Utility Commission



Janine Benner, Director
Oregon Department of Energy

About the Oregon Public Utility Commission

The Public Utility Commission of Oregon regulates customer rates and services of the state's investor-owned electric, natural gas and telephone utilities, and certain water companies. The Commission does not regulate people's utility districts, cooperatives or municipally-owned utilities except in matters of safety. The Commission ensures Oregon utility customers have access to safe, reliable, and high-quality utility services at just and reasonable rates, while allowing regulated companies the opportunity to earn an adequate return on their investment.

About the Oregon Department of Energy

The mission of the Oregon Department of Energy is to lead Oregon to safe, clean, and sustainable energy future. The Department helps Oregonians improve the energy efficiency of their homes, provides policy expertise to prepare for Oregon's future energy needs and fight climate change, staffs the Energy Facility Siting Council, provides technical and financial assistance to encourage investments in energy efficiency and renewable energy resources, promotes the cleanup of the Hanford nuclear site, and ensures state preparedness to respond to emergencies at energy facilities.



Oregon

Kate Brown, Governor

January 18, 2019

David Olsen, Chair
California ISO Board of Governors
P.O. Box 639014
Folsom, CA 95630

Dear Chair Olsen:

The State of Oregon appreciates the opportunity to submit comments in response to the California Independent System Operator's (CAISO) *EIM Governance Review Issue Paper & Straw Proposal (EIM Governance Paper)*. Our comments are focused on issues of importance to Oregonians.

The *EIM Governance Paper* begins with a proposed near-term, incremental change to revise the decisional classification rule to expand the motivation test to determine when the EIM Governing Body has primary authority.¹ We support the proposal as it designates primary authority to the EIM Governing Body in a more holistic way.

In Section III, the *EIM Governance Paper* raises a broader EIM Governing Body review.² Within Category One, that review should consider whether the time has come to move to shared authority between the EIM Governing Body and the Board for all initiatives affecting the real-time market. As the real-time market becomes more material to consumers' final energy costs outside California, the currently narrowly-delegated authority, which ultimately operates as veto power on a subset of initiatives today, is perhaps insufficient.

While the *EIM Governance Paper* has appropriately set aside governance questions related to the Day Ahead Market, it is a positive sign that the EIM Governing Body is playing an advisory role in those initiatives.³ Ideally, that advisory role will be conceived broadly and their advice will be given substantial weight in light of the exploration of expansion of the Day Ahead

¹ *EIM Governance Paper*, p. 4.

² *EIM Governance Paper*, p. 6.

³ Western Energy Imbalance Market Initiatives.

<https://www.westerneim.com/Pages/Initiatives/Default.aspx>

Market regionally. Clearly, further substantive governance changes would be needed to facilitate that expansion, but the time is not yet ripe for that exploration.

Section III, Category Three requests input on stakeholder processes. We offer comments related to (1) regional representation in EIM governance, (2) adequate opportunities for public power involvement in EIM issues, and (3) regional meeting locations.

(1) Regional Representation in EIM Governance

The *EIM Governance Paper* notes that the CAISO and its stakeholders have been through the selection process several times for members of the EIM Governing Body. The paper then asks:

*“. . .whether there are any aspects of the [selection] process that warrant reconsideration as part of the EIM Governance Review. Are there, for example, any aspects of the qualifications and criteria used to identify and evaluate potential candidates that should be considered for potential change?”*⁴

The State of Oregon appreciates that the current composition of the EIM Governing Body to date has reflected the broad geographic diversity of the states that have utilities participating in the EIM. We note that the current EIM Governing Body includes members with utility or regulatory experience in the Pacific Northwest, California, Nevada, New Mexico, and Montana.⁵ There are now eight active participants in EIM, representing portions of eight states and British Columbia. According to the EIM website, entities operating in two additional states are scheduled to join by 2021.⁶ As the EIM continues to expand, we recommend that the CAISO consider steps that could be taken to formalize the importance of maintaining geographic diversity among the members of the EIM Governing Body.

⁴ *EIM Governance Paper*, p. 7.

⁵ Governing Body Members, Western Energy Imbalance Market.
<https://www.westerneim.com/Pages/Governance/default.aspx>

⁶ Western EIM Active and Pending Participants, Western Energy Imbalance Market.
<https://www.westerneim.com/Pages/About/default.aspx>

While we do not have a strong preference for how this might be achieved, we do have two suggestions for how it could be accomplished: (i) require geographic diversity of members of the EIM Governing Body by region (e.g., Northwest, Southwest, Mountain West, California); and/or (ii) involve the Body of State Regulators more directly in the nomination and/or approval processes of new EIM Governing Body members. These types of steps would give states across the expanding geographic footprint of EIM greater confidence that the EIM Governing Body will maintain balanced geographic representation into the future.

(2) Adequate Opportunities for Public Power Involvement in EIM Issues

The *EIM Governance Paper* also addresses the role of current stakeholder engagement processes, and in particular, asks whether or not membership of the Body of State Regulators (BOSR) should be revisited.⁷ It is our understanding that the BOSR is comprised of one Commissioner from the PUC of each state in which an EIM participant is located.⁸ While this arrangement has been satisfactory given the membership of EIM participants to date, we note that several public power entities are expected to soon join the EIM (including Seattle City Light here in the Pacific Northwest). The Bonneville Power Administration (BPA)⁹ is also actively exploring whether to join in the years ahead.¹⁰ Recognizing the BOSR is self-governing, the BOSR could consider formally expanding to explicitly include representation for public power entities that are not PUC-jurisdictional. As with the current membership, this should allow for broad geographic representation of public power entities from across the EIM footprint.

⁷ *EIM Governance Paper*, p. 8.

⁸ Charter for Energy Imbalance Market Governance, Section 5.1.1 (Membership of Body of State Regulators). <https://www.westerneim.com/Documents/CharterforEnergyImbalanceMarketGovernance.pdf>

⁹ BPA is headquartered in Portland, Oregon and provides the vast majority of the wholesale power needed by the state's 36 consumer-owned utilities to serve their retail customers, accounting for approximately one-third of all electricity sales in the state of Oregon.

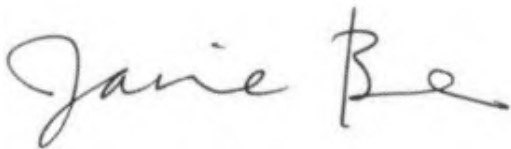
¹⁰ Bonneville Power Administration, "BPA's High Level EIM Timeline." Slide 7. <https://www.bpa.gov/Projects/Initiatives/EIM/Doc/20181214-December-18-2018-EIM-Stakeholder-Mtg-Appendix.pdf>

(3) Regional Meeting Locations

Last, the *EIM Governance* also asks whether there are any changes that should be considered with respect to the “frequency, timing relative to the ISO Board meetings, location, or topics covered” in the EIM Governing Body’s public meetings.¹¹ As noted previously, the EIM now includes participants operating within eight different states and British Columbia. We appreciate that the EIM Governing Body made an effort to hold public meetings across the west (e.g., meetings were held in California, British Columbia, Colorado, and Arizona) in 2018.¹² To ensure there is sufficient opportunity for stakeholders from across the west to provide feedback and input, we recommend that this geographic rotation of meeting locations for the EIM Governing Body become a requirement and that meetings occur in specific states on a regular, recurring basis.

Thank you for the opportunity to comment on this proposal.

Sincerely,



Janine Benner
Director
Oregon Department of Energy



Letha Tawney
Commissioner
Public Utility Commission of Oregon

¹¹ *EIM Governance Paper*, p. 8.

¹² Western EIM, Calendar of Meetings. <https://www.westerneim.com/Pages/Calendar.aspx>

Input for ODOE Strategic Planning Process
Energy Advisory Work Group
July 29, 2019

ODOE is seeking input from the EAWG to inform our strategic planning process. The strategic plan will help our agency define our work and build stronger collaboration with stakeholders. It will also help ODOE prioritize our work, measure progress, and strengthen alignment between agency goals, programs, and budget. Plan development will involve equity considerations, internal and external stakeholder outreach, secondary research, program assessment, strategic and operational planning sessions, and stakeholder-informed revisions.

