ORDER NO. 25-519

ENTERED Dec 18 2025

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

AR 681

In the Matter of Rulemaking to Establish Microgrid Frameworks (HB 2065 & HB 2066 Implementation).	ORDER

DISPOSITION: STAFF'S RECOMMENDATION ADOPTED

At its public meeting on December 18, 2025, the Public Utility Commission of Oregon adopted Staff's recommendation in this matter. The Staff Report with the recommendation is attached as Appendix A.

BY THE COMMISSION:

Alison Lackey
Chief Administrative Law Judge

ITEM NO. RM1

PUBLIC UTILITY COMMISSION OF OREGON
STAFF REPORT
PUBLIC MEETING DATE: December 18, 2025

REGULAR X CONSENT ____ EFFECTIVE DATE N/A

DATE: December 10, 2025

TO: Public Utility Commission

FROM: Peter Kernan

THROUGH: Caroline Moore and Sarah Hall **SIGNED**

SUBJECT: OREGON PUBLIC UTILITY COMMISSION STAFF:
(Docket No. AR 681)
Initial rulemaking scope to establish microgrid frameworks.

STAFF RECOMMENDATION:

Approve Staff's proposed scope for the rulemaking to establish an initial microgrid framework.

DISCUSSION:

Issue

Whether to approve Staff's proposed scope for the rulemaking to establish the Commission's initial microgrid framework, focused on simple microgrid designs first.

Applicable Rule or Law

House Bill 2066 (2025) requires the Commission to establish a regulatory framework for allowing the ownership, deployment and use of microgrids.

ORS 756.060 authorizes the Commission to adopt and amend reasonable and proper rules and regulations relative to all statutes administered by the commission.

Oregon Administrative Rules (OARs) 860-001-0160 and 860-001-0210 through 860-001-0260 set forth certain procedural requirements related to rulemaking.

Analysis

Background
House Bill 2066 (2025) directs the PUC to establish a microgrid regulatory framework by March 26, 2027, 18 months from the bill's effective date. The legislation tasks the PUC with developing a microgrid framework that includes:

- Interconnection, safety, and performance standards and requirements;
- An accessible process for application and approval; and
- A methodology for compensation, cost allocation, and cost recovery.

House Bill 2065 (2025) allows third-party engineers to perform studies and requires utilities to provide technical data to support microgrid interconnection evaluations.

In October 2025, the PUC opened Docket No. AR 681 to begin the rulemaking and scope an 18-month process to establish a microgrid framework. Staff first solicited informal responses to a scoping survey, which asked stakeholders to elevate key questions and issues to resolve. Staff received a total of 17 responses, which were summarized in Staff's draft scope. Full responses were posted to the docket on November 18, 2025.[1]

Staff considered stakeholder survey responses and published a draft scope on November 18, 2025.[2] Staff shared the draft scope in a workshop hosted on November 20, 2025.[3] Four stakeholders submitted formal comments on the draft scope by the December 5, 2025 deadline. Staff greatly appreciates stakeholder comments and engagement. Throughout this memo, Staff integrates stakeholder feedback from both survey responses and comments on the draft scope.

HB 2066 Implementation Approach
Staff proposes a phased approach to HB 2066 implementation starting with a focus on "simple" microgrid designs, as described in a Floor Letter in the legislative history.[4] Staff proposes that this rulemaking serve as the initial phase of HB 2066 implementation and

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1 *See* Docket No. AR 681, *Informal Phase: Stakeholder responses to Staff scoping survey*, (November 18, 2025), https://edocs.puc.state.or.us/efdocs/HAH/ar681hah341766115.pdf.

2 *See* Docket No. AR 681, *Informal Phase: Staff's draft scoping proposal for establishing microgrid frameworks*, (November 18, 2025), https://edocs.puc.state.or.us/efdocs/HAH/ar681hah341767115.pdf.

