



# Oregon

Kate Brown, Governor



**Oregon Energy Facility Siting Council**  
**Solar PV Rulemaking Advisory Committee**  
**Meeting #3 Summary**

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**Date:** Wed. January 30, 2019

**Time:** 10:30 am – 2:20 pm PST

**Place:** Port of Morrow Riverfront Center, Wells Springs Room; 2 Marine Drive, Boardman, OR.

**RAC Members:** Amy Berg-Pickett, Cypress Creek Renewables; Ann Beier, Crook County; Beryl Weinshenker, Oregon Solar Energy Association\*; Brian Walsh, Avangrid; Carla McLane, Morrow County; Dan Morse, Oregon Natural Desert Association; Darwin Johnson, Lake County\*; Elizabeth Farrar, Gilliam County; Irene Gilbert, Friends of the Grande Ronde Valley; Joe Fennimore, Marion County\*; Jon Jinings, DLCD; Laurie Hutchinson, Obsidian Renewables; Patrick Mills, Confederated Tribes of the Umatilla Indian Reservation\*; Paul Titus, Northern Wasco Public Utility District; Rikki Seguin, Renewable Northwest; Sarah Reif, ODFW

**EFSC Members:** Barry Beyeler, Chair; Hanley Jenkins II, Vice Chair; Betty Roppe\*

**ODOE Staff:** Todd Cornett, Division Administrator; Max Woods, Sr. Policy Analyst; Christopher Clark, Rules Coordinator; Esther Kooistra, Admin. Assistant; Sean Mole, Operations Analyst

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**Following introductory remarks, the department provided an overview of its research into impacts on traffic safety and aviation related to panel glare and asked RAC members for their input.**

RAC members discussed issues with glare at a solar development near the Pendleton Airport. Amy Berg-Pickett commented that most issues were related to glare from exposed racking during construction and were addressed with signage. In follow-up discussion, RAC members were asked about construction timelines and if it would be appropriate for Council to require signage for glare during construction.

- Several developers responded that construction timelines for solar facilities are shorter than timelines for other types of energy development and that construction projects are already often subject to signage requirements. Brian Walsh added that system components like galvanized steel pilings and aluminum framing are highly reflective, but are only exposed for a short time because construction is completed in phases.
- Carla McLane and Ann Beier expressed concerns about establishing specific standards for just one type of construction, commenting that all types of construction have impacts and developers have incentives to mitigate them.
- Several RAC members commented that Council has authority to require signage by condition if ODOT or other reviewing agencies identify safety concerns related to glare.

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\* Attended by phone

Many RAC members agreed that public perception of risks had been an issue in the past, but there was limited evidence to suggest that glare presents a risk to public safety and any impacts were highly context specific.

- RAC members discussed experiences with projects and what factors that make glare related issues more likely:
  - Fixed-tilt systems sited on high-grade slopes are likely to have more issues with reflectivity than single-axis systems on flat ground.
  - Impacts are likely to be limited to certain hours of the day, such as early morning, at specific times of the year.
  - Newer panels are equipped with antireflective coating that reduces likelihood of glare.
- Rikki Seguin provided [correspondence from Alison Hamilton at ODOT](#) stating that she does not have specific concerns related to glare.
- Laurie Hutchinson clarified that FAA no longer requires glare analysis on non-towered airports.

RAC members expressed concerns about the limited understanding we have about the “lake effect” and its impact on wildlife.

- Sarah Reif mentioned that the impacts are uncertain, but there is one ongoing study of projects in southern California. She stated she is in contact with the researcher and can provide an update to the group.
- Dan Morse expressed the need to continue to research and study impacts to avian species, whether related to glare or not.

Irene Gilbert expressed concern about impacts to residences, and believes the distance where glare can be an issue and weather condition impacts should be considered.

- Representatives from some counties commented that they had not seen proposals for substantial solar development near residential units, or that projects were too new to know if there are concerns.
- Ann Beier commented that one Crook County project had comments from residences above a nearby project, but they were limited to the construction phase.

Rikki Seguin commented that she believes the current standards are adequate to address impacts.

Dan Morse commented that while ONDA does not have an issue specifically related to glare they would like to see addressed by rule, they are strongly interested in seeing reasonable protective standards for scenic resources and protected areas. Ann Beier added that impacts to recreation and scenic resources are important for any type of development, but glare should not be the driver.

**The department provided an overview of its research into impacts on agriculture related to changes in ambient temperature near solar facilities and asked RAC members for their input.**

Most RAC members either had no comments on this issue, or believed the existing standards were sufficient to address any impacts that may arise.

RAC members discussed the lack of conclusive evidence on this topic.

- Rikki Seguin provided [correspondence with Greg Barron-Gafford](#), author of a leading paper on the solar heat island effect, stating that he is convinced that effects are minimal outside of facilities.
- Some RAC members stated that, theoretically, solar panels should dissipate heat faster and have a cooling effect.

RAC members discussed how microclimate effects might affect agriculture.

- Carla McLane commented that impacts may differ depending on the crop, and that regulation may be a slippery slope.
- Irene Gilbert commented that in light of the lack of data, she would like to see long-term monitoring of changes in vegetation and other effects on larger projects.
- Amy Berg-Pickett commented that some research shows increased productivity in vegetation under panels, and suggested the department reach out to Chad Higgins at OSU.