The agency kicked off strategic planning in the Fall of 2018; the process was put on hold during the legislative session. The table below shows our timeline for the strategic planning process, divided into two phases. The first phase involves stakeholder outreach, secondary research, and work sessions to develop position and values and draft strategic imperatives. This phase will help us to define ODOE’s unique position and areas to add value in a complex landscape of energy programs and policies in the state. In the second phase, we’ll develop objectives and initiatives, affirm vision/mission/values, review stakeholder feedback, and operationalize the strategic plan. See the strategic planning terminology section on the next page for definitions of terms referenced in this timeline.

Project Timeline		Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct
Phase 1	Stakeholder Outreach	█	█													
	Insights Discussion		█	█												
	Strategic Session #1: Position and Values			█	█											
	Strategic Session #2: Draft Strategic Imperatives				█	█										
	Short-Session						█	█								
Phase 2	Strategy Session #3: Objectives and Initiatives								█							
	Strategy Session #4: Vision Mission Values Work Session									█						
	Stakeholder Outreach and Feedback										█	█				
	Operational Planning Session #1: Milestones and Metrics											█	█			
	Operational Planning Session #2: Budget Implications & Guidance												█	█		
	Final Plan Documentation													█	█	
	Publish/rollout Final Plan															█

Input Requested from EAWG:

1. What do you anticipate are ODOE’s greatest strategic challenge and strategic opportunity over the next two years? Over the next decade?
2. What information do you need about ODOE and the energy landscape in Oregon to help you engage in this planning process? For example:
 - Where should ODOE focus to help the state meet its energy goals?

- Where can ODOE add the most value?
 - How should ODOE prioritize our energy activities and initiatives?
 - What is the unique position of the agency in the complex landscape of energy programs and policies in the state?
3. This strategic planning process envisions convening the EAWG in September 2019 to gather input, then convening again in the winter (December 2019 or January 2020) to share what we learned in phase 1 to inform draft strategic imperatives. What other stakeholder engagement or procedural elements would you suggest so that we are getting input that represents Oregonians across the state?

For reference: strategic planning terminology (courtesy of Coraggio Group):

Clarity

- **Vision:** What is the ideal future state we are trying to create?
- **Mission:** What is our purpose? What are we here to make happen?
- **Values:** What are the fundamental beliefs that shape how we work together and serve our mission?
- **Reputation:** What do we want to be known for? What is the enduring perception or emotion that describes the total experience of our organization?
- **Position:** What unique and sustainable value do we deliver, where do we deliver, and for whom?

Focus

- **Strategic Imperatives:** What must be accomplished over the planning horizon?
- **Objectives:** How will we measure success?

Action

- **Initiatives:** What collective actions do we need to take that are transformative in nature?
- **Milestones and Metrics:** What are the points in time that represent key achievements in the progress of an initiative? These can be decisions, completed tasks, or other achievements (qualitative or quantitative).



Oregon Department of Energy

Strategic Planning Introduction

Coraggio Group
503.493.1452 | coraggiogroup.com

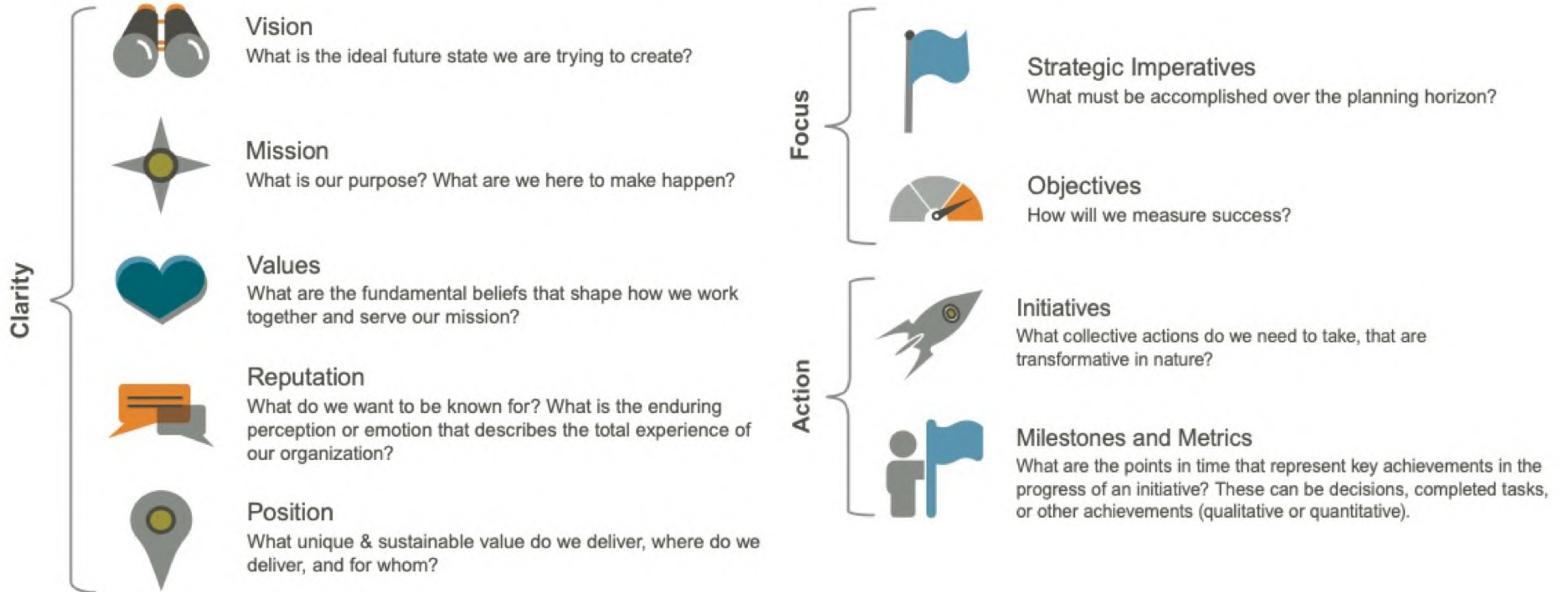


Project Purpose

- Better define ODOE's work to build better understanding from—and stronger collaboration with—stakeholders
- Prioritize ODOE's work
- Measure progress
- Strengthen alignment between agency goals, programs, and budget.