3 *See* Docket no. AR 681, *Informal Phase: Staff's Presentation for the November 20, 2025 Workshop,* (November 20, 2025), https://edocs.puc.state.or.us/efdocs/HAH/ar681hah341814115.pdf. The workshop recording is now available on the PUC Events Page

4 See Floor Letter RE: HB 2065 B and HB 2066 B from Representative John Lively, House District 7, (June 23, 2025), https://olis.oregonlegislature.gov/liz/2025R1/Downloads/FloorLetter/4513.

target the adoption of administrative rules needed to establish a framework for simple microgrid designs within HB 2066's 18-month implementation timeline.

In survey responses and comments on the draft scope, stakeholders offered broad support for Staff's phased approach, while also noting that Staff can prioritize certain enabling elements that apply to microgrids of any complexity from the outset.

In the draft scope, Staff proposed five principles to anchor the rulemaking investigation. These principles will guide the outcome of the investigation:

1. Manage increasing complexity through iterative and incremental growth from a foundation of more simple microgrid regulatory issues.
2. Facilitate microgrid designs with less clear regulatory pathways, e.g., beyond behind-the-meter, single customer designs.
3. Ensure communities have pathways to site microgrids where resilience value is highest, and there is an identified need.
4. Focus on microgrid types that can easily leverage existing utility and regulatory frameworks e.g., frameworks for distributed energy resource (DER) compensation and cost recovery.
5. Encourage microgrid designs that provide the greatest benefits to utility customers and the utility system.

Simple Microgrid Designs
Staff sought technical assistance from Pacific Northwest National Laboratory (PNNL), which helped conduct research on microgrid archetypes to inform a simple design. Staff published some of PNNL's findings with the draft scope, to help create common language around microgrid characteristics.[5] PNNL shared a microgrid "Levels" archetype, adapted from the New Jersey Board of Public Utilities, which includes:

Level 1. Single Customer Microgrid
- E.g., behind-the-meter solar and storage.

Level 2. Single Customer Campus Microgrid
- Potential for multiple buildings and generation and storage assets.
- May include front-of-meter and behind-the-meter assets.
- One customer responsible for all meters.
- E.g., university campus.

[5] *Staff's draft scoping proposal*, pp. 2-5.

Level 3. Multi-Customer Area Microgrid
- Potential for multiple customers and multiple generation and storage assets.
- May include front-of-meter and behind-the-meter assets.
- E.g., neighborhood microgrid.

Staff proposes that this rulemaking focus on providing regulatory clarity needed for Level 2 microgrids. Table 2 elaborates on the microgrid characteristics that Staff plans to target. Staff sought feedback on these proposals at the November 20, 2025 workshop and via written comments. Staff summarizes that feedback in this section.

Table 1: Initial Phase Simple Microgrid Focus

Microgrid Characteristic	Focus for Initial Phase	Staff Basis
Generation and storage	Microgrids with one or more generation and storage assets behind a point of common coupling • Behind-the-meter resources • Front-of-meter resources • Combinations of behind-the-meter and front-of-meter resources	Staff believes that the more simple "Level I systems," which are islandable and behind-the-meter, have clear, existing pathways. Accordingly, Staff's focus is on incrementally more complex systems by addressing front-of-meter generation and storage.
Number of customers	Campus Style • More than one meter and/or more than one building • Single customer (university, municipality, etc.)	Complexity increases when there are multiple customers served by a microgrid, from an engineering, compensation, and contractual perspective. Focusing on campus style microgrids will allow consideration of multiple buildings that are connected with distribution system infrastructure without the complexity of accounting for the participation of many distinct sites and customers under a Level 3 Area Microgrid. This also addresses a popular configuration for local government resilience planning.