**The department asked RAC members if there were other new or previously discussed issues they would like to discuss. Several RAC members requested that these discussions be primarily for scoping issues since members did not have time to prepare.**

**Dan Morse suggests a review of whether or not current standards appropriately address visual impacts to scenic quality and resources.**

- Dan commented that the scenic resources standard may be too qualitative to interface well with Federal land management practices that require all lands to be inventoried and categorized for aesthetic or visual resource value. He commented that because the standard does not objectively identify what resources are important, it may not appropriately address visual impacts.
- The department provided an overview of how it treats scenic resources and some of the challenges associated with evaluating them.
- RAC members discussed development of objective criteria for identifying important scenic resources.
  - Irene Gilbert commented that she supports objective criteria, but did not think they always adequately valued resources. She added that decision makers should honor clear and objective criteria when established.
  - Carla McLane discussed the limitations of using objective criteria to address sensitive issues like scenic resources, commenting that Counties have not inventoried scenic resources in part due to lack of agreement on what criteria should be used.
  - Rikki Seguin commented that governments appoint decision-making bodies like EFSC, in part, to bring a diversity of views and perspectives to the evaluation of these issues.
- The department asked if concerns with the scenic resources standard were specific to solar facilities or a general issue. Dan Morse responded that it was both: solar facilities have unique visual impacts on scenic quality, but that the challenges of evaluating resources was more general. The department committed to reviewing this issue further.

**The RAC discussed a potential standard to address cumulative impacts of solar development on wildlife and wildlife habitat, and the proposal to form a subcommittee raised at the last RAC meeting.**

RAC members discussed how the ODFW habitat mitigation policy currently addresses cumulative impacts to wildlife habitat.

- Sarah Reif provided an overview of how the policy guides mitigation recommendations. The policy requires recommendations to be based on habitat categorization, which reflects habitat function, importance, placement, and scarcity on the landscape. She added that while cumulative impacts may be reflected in some factors for categorization, they are not explicitly discussed in the rule. She suggested that while cumulative impacts could be considered for energy facilities, work is needed to explore how it is done and benchmark it with other state and federal rules and laws.

- Chair Beyeler asked how ODFW evaluates the effectiveness of mitigation activities. Sarah Reif responded that ODFW monitors mitigation sites to make sure they do what they are intended, but there is still a loss of habitat. She added that movement corridors, in particular, may not be replaceable.
- Brian Walsh asked how policy addresses cumulative impacts of fossil fuel facilities, and if they account for the benefits of solar facilities on climate and the environment, such as the reduction carbon emissions and restoration of native plants and pollinator habitat.
  - Several RAC members commented that they recognize the impacts of climate change on wildlife, and expressed support for a siting process that facilitates renewable energy development in a way that minimizes financial and ecological burdens. The department responded that the EFSC process does not provide credit for greenhouse gas reductions, and that the only cumulative impacts analysis in place is for wind.
  - Sarah Reif commented that ODFW looks at habitat use and function when making mitigation recommendations. In some cases, the most important use is the movement of wide-ranging species and revegetating with pollinator friendly species within a fenced area does not mitigate those impacts. ODFW recognizes that revegetation may provide those benefits when the area of concern is important to small mammals or songbirds.
  - Dan Morse commented that currently, no mechanism is in place to assess cumulative impacts to habitat function, particularly for wildlife movement. He added that the public has an interest in making sure that combinations of projects over time do not have an additive effect on wildlife habitat.

RAC members discussed whether a discussion of cumulative impacts was within the scope of this rulemaking. Some stated concerns about looking at just one development pressure among many, and that this question may need to happen at a broader level.

- Rikki Seguin stated that she believes this question is outside the scope of this rulemaking, and that statewide leadership is needed to address cumulative effects.
- Irene Gilbert commented that the Council previously adopted a cumulative impacts standard for wind and discussed its historic application, specifically to the Shepherd's Flats facility.
- Dan Morse commented that a solar specific wildlife standard should not be automatically outside of the scope of this rulemaking.
- Sarah Reif commented that she would not recommend a cumulative impact analysis that only looks at a facility in relation to other solar facilities, but noted that solar is different from other types of energy development and land use. Specifically, she noted that solar development is happening on a much larger scale than other land uses, and unlike wind development, fenced solar facilities are impermeable to wildlife.
- Laurie Hutchinson expressed concerns that introducing mitigation requirements based on cumulative effects may incentivize developers to avoid regulation.

The RAC discussed the proposal to create a subcommittee to discuss this issue further. The department stated that staff would review the proposal and suggestions from RAC members and seek further guidance from Council.

**Rikki Seguin restated her request that the RAC review existing standards that do not apply to solar PV facilities in addition to considering standards to add. The department responded that it believed this was a valid question but that it believed it was outside the scope of this rulemaking.**

**The department opened the discussion to public comment.**

Matt Hutchinson, from Avangrid Renewables, commented that one simple solution to the cumulative impacts issue would be to expand the cumulative impacts standard for wind to solar facilities.

**Chair Beyeler thanked RAC members for their time and effort in this rulemaking project. Department staff provided next steps, including providing an update to Council at its Feb. 22, 2019 meeting. Staff expects an additional RAC meeting to be held in March in Salem.**

*For questions about this summary, please contact EFSC's Rules Coordinator Christopher Clark at [EFSC.Rulemaking@oregon.gov](mailto:EFSC.Rulemaking@oregon.gov), or call 503-373-1033.*