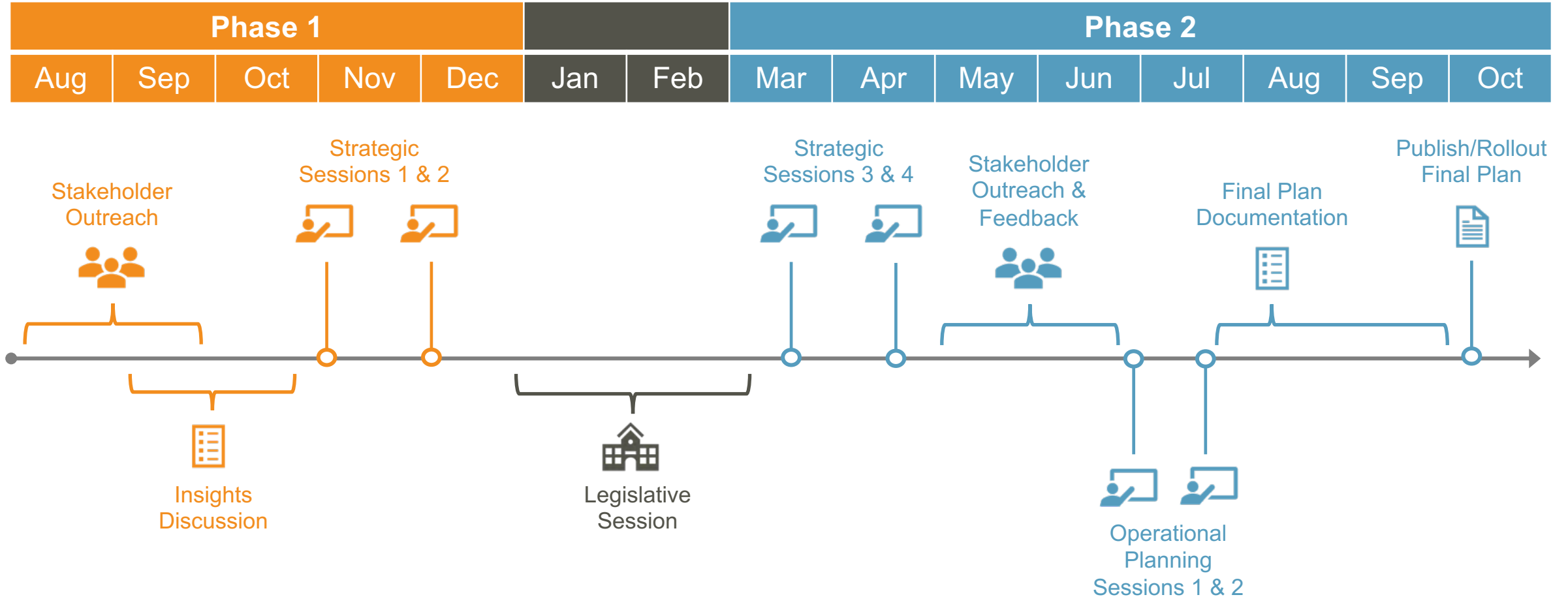


Elements of a Strategic Plan



ODOE Strategic Planning Timeline

The Strategic Planning process will involve equity considerations, internal and external stakeholder outreach, secondary research, program assessment, strategic and operational planning sessions, and stakeholder-informed revisions.



Oregon Department of **ENERGY**

Energy Advisory Work Group: Guidebook for Local Energy Resilience

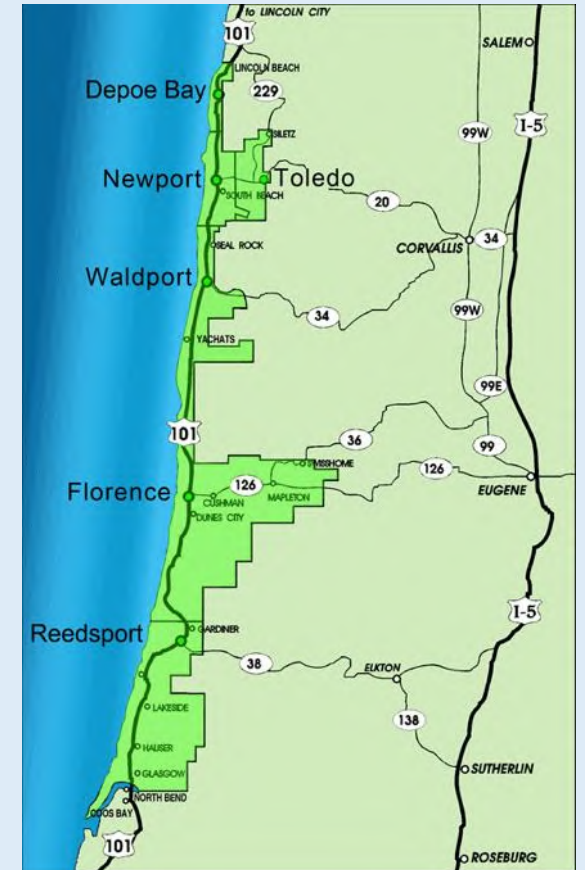
Adam Schultz

July 29, 2019
Salem, Oregon



Oregon Guidebook for Local Energy Resilience

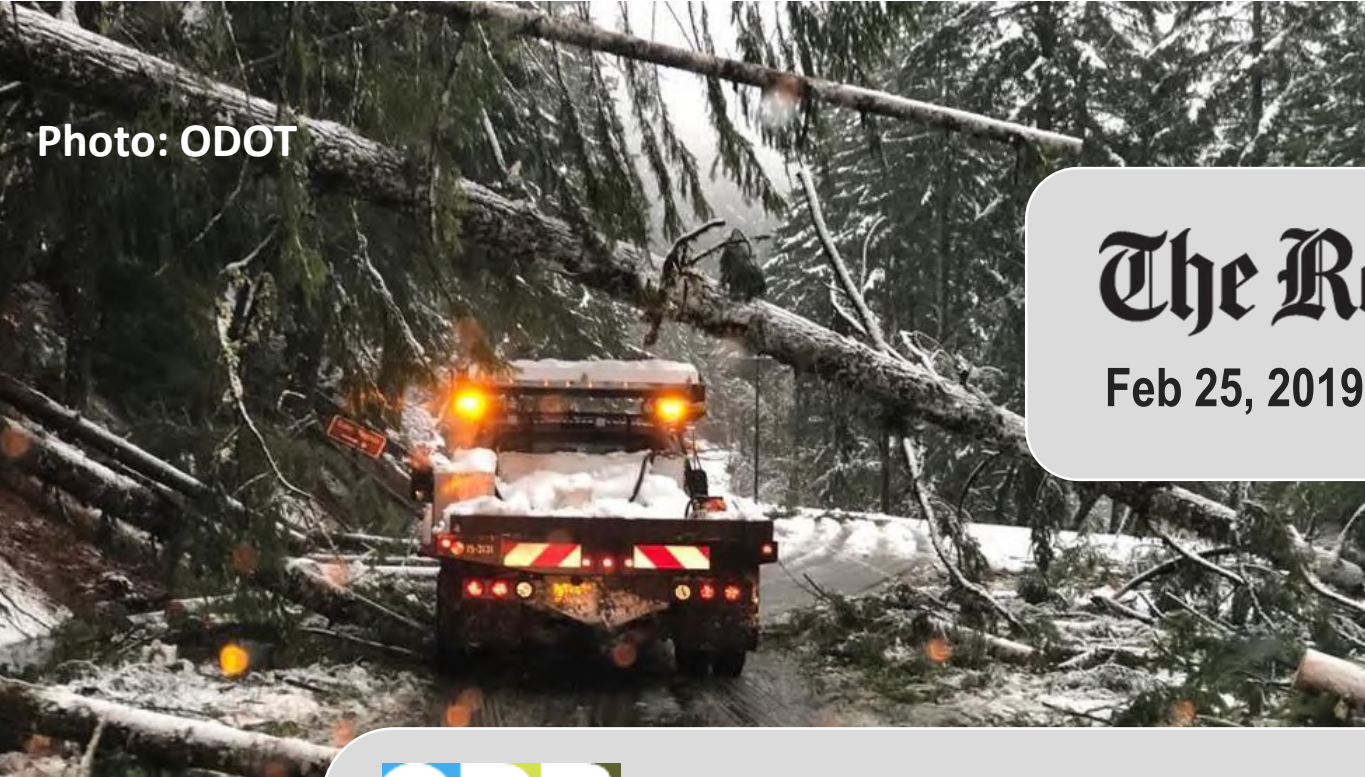
- NGA sponsored Policy Academy 2017-18
- Oregon Department of Energy worked with CLPUD to develop a Guidebook to Improve Local Energy Resilience targeted at COUs



Yaquina Bay Bridge, Newport, OR

Why resilience?