Microgrid Characteristic	Focus for Initial Phase	Staff Basis
Ownership: Generation and storage assets	Allow multiple ownership types to be considered: • Utility owned • Microgrid customer ownership • Independent 3rd party ownership	PUC frameworks for interconnection and compensation of generators, during normal operations, currently exist for utility and non-utility ownership types. There is limited value to considering microgrid specific frameworks for a subset of generation ownership types.
Ownership: Microgrid control equipment and distribution system assets	Utility owns, constructs, and operates. • Cost recovery via existing utility pathways	Leverage utility expertise in constructing and operating distribution networks. When a microgrid triggers necessary utility investments, can use or modify existing engineering, operations, cost allocation practices without designing a new paradigm for third-party owned or operated distribution infrastructure. E.g., utility interconnection process identifies upgrades and costs the project will incur and utility cost recovery mechanisms collect and allocate costs.
Normal microgrid operation (non-island)	Allow for multiple operation frameworks • Autonomous or customer control pursuant to net metering agreement or PURPA contract or other • Utility control or operation per existing offering	Under normal operating conditions, allow for generation and storage assets to generate energy and contribute grid value under existing frameworks. Make progress on the PUC's regulatory frameworks for utility dispatchable DERs.
Microgrid operation in island mode	Utility operation under operation agreements with microgrid customer	Utilities have expertise in operating distribution systems using existing safety and performance standards. Staff proposes the initial framework to focus on leveraging the utility's ability to operate an islanded segment of its distribution system with generation and storage assets. Utility operation agreements must address customer priorities for microgrid use.

Stakeholder Comments

In written comments, PGE, PacifiCorp, Idaho Power, and Protogen supported the premise of a phased approach which focused on simpler microgrid designs first. Idaho Power encouraged focus to remain on Level 2 microgrids, such that the complexity of Level 3 microgrids does not complicate and slow down this phase. PGE proposed further design restrictions, which are listed verbatim below:[6]

- Electrically bounded systems with one point of interconnection;
- No crossing of public rights-of-way, consistent with net metering rules;
- Exclusion of front-of-meter assets shared across multiple meters;
- No utility obligations to construct standalone distribution infrastructure solely for microgrid operation; and,
- Operational configurations that do not introduce hybrid [front-of-meter] FOM-behind-the-PCC [point of common coupling] arrangements until foundational protection and operational standards are established.

Staff appreciates the support to focus on Level 2 microgrids and intends to maintain that focus after feedback. At this stage, Staff does not seek to further limit the focus of the initial phase as suggested by PGE. Specifically, Staff believes that issues related to front-of-meter generation and storage assets must be addressed to make meaningful progress beyond existing distributed energy resource (DER) frameworks.

That said, Staff recommends adding PGE's issue list to the physical and operational parameter workstream. Staff is interested in exploring expedited processes for microgrids with simpler designs. PGE also recommended engaging certain priority customer types such as hospitals, local governments, and schools, for their greatest shared value. Staff appreciates this pragmatic approach to advancing Level 2 microgrids and increasing resiliency for communities around the state.

PGE also indicated that a benefit of starting with Level 2 microgrids is that it may help avoid some more challenging legal issues.[7] Staff agrees that a Level 2 focus avoids

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6 *See* Docket No. AR 681, *PGE's Comments to Proposed Rulemaking Scope*, p. 2, https://edocs.puc.state.or.us/efdocs/HAC/ar681hac342071115.pdf.

7 *See* AR 681, PGE's Comments on Staff's Final Proposed Scope, "Whether and under what circumstances microgrid operators should be considered public utilities as defined in ORS 757.005 and thus subject to rate regulation requirements? Whether microgrids that serve whole communities delves into any concerns regarding utility territorial allocation under ORS 758.400? Whether microgrids are qualifying facilities under ORS 758.505 and associated cost limitations? Whether microgrids can be viewed as energy service suppliers under ORS 757.600? Whether microgrids offer prohibited residential direct access under ORS 757.601 or whether, if microgrid operators are seen as public utilities, they have to develop and operate in compliance with risk-based wildfire protection plans pursuant to ORS 757.963?"

certain questions, but flags that front-of-meter resources may mean addressing PURPA qualifying facilities.

Proposed Process and Procedural Schedule
Staff prepared an initial scope for the next 15 months until March 2027, which includes an informal and formal rulemaking stage. The informal stage includes an investigation covering the first half of 2026. The investigation includes educational baselining workshops to establish shared information for alignment throughout the docket. Simultaneously, Staff proposes creation of four workstreams to focus on specific issues from the legislation. In the third quarter of 2026, the focus will turn to composing draft rules. Before the end of 2026, Staff will request the Commission open a formal rulemaking to establish an initial microgrid framework by March 2027. Table 1 illustrates the different stages including anticipated Commission decisions.