Photo: ODOT



The Register-Guard

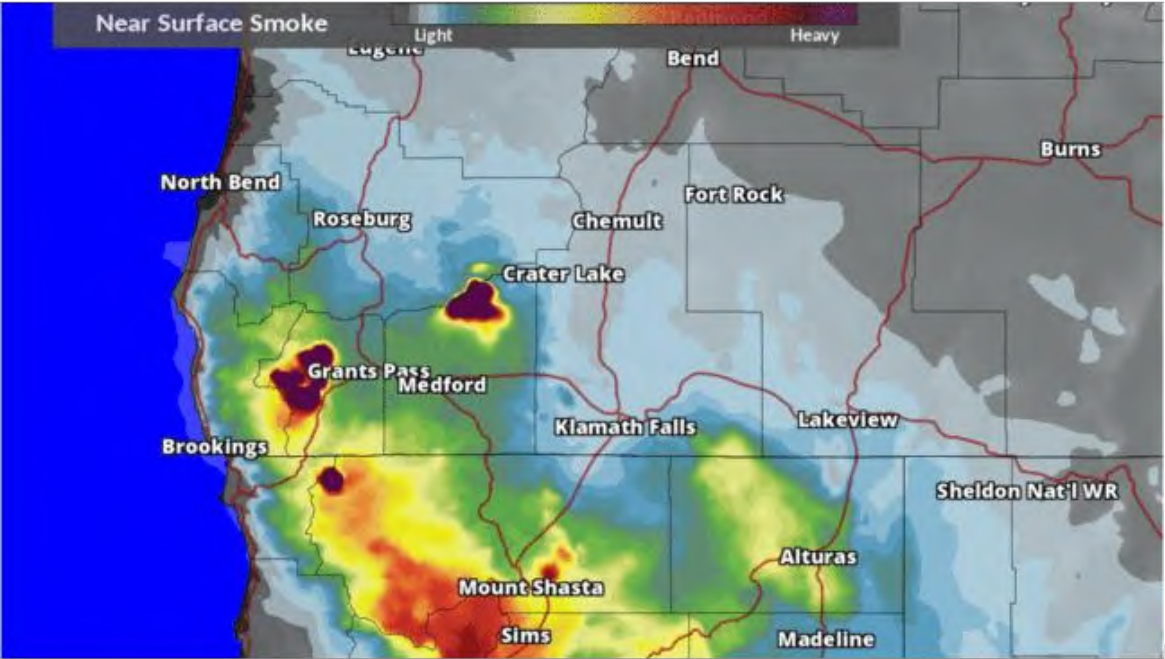
Feb 25, 2019 | Monday's snowstorm one for the record books



Mar 7, 2019 | When Disaster Struck, This Tiny Oregon Town Was Out On Its Own

“...it will take millions of dollars to repair the sewer and water systems for this town [Elkton] of 200 people. And the local utility company, **Douglas Electric Cooperative**, is looking at about \$6 million in damages. **Nine days after the storm, about 4,600 of its customers didn't have electricity.**...”

Why resilience?



statesman journal
PART OF THE USA TODAY NETWORK
Jun 14, 2019 | Pacific Power will consider shutting off power in Oregon to avoid wildfires in 'extreme weather'

Mail Tribune
Aug 6, 2018 | Smoke expected to persist in the valley



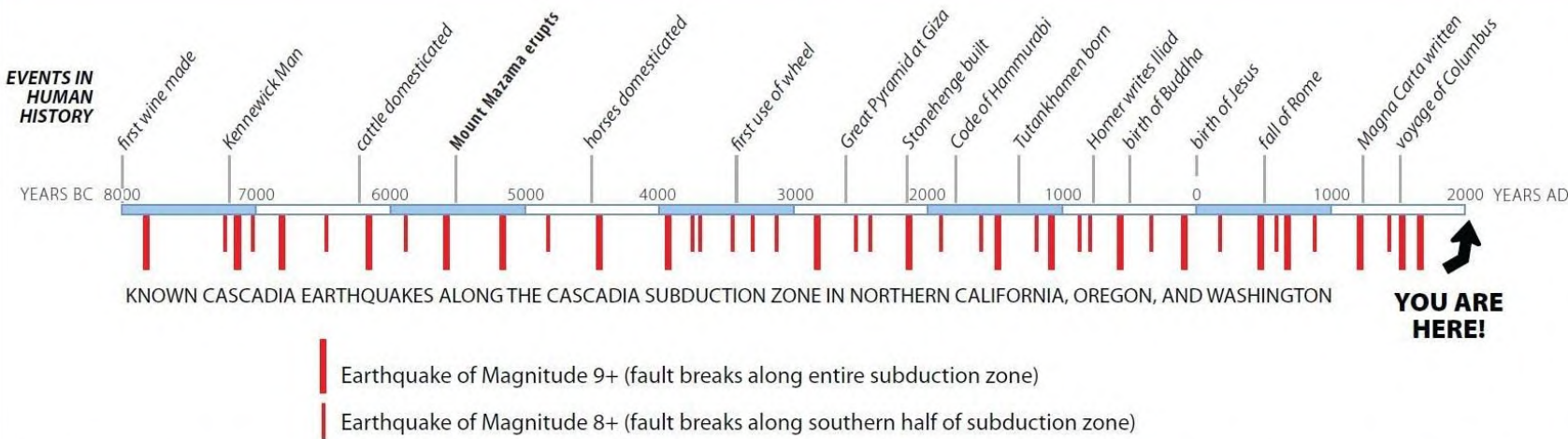
The New York Times
May 15, 2019 | California Says PG&E Power Lines Caused Camp Fire That Killed 85



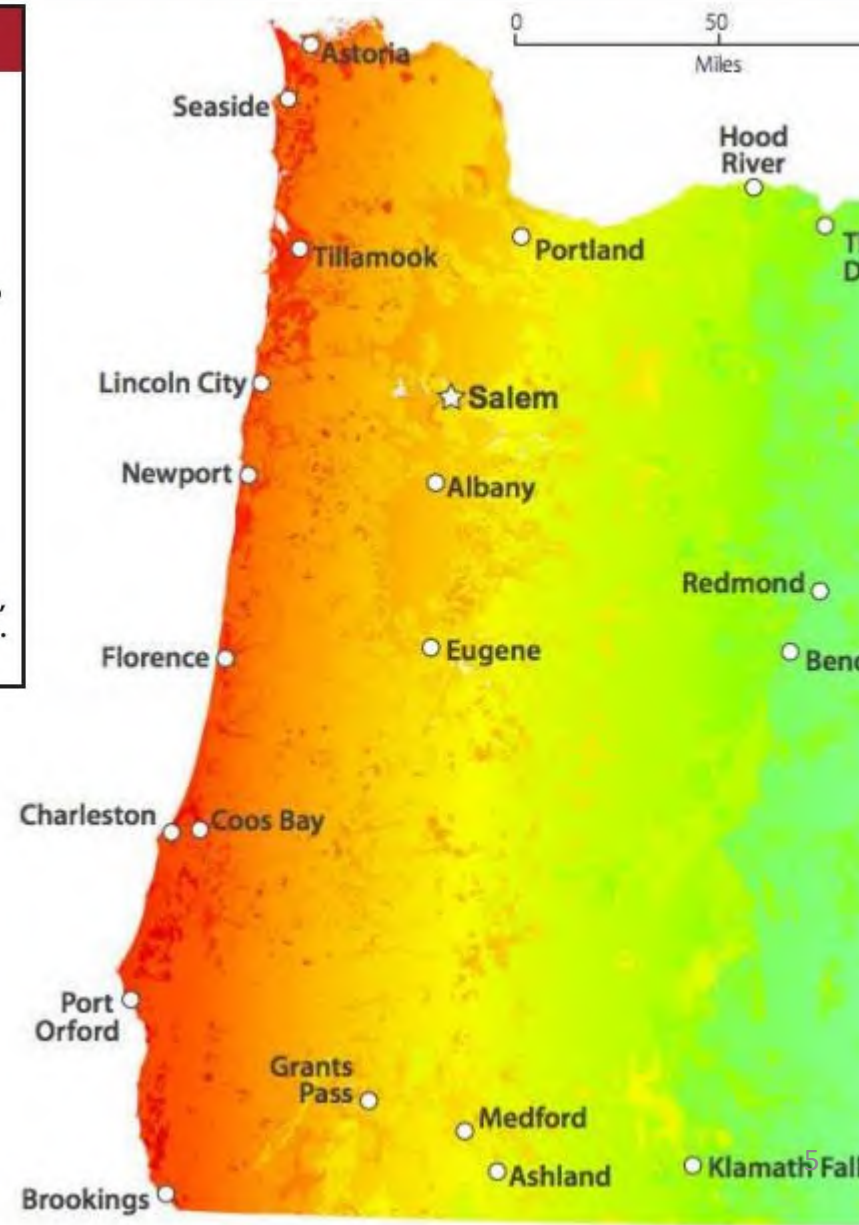
Why resilience?

ShakeMap for SIMULATED M9 Cascadia earthquake

CASCADIA EARTHQUAKE TIME LINE



Comparison of the history of subduction zone earthquakes along the Cascadia Subduction Zone in northern California, Oregon, and Washington, with events from human history. Ages of earthquakes are derived from study and dating of submarine landslides triggered by the earthquakes. Earthquake data provided by Chris Goldfinger, Oregon State University; time line by Ian P. Madin, DOGAMI.



Sep 15, 2016 | Unprepared: Will we be ready for the megaquake in Oregon? ([video](#))

Why resilience?

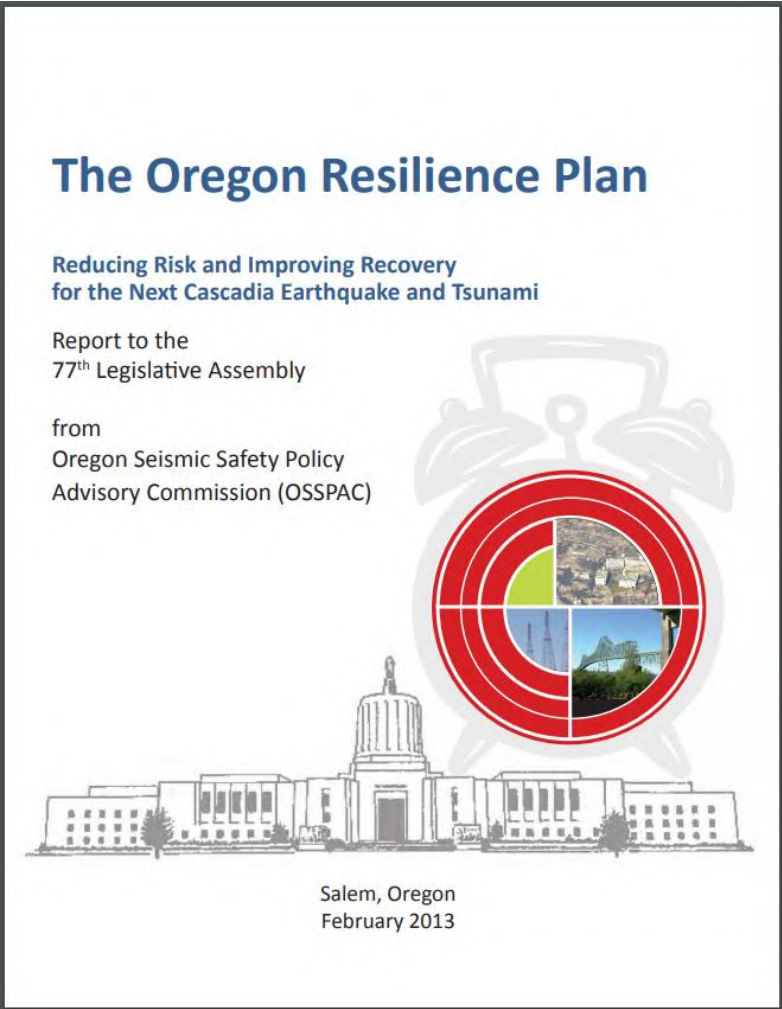
Electric Transmission Impacts

The Oregon Resilience Plan

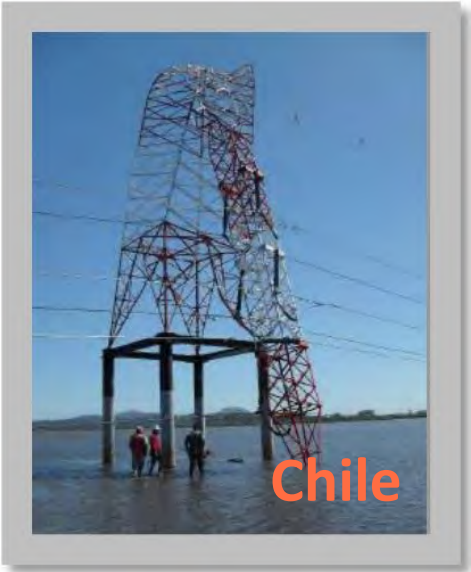
Reducing Risk and Improving Recovery
for the Next Cascadia Earthquake and Tsunami

Report to the
77th Legislative Assembly

from
Oregon Seismic Safety Policy
Advisory Commission (OSSPAC)



Salem, Oregon
February 2013



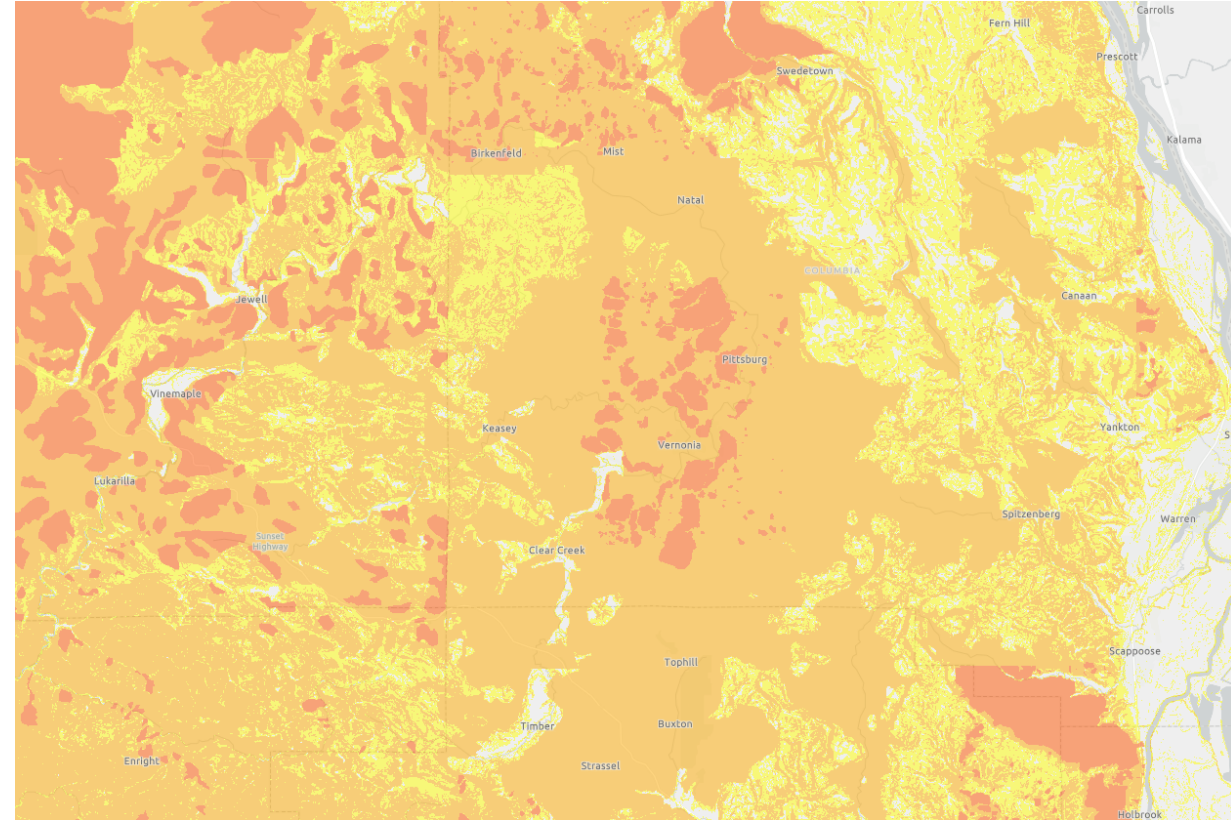
- **Coast:** 6 months to a year to restore to 90% operation
- **Willamette Valley:** Up to 3 months to restore to 90%