Table 2: Proposed Procedural Schedule

Date	Activity
INFORMAL RULEMAKING STAGE – DRAFT RULE DEVELOPMENT PROCESS	
Jan – July 2026	Staff-led process to develop and refine rule concepts via proposed workstreams and workshops focused on foundational understanding. Individual workstreams establish meeting cadence, obligations, and goals.
Aug – Oct 2026	Staff-led process to convert concepts into draft rules
November 2026	Commission decision to move draft rules to formal rulemaking stage
FORMAL RULEMAKING PROCESS	
Dec – Mar 2027	Commission-led process to adopt administrative rules *At minimum, formal rulemaking requires approximately 90 days*
March 26, 2027	Legislative Deadline for Completion Commission decision on rules prior to this date.
IMPLEMENTATION AND SUBSEQUENT RULEMAKINGS TO FOLLOW	

Baselining and Workstream Process
Staff believes the initial phase should explore existing interconnection and compensation practices to inform microgrid frameworks. In the draft scope, Staff included Appendix 2, which summarized the existing Small Generator Interconnection

Procedures (SGIP), OAR ch. 860, div. 082, and some existing compensation pathways for generation and storage assets including net energy metering, the PURPA qualifying facilities contracts, and the Oregon Community Solar Program.[8] Staff also listed several utility-operated pilots and programs which request control of and provide compensation for distributed energy resources.

Stakeholders identified important workshop ideas that are generally applicable across workstreams. Staff intends to work with PNNL to solicit input and availability of subject matter experts to lead these initial, foundational workshops for early 2026. Potential topics include:

- Community microgrid case studies: Review success stories of utility and community partnerships that led to successfully deployed microgrids.
- Lessons from other states: Invite states with existing frameworks and programs to highlight best practices and how to avoid past mistakes.

Stakeholder Feedback
PGE recommended reviewing California's three-phase approach to studying microgrids. Staff will review this topic for a workshop focused on lessons from other states.

Proposed Workstreams
Staff envisions a process in which each of the four workstreams operates in parallel during the first half of 2026. Workstreams will kick off in January, with each group establishing agendas, priorities and a regular cadence of meetings and attendees. Each group will be encouraged to focus on desired outcomes and work backward from important deliverables to address key issues. Individual groups will be tasked with developing workshops including agenda and presenters. After six months, focus will turn to developing draft rules, and Staff will apply the learnings from each workstream.

Staff notes that multiple survey responders requested accessibility of information. Notice of all workshops, regardless of workstream, will be posted to the AR 681 docket. Additionally, Staff will record workshops and post the recordings to the PUC Events page afterward.[9]

1. **Interconnection Requirements**: This work stream will consider changes needed to the existing Commission's interconnection rules. HB 2065 created a new statutory right for applicants to use third-party consultants to conduct required studies and receive timely data and review from utilities. This workstream is intended to

[8] See *Staff's draft scoping proposal*, pp. 18-19.
[9] See PUC Events page, https://www.oregon.gov/puc/news-events/Pages/default.aspx.

coordinate with the existing UM 2111 interconnection docket to implement this new statutory requirement. [Legislation: HB 2065; HB 2066 Section 2(3)(d)]

Stakeholder Feedback

PacifiCorp reiterated the need for this workstream and raised a specific issue of maintaining proper separation of federal and state jurisdiction over front-of-meter sales by microgrid assets. PGE recommended keeping review of individual generation and storage assets and necessary changes within existing UM 2111. PGE also noted that front-of-meter assets will increase complexity of necessary studies, so the focus of this workstream should be on any additional rules that must be developed for microgrids.

Staff appreciates utility comments on interconnection and seeks to use this workstream to clarify HB 2065 data sharing requirements. Staff agrees that coordination with UM 2111 is essential. Staff finds that the key questions below will help resolve the appropriate venue to address microgrid interconnection issues long-term.