Location-Specific Resilience Threats

Earthquake Hazard (Vernonia, OR)



Landslide Hazard (Vernonia, OR)



[Oregon HazVu: Statewide Geohazards Viewer \(DOGAMI\)](#)

Guidebook for Local Energy Resilience

1

Business Continuity Planning: Tangible steps utilities can take to make their organizations more resilient

2

Community Energy Resilience: Coordinating with local governments and communities to increase the resilience of energy supplies needed to deliver critical community services

3

Federal and State Emergency Planning: Understanding the broader context of federal and state emergency management planning and where the utility fits in

Collaborative Effort with COUs



Guidebook: Designed as a Resource for COUs



**Key
Terms**

**Definitions
adopted by
ODOE**



**Resilience
at Work**

**Examples
from local
utilities**



Deep Dive

**Links to
related online
content**



**Take
Action**

**Actions
utilities can
take**



**Tools &
Tips**

**References to
other
resources**

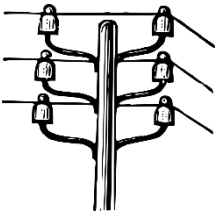
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Business Continuity Planning



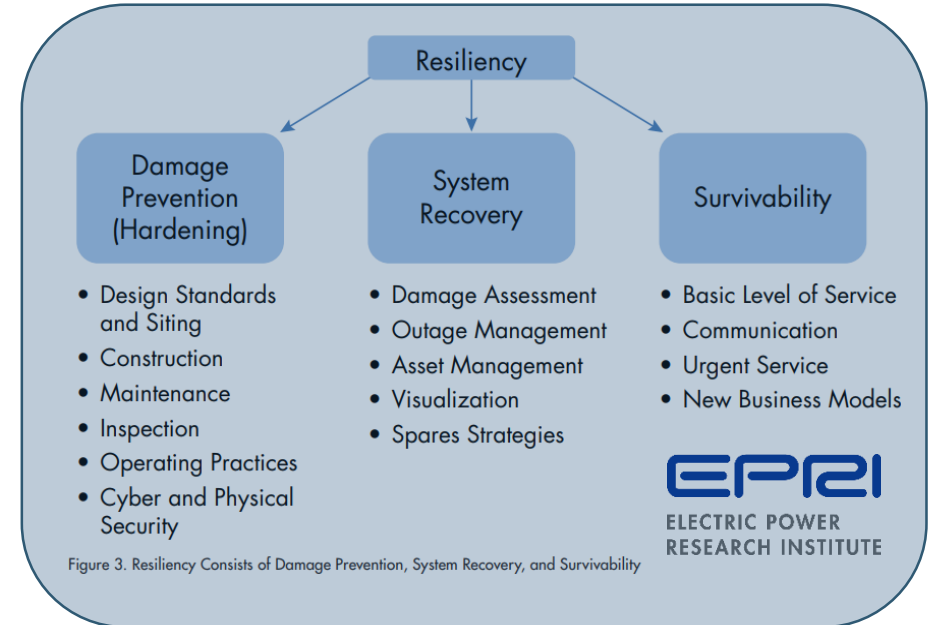
- **People:** Culture of preparedness; trainings; succession and devolution planning; Go Bags; mutual aid; digitization of personnel records; ongoing education

- **Facilities:** Facilities assessment; alternate sites; retrofits; on-site power



- **Infrastructure:** Vulnerability assessment; relocation of assets; sensors; digitization of engineering records; shutdown protocols; stockpiling

- **Communications:** Contact information; crisis plan; redundancy; out-of-region partnerships; alternative communication systems



1

Business Continuity Planning

Incremental Actions:

Focused on discrete actions that COUs can take to improve business continuity planning to make themselves more resilient

Utility Case Studies:

Collaboration with Oregon COUs allows us to share what your colleagues are already doing around the state

McMINNVILLE WATER & LIGHT SINCE 1889

OREGON RESILIENCE CASE STUDY
MCMINNVILLE WATER & LIGHT

McMinville Water & Light provides electric and water utility services to about 17,000 electric and 12,000 water customers in the McMinville area.

Facilities Planning

McMinville installed a diesel generator at its headquarters in 2017. In the event of a large emergency like a Cascadia quake, the generator would help keep operations running. The utility also owns its own fuel truck, which holds up to 2,000 gallons of diesel and 250 gallons of gasoline. They keep the tank at least half full at all times in case of emergency.

McMinville facilities are also prepped with stockpiled food for emergencies. The headquarters is close to the South Yamhill River, so the utility has portable filters to gain water access.

The utility is also working on dispersing materials to different sites around the service area, especially to areas outside the immediate city where crossing a bridge may be impossible.

Emergency Response

Employees at McMinville Water & Light have a pocket-sized guidebook for emergency response. The guidebook includes contact information, pertinent addresses, supplier information, and a business continuity plan, including what managers are responsible for during an emergency. The guidebook is updated annually, and staff often have more than one copy in their vehicles.

The emergency response team at McMinville has developed an ongoing task list. The team meets every other month to report on task progress and update the list as needed.

Information provided by www.oregon.gov/energy 503-378-4040

Blachly-Lane ELECTRIC CO-OP

OREGON RESILIENCE CASE STUDY
BLACHLY-LANE ELECTRIC COOPERATIVE

Blachly-Lane Electric Cooperative serves about 3,600 customer meters in the Eugene area.

Facilities Plan

Blachly-Lane discovered that its 1965 headquarters building would not sustain a 5.0 earthquake – let alone a possible 9.0 Cascadia Subduction Zone quake. The utility looked at multiple options, including doing nothing or leveling the existing building and starting over. The best course was to remodel the building and reinforce its concrete masonry to withstand a major earthquake, including tying in struts and trusses, and reinforcing the roof.

The utility also built an addition to the headquarters building to support essential services. The new 10,000-square foot facility includes kitchen facilities and a large multipurpose room that could run operations or house cots for long-term stays. The addition also includes a backup electricity generator with a 2,000 gallon propane tank. Propane was deemed the best option for running the generator after considering alternate fuels. For example, natural gas lines do not run near the facility, and may not be functional after an emergency.

Blachly-Lane estimates that the generator could run nonstop for 10-12 days. However, in the event of a large emergency like a Cascadia earthquake, the utility would conserve as much propane for the generator as possible – especially through the first three days as the team takes stock of the damage and challenges, and then calculates how long they could or will need to run the generator.

The project's budget totaled about \$5.5 million. Construction started in March 2017, and was completed in 2018.

Information provided by the Blachly-Lane Electric Co-op in Summer 2018.
www.oregon.gov/energy/safety-resiliency/Pages/default.aspx
503-378-4040 | 550 Capital St. NE in Salem | Page 1

1

Business Continuity Planning

ShakeAlert™

Earthquake Early Warning Basics

- 1 In an earthquake, a rupturing fault sends out different types of waves. The fast-moving P-wave is first to arrive, but damage is caused by the slower S-waves and later-arriving surface waves.
- 2 Sensors detect the P-wave and immediately transmit data to an earthquake alert center where the location and size of the quake are determined and updated as more data become available.
- 3 A message from the alert center is immediately transmitted to your computer or mobile phone, which calculates the expected intensity and arrival time of shaking at your location.

P-wave: 3.5 mi/sec (first waves felt)
S-wave: 2.0 mi/sec (damage waves)
ShakeAlert: 186,000 mi/sec

Strong Shaking Expected

Event PLAYBACK: F010r_Sahmedia_M7.2
Disruptive Weak Jan 30 18:07:32 PST 2013
Epicenter is 148 miles (238 km) E of your location.