Key Questions

- Where do the HB 2065 and HB 2066 requirements conflict with, or lack clarity for, application to generators associated with microgrids?
- Should the Commission create a separate interconnection process for generators participating in microgrids and what are the eligibility criteria?
- What additional transparency and hosting capacity information do communities and microgrid developers need?
- For third-party interconnection studies:
    - What technical data must utilities share, in what formats, and under what process?
    - What are the requirements for complete, Professional Engineer (PE)-stamped third-party studies?
    - What collaboration and dispute resolution processes should exist between utilities and third parties?
    - Should the Commission adopt enforcement requirements for utilities and third parties?

Potential Workshops

- Interconnection process and requirements: review of OAR ch. 860, div. 082; microgrid configurations.
- Third-party interconnection: standardized study templates; data sharing protocols; PE qualifications; dispute resolution; modeling software and tools.

2. **Roles, Responsibilities, and Process:** This workstream will focus on directives from the legislation about the role, benefits, and approach to developing microgrids

in Oregon. This workstream includes issues such as ownership, liability, and contracts. [Legislation: Section 2(3)(a), (b), (c), (f), (j), (k), (n), (q).]

Stakeholder Feedback

Protogen recommended this workstream better define roles across the microgrid lifecycle. Specifically, Protogen noted that focus on ownership of microgrids may complicate rather than clarify microgrid development, as multiple microgrid components may be owned by different parties. Staff agrees that this is an issue for this workgroup and adds a task of drafting microgrid lifecycle roles for feedback and alignment.

PacifiCorp and PGE also expressed the need for clarity on roles, specifically for affirming utility obligations. In particular, PacifiCorp raised single or joint ownership issues. PGE seeks clarity on utility operation both under blue sky conditions and in islanded mode. In the workshop, and in comments, utilities emphasized the need to manage microgrids for wildfire risk. Staff believes that further defining roles will be essential.

PGE recommended adding a separate workstream on community microgrids, citing the demand for community microgrids as a motivation for the legislation. Staff plans to develop the microgrid approval process within this workstream but agrees with PGE that some form of longitudinal engagement with state-wide communities will be necessary, even beyond this initial rulemaking phase.

Key Questions

- What eligibility criteria should a microgrid meet for a utility to be required to contract with a microgrid and design, construct, and operate microgrid control equipment and distribution system assets for the microgrid?
- Which roles and responsibilities, including qualifications, liability, and operational boundaries should be clearly outlined for Level 2 microgrids?
- Which contractual elements are required for Level 2 microgrids?
- How should the Commission define joint operation of microgrids (both generation/storage and controls) considering utility safety concerns?
- How should the Commission define instances of permissible, redundant infrastructure?
- What process and criteria will the Commission use to approve local government applications for microgrid zones?

Potential Workshops

- Microgrid zone approval process: criteria; application templates; local government coordination; conditional approvals.

- Roles and responsibilities: ownership models; liability; interactions between utility, third parties, and local government.
- Community engagement: accessibility for non-technical audiences; standardized processes.

3. **Physical and Operational Parameters:** This workstream will focus on the physical relationship between the microgrid and the utility including standards and requirements for safety, operation, and performance. [Legislation: HB 2066 Section 2(3)(e), (m), (o), (p), (q).]

Stakeholder Feedback

Protogen recommended this workstream establish operational protocols to address liability concerns. PacifiCorp also raised the question of liability assignment as a key issue that the Commission must address. PGE encouraged minimum standards, noted complexity of inverter based resources, and recommended incorporation of cybersecurity requirements.

Key Questions

- What technical standards apply to microgrids, and do new standards need to be adopted to support microgrid development?
- What operational requirements apply to islanding, and how will utilities and microgrids coordinate implementation?
- How do front-of-meter, but behind point of common coupling (PCC), assets impact protection coordination?
- How will utilities verify microgrid safety and readiness during both design and implementation?
- How will microgrids and community microgrids be considered in broader utility planning such as integrated resource plans, distribution system plans, and wildfire mitigation plans?

Potential Workshops

- Technical standards and operational requirements: IEEE 1547; control systems, islanding, black start; telemetry; cybersecurity.
- Microgrid configurations and capabilities with utility integration: demand response and load flexibility; use of microgrid in virtual power plant; operation while islanding; normal operation.

4. **Cost and Valuation:** This workstream will focus on a variety of cost issues including frameworks for compensation and cost allocation and methodology for valuation of microgrid services. [Legislation: HB 2066 Section 2(3)(g), (h), (i), (L).]

Stakeholder Feedback

PGE, PacifiCorp, and Protogen noted the importance of cost-allocation for microgrids and appropriate practices to avoid cost-shifting onto non-participating customers. Protogen encouraged Staff to focus on equitable cost allocation that does not impede microgrid development.

PGE and Idaho Power raised concerns about valuing new benefits such as resiliency and the value of lost load and indicated those issues may be better addressed in future phases or with additional Commission guidance. Relatedly, Idaho Power flagged the potential for double counting benefits as an issue.

Staff agrees with stakeholders on the importance of addressing cost-allocation and maintains it as a focus for this workstream. Level 2 microgrids with a single customer, by nature, have less complex cost-allocation issues. Staff believes it is important for this initial phase to value resilience, and this workstream will consider how that valuation results in compensation. Similar to many PUC planning processes, there will be future phases to refine, modify, or add complexity.

PNNL will support the cost and valuation workstream, with expertise in review and analysis of resilience value and the distribution system. In 2022, PNNL prepared a report on considerations for resilience in Oregon's Clean Energy Plans, which can provide a foundation for the issue.[10]

Key Questions

- How should the value of resilience be determined and applied to a given microgrid? Based on the value of lost load, an avoided outage cost, and/or additional valuation methods?
- How should microgrid avoided costs be determined?
- What mechanisms should exist for local cost recovery?
- What gaps exist between the cost to develop microgrids and the value of the microgrid grid services stack?
- What mechanisms are available to minimize cost shifts, and what elements may be part of a least cost, least risk planning framework?
- Where do resilience benefits accrue and who pays for them?
- What levels of utility compensation is reasonable to operate microgrids on communities' behalf?

[10] *See* Docket No. UM 2225, *Considerations for Resilience Guidelines for Clean Energy Plans,* (September 7, 2022), https://edocs.puc.state.or.us/efdocs/HAH/um2225hah113046.pdf.

Potential Workshops

- Compensation: avoided costs and utility resource plan cost assumptions.
- Valuation: value of lost load; resilience; black start; other.
- Microgrid services tariff: tariff design; cost allocation; rate design.

Cross-cutting Policy Considerations

PGE raised several important questions about how microgrids relate to other planning issues. Specifically, PGE made connections to the microgrids' role in utility small scale renewable requirements, utility greenhouse gas reporting, and resource adequacy obligations. Staff believes these issues should be elevated within AR 681, though discrete issues may be re-directed to those other planning venues.

PacifiCorp recommended the Commission indicate flexibility to remove issues from the first rulemaking scope in its scoping decision to preserve flexibility to meet the initial phase deadline. Staff agrees the Commission has this authority to refine the scope as the rulemaking proceeds. Commission decisions around the formal rulemaking phase will provide an opportunity to further refine scope as needed.

Next Steps

Pending Commission approval of the proposed scope, Staff will immediately advance collaborative resolution of numerous questions raised in the scoping process. Right away, Staff will utilize technical assistance support from PNNL to start developing content and timing for general education workshops. Staff also plans to leverage PNNL's expertise to advise and support on the Cost and Valuation workstream specifically. Simultaneously, Staff will begin outreach to stakeholders to create rosters for each workstream, and develop individual schedules, tasks, and outcomes as described in this memo.

Conclusion

Staff recommends the Commission approve the proposed initial rulemaking scope to establish microgrid frameworks. Approval will help focus the investigation on answering key questions about simple, Level 2, microgrids through an initial rulemaking process. Staff will coordinate and facilitate general baselining workshops and four simultaneous workstreams before drafting rules. Staff expects draft rules by the end of 2026 and final rules by March 26, 2027.

PROPOSED COMMISSION MOTION:

Approve Staff's proposed scope for the rulemaking to establish an initial microgrid framework.

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