Remaining Time: **28**

Expected Intensity: **VI**

Estimated Magnitude: **7.8**

Intensity Scale: **7**

1 S-wave 2 P-wave

On your screen: ShakeAlert

- 1 Real-time tracking of seismic waves from quake's epicenter.
- 2 Real-time tracking of the fault rupture (updates intensity).
- 3 Your current location tracked by GPS.
- 4 Seconds remaining before seismic waves reach you.
- 5 Expected intensity of quake at your current location.
- 6 Estimated magnitude of quake.
- 7 Intensity scale.

1

Business Continuity Planning

AlertWildfire: Network of state-of-the-art Pan-Tilt-Zoom (PTZ) fire cameras and associated tools to help firefighters, first responders, and infrastructure owners/operators to confirm fires, scale response efforts, and monitor ongoing activity. Current network deployments across CA, NV, OR, and WA.



UNIVERSITY
OF OREGON



University of Nevada, Reno

UC San Diego



2

Community Energy Resilience

“The ability of a specific community to maintain the availability of energy needed to support the provision of energy-dependent critical public services to the community following non-routine disruptions of severe impact or duration to the state’s broader energy systems.”



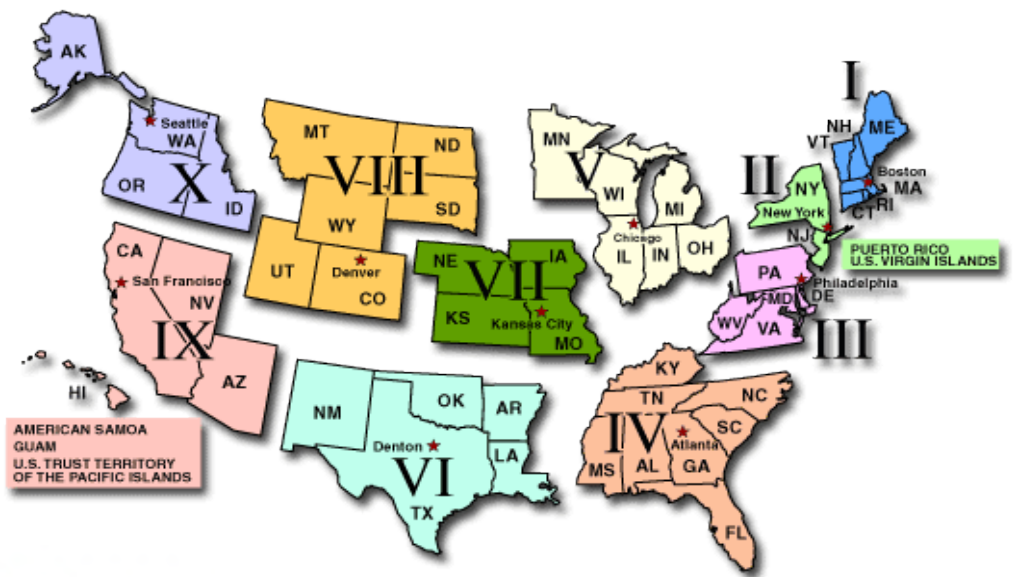
2 Community Energy Resilience

Community-Specific Considerations	
Threat Assessment:	Types of threats; expected likelihood of occurrence; project local impacts
Expected Duration of Disruption:	Are impacts to infrastructure likely to persist for hours, days, months?
Relationship to Bulk Energy Systems:	Identify expected timeframe for restoration of bulk energy systems in your location
Availability of Local Resources:	Identify existing local energy resources: diesel generators, CHP, distributed renewables, batteries, etc.
Interdependencies Between Local Energy Providers + Other Critical Services:	Evaluate extent of the interdependencies between delivery of energy and delivery of other critical public services
Existing Emergency Planning Efforts:	Identify opportunities to coordinate/align local energy providers and emergency planning efforts

3 Federal and State Emergency Planning



FEMA



Oregon State Emergency Support Function (ESF) Quicksheets



ESF 1
Transportation



ESF 2
Communications



ESF 3
Public Works



ESF 4
Firefighting



ESF 5
Information and Planning



ESF 6
Mass Care



ESF 7
Resource Support



ESF 8
Health and Medical



ESF 9
Search and Rescue



ESF 10
Hazardous Materials



ESF 11
Food and Water



ESF 12
Energy



ESF 13
Military Support



ESF 14
Public Information



ESF 15
Volunteers and Donations



ESF 16
Law Enforcement



ESF 17
Agriculture and Animal Protection



ESF 18
Business and Industry



3

Federal Funding Opportunities

- Pre-disaster
- Post-disaster
- Disaster Recovery Reform Act of 2018

Individual utilities, homeowners, businesses, and private nonprofits may apply for funding through Eligible Sub-applicants.

Sub-applicants work with Eligible Applicants to acquire funding.

- State agencies
- Federally-recognized Tribes
- Tribal agencies
- Private nonprofits
- Local governments
- Communities

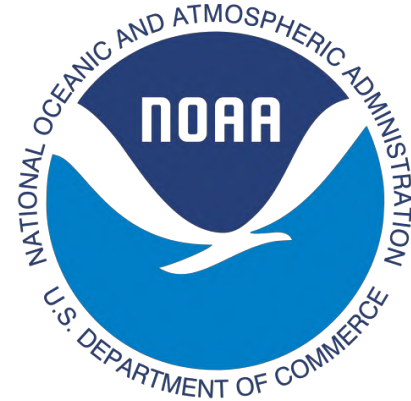
Eligible Applicants Apply to FEMA:

- Territories
- Federally-recognized Tribes
- States



FEMA

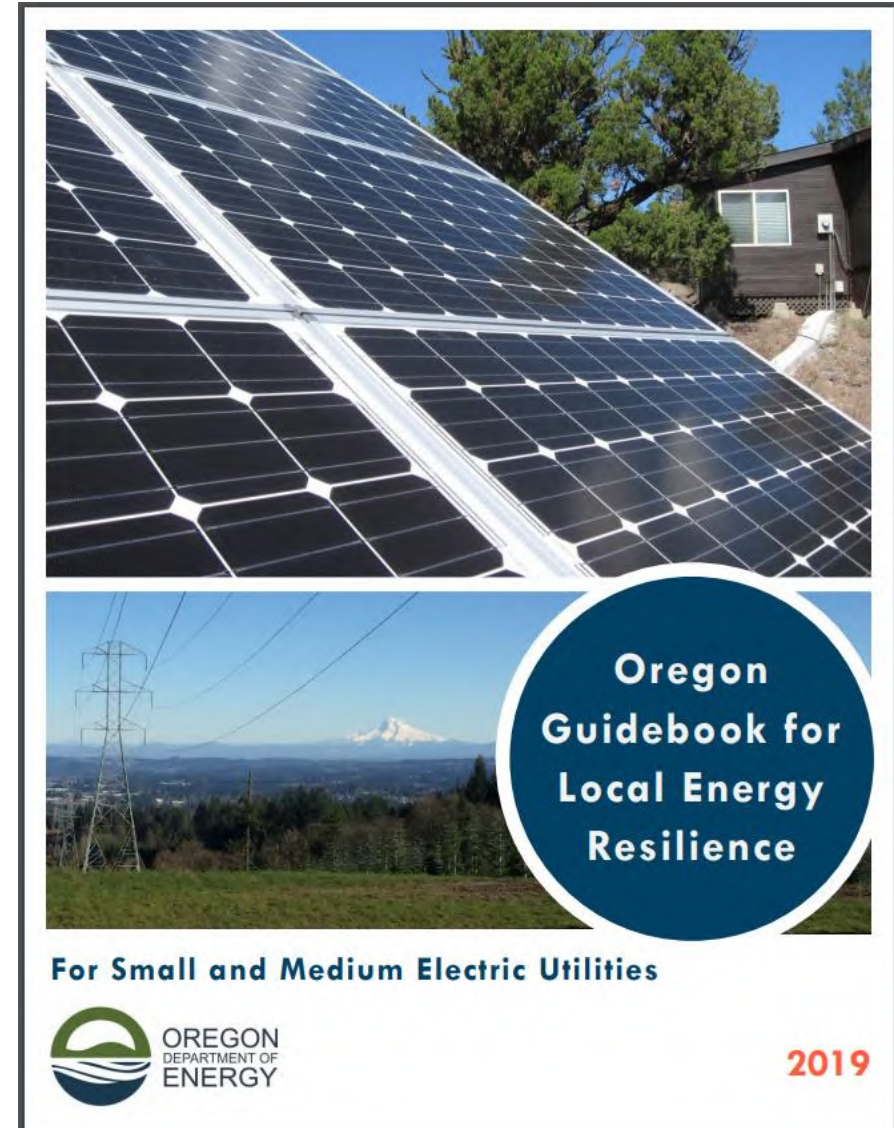
Allocates Grants



U.S. DEPARTMENT OF ENERGY



Discussion / Q&A



Thank you

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Biennial Energy Report (BER) – Input for 2020 BER
Energy Advisory Work Group
July 29, 2019

ODOE is seeking input from the EAWG to inform the development of the 2020 BER. In 2017, ODOE, recognizing that the energy world has changed dramatically since the 1970s, introduced [HB 2343](#). This law charged the agency with developing a BER every two years to inform local, state, regional, and federal energy policy development and energy planning and investments (see attached). The inaugural BER (2018) was based on analysis of data and information collected and compiled by ODOE staff to provide a comprehensive review of energy resources, policies, trends, and forecasts, and what they mean for Oregon. The 2018 BER is available online: <https://energyinfo.oregon.gov/ber>.

Input Requested from EAWG:

1. Have you read or used the 2018 BER? If so, in what ways have you used it? What did you like most about the 2018 BER? What would you improve?
2. What questions about energy in Oregon do you have that weren't covered in the 2018 BER? For example, are there energy facts and figures that weren't included in the previous BER that ODOE should strive to cover in the 2020 BER?
3. What do you think are the priority emerging "energy opportunities, challenges, and impacts" over the next two years? Of these priorities, what are the top five issues or policies in Oregon that need more data, information, or analysis so they are better understood?
4. What do you think are important trends in energy sectors and markets (such as policy or market drivers, new resources, or emerging technologies) that the 2020 BER should include with relevant data, information, or analysis?
5. What new or revised local, state, regional, and/or federal energy regulations, policies, and planning activities do you think should be included in the 2020 BER so they may be better understood through further data, information, or analysis?
6. ODOE used a wide range data sources, including federal government data, state government data, utility data, and data provided by associations or other organizations, to calculate and publish information on energy costs and energy consumption, generation, transmission, and production of energy (among other things). Are there additional or different sources of data that you think ODOE should consider in the 2020 BER?
7. [Chapter 8 of the 2018 BER](#) included recommendations around data gaps, equity, and energy burden, planning for the future, and assessing the need for state engagement and investment. Which recommendations do you think are the highest priority or would yield the greatest value? Do you have suggestions on moving forward with those recommendations?

For reference, topics covered in the 2018 BER:

[Introduction](#) (with Executive Summary)

1. [Energy By the Numbers](#)

- Oregon Energy Use: Electricity, Direct Use Fuels, Transportation Fuels
- Oregon Energy Production: Electricity, Direct Use Fuels, Transportation Fuels
- Energy End-use Sector Profiles
- Energy Stats and Basics

2. [Climate Change](#)

- Greenhouse Gas Reduction Goals and Climate Commitments
- Risks and Impacts
- Deep Decarbonization Pathways

3. [Renewable Energy](#)

- Renewable Energy Drivers
- What's Next for Renewable Energy
- Advances in Solar Energy Case Study

4. [Transportation](#)

- National Transportation Sector Trends
- Oregon Trends
- Policies: Cleaner Vehicles, Alternative Fuels, and Vehicle Miles Traveled
- Electric Vehicles

5. [Resilience](#)

- Defining Energy Resilience
- Identifying Threats
- Understanding Current Actions
- Climate Adaptation for Energy Systems
- Next Steps

6. [Energy Efficiency](#)

- Meeting Load Growth with Efficiency
- How Oregon Acquires Energy Efficiency
- Energy Efficiency Achievements
- Sector Energy Efficiency
- State of Oregon Programs and Initiatives
- Oregon's National Standing

7. [Protecting Consumers](#)

- Energy Burden
- Consumer Protection
- Equity

8. [Recommendations](#)

Enrolled
House Bill 2343

Introduced and printed pursuant to House Rule 12.00. Pre-session filed (at the request of Governor Kate Brown for State Department of Energy)

CHAPTER

AN ACT

Relating to comprehensive energy reporting; creating new provisions; and repealing ORS 469.060 and 469.070.

Be It Enacted by the People of the State of Oregon:

SECTION 1. ORS 469.060 and 469.070 are repealed.

SECTION 2. Section 3 of this 2017 Act is added to and made a part of ORS 469.010 to 469.155.

SECTION 3. (1) No later than November 1 of every even-numbered year, the State Department of Energy shall transmit to the Governor and the Legislative Assembly a comprehensive report on energy resources, policies, trends and forecasts in Oregon. The purposes of the report shall be to inform local, state, regional and federal energy policy development, energy planning and energy investments, and to identify opportunities to further the energy policies stated in ORS 469.010 and 469.310.

(2) Consistent with the legislatively approved budget, the report shall include, but need not be limited to, data and information on:

(a) The consumption, generation, transmission and production of energy, including fuel energy;

(b) Energy costs;

(c) Energy sectors, markets, technologies, resources and facilities;

(d) Energy efficiency and conservation;

(e) The effects of energy use, including effects related to greenhouse gas emissions;

(f) Local, state, regional and federal regulations, policies and planning activities related to energy; and

(g) Emerging energy opportunities, challenges and impacts.

(3) The report may include, but need not be limited to:

(a) Recommendations for the development and maximum use of cost-effective conservation methods and renewable resources, consistent with the energy policies stated in ORS 469.010 and 469.310 and, where appropriate, the energy plan and fish and wildlife program adopted by the Pacific Northwest Electric Power and Conservation Planning Council pursuant to P.L. 96-501; and

(b) Recommendations for proposed research, development and demonstration projects and programs necessary to further the energy policies stated in ORS 469.010 and 469.310.

(4) The report shall be compiled by collecting, organizing and refining data and information acquired by the department in the performance of its existing duties and under its existing authority.

(5)(a) This section is not intended to allow disclosure of records exempt from disclosure under ORS 192.410 to 192.505.

(b) The department shall establish procedures for the development and compilation of the report that:

(A) Allow for a person to request the exclusion from the report of specific data or information submitted by the person to the department and to provide, in the request, reasoning as to why the data or information is exempt from disclosure under ORS 192.410 to 192.505; and

(B) Protect data and information that the department determines to be exempt from disclosure in accordance with ORS 192.505.

(c) The department may utilize data and information that is exempt from disclosure under ORS 192.410 to 192.505 in compilation or analysis that is included in the report, provided that the exempt data and information is not disclosed in a manner that is individually identifiable.

(6) Upon request from the department, other agencies shall assist the department in the performance of its duties under this section.

(7) The department shall seek public input and provide opportunities for public comment during the development of the report.

Passed by House April 20, 2017

.....
Timothy G. Sekerak, Chief Clerk of House

.....
Tina Kotek, Speaker of House

Passed by Senate May 31, 2017

.....
Peter Courtney, President of Senate

Received by Governor:

.....M.,....., 2017

Approved:

.....M.,....., 2017

.....
Kate Brown, Governor

Filed in Office of Secretary of State:

.....M.,....., 2017

.....
Dennis Richardson, Secretary of State