ITEM NO. RA5

PUBLIC UTILITY COMMISSION OF OREGON
STAFF REPORT
PUBLIC MEETING DATE: August 22, 2023

REGULAR __X__ **CONSENT** ____ **EFFECTIVE DATE** ____N/A____

DATE: August 15, 2023

TO: Public Utility Commission

FROM: Ted Drennan

THROUGH: Caroline Moore and Scott Gibbens **SIGNED**

SUBJECT: OREGON PUBLIC UTILITY COMMISSION STAFF:
(Docket Nos. UM 2111 and AR 659)
Request to Move Phase 1 Interconnection Rules to Formal Rulemaking.

STAFF RECOMMENDATION:

Staff recommends that the Oregon Public Utility Commission (Commission) approve Staff's request to open a formal rulemaking and issue a notice of proposed rulemaking to adopt changes to Division 82 Small Generator Interconnection Rules, and Division 39 Net Metering Rules. The proposed draft rule revisions are included in Attachment 1.

DISCUSSION:

Issues

Whether the Commission should initiate a formal rulemaking for the first group of rules developed in the interconnection modernization investigation, focused on modernizing screening practices, export controls, and advanced inverter standards.

Applicable Rule or Law

ORS 756.060 provides "[t]he Public Utility Commission may adopt and amend reasonable and proper rules and regulations relative to all statutes administered by the commission and may adopt and publish reasonable and proper rules to govern proceedings and to regulate the mode and manner of all investigations and hearings of public utilities and telecommunications utilities and other parties before the commission."

In 2007, the Commission adopted OAR Chapter 860, Division 39, which outlines the Commission's net metering policies. The net metering rules include requirements for a net metering project to safely interconnect with the utility's system.[1]

In 2009, the Commission adopted OAR Division 82 of Chapter 860 Small Generator Interconnection Rules (OR-SGIP) which outline the interconnection requirements for Oregon-jurisdictional generators up to 10 MW in size.[2]

Analysis

Background

The Commission opened Docket No. UM 2111 on July 6, 2020, to address a range of interconnection issues arising across generator types (i.e., net metering, small generator, large generator, community solar project). Given the breadth of issues, Staff conducted an open scoping process focused on identifying issues that would reduce barriers to projects that provide direct customer and community benefits and decarbonization benefits, including smarter, flexible DERs and resiliency-focused projects. On April 12, 2022, the Commission approved the scope for the first of set issues to address ("Group 1 issues"), which include:

- Modernizing the screening and interconnection study thresholds, and the technologies considered when an upgrade is needed.
- Incorporating updated standards such as IEEE 1547-2018.
- Incorporating advanced inverters, storage, islanding, and other modern configurations.

Participants engaged in a working group process to strategize and work through proposed rule revisions within these three buckets of the scope, circulating and responding to each other's proposed redlines of the administrative rules with a goal of reaching agreement on as many rule changes as possible. Through this process, participants were able to reach agreement on a great number of technical, policy, and procedural changes, with only of handful of issues requiring further resolution.

The remainder of this Staff report summarizes the key elements of the proposed rule changes and outlines Staff's proposal for resolving outstanding items.

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[1] Commission Order No. 07-319.
[2] Commission Order No. 09-196.

Participants
Discussion in the process has been robust, with individuals representing many stakeholders. Parties involved include the investor-owned electric utilities operating in Oregon, Idaho Power Company, PacifiCorp and Portland General Electric Company (PGE), collectively the Joint Utilities (JU). Other groups include the Renewable Energy Coalition (Coalition), Oregon Solar + Storage Industries Association (OSSIA), and the Community Renewable Energy Association (CREA) collectively known as the Interconnection Trade Associations (ITA). The Interstate Renewable Energy Coalition (IREC) and the Energy Trust of Oregon (Energy Trust) were involved as well. Staff would like to express thanks to the parties for working together throughout the process. It was a lengthy, involved process with parties willing to give and take in order to work through issues and develop consensus on the issues.

In addition to stakeholder involvement, the process benefitted from input from external experts including Electrical Power Research Institute (EPRI), and National Association of Regulatory Utility Commissioners (NARUC).

Summary of Proposed Rule Changes
Following the identification of Group 1 issues, participants agreed to the following strategy to tackle the most important near-term opportunities within the scope:

- **Screening practices:** Use IREC's Model Interconnection Procedures 2019 as a starting point to consider opportunities to modernize the interconnection screening practices for net metering and small generator projects, which is expected to help facilitate faster, lower cost interconnection for more distributed energy resources (DERs).[3] This includes an effort to standardize the rules related to screening between net metering (Division 39) and small generators (Division 82).
- **Export controls:** Use IREC's storage interconnection reform toolkit, Building a Technically Reliable Interconnection Evolution for Storage (BATRIES), to consider changes that will facilitate interconnection of net metering and small generator projects that include storage, namely the adoption of requirements for export controls and a move to review interconnections based on export capacity instead of nameplate capacity.[4]
- **IEEE 1547 standard update:** Use IREC's IEEE-1547 Decision Options Matrix for IEEE 1544-2018 Adoption to work through near-term decisions needed to incorporate current standards for advanced inverters. This includes a deadline for the utilities to begin requiring compliance from interconnection applicants.[5]

[3] https://irecusa.org/resources/irec-model-interconnection-procedures-2019/.
[4] https://irecusa.org/programs/batries-storage-interconnection/.
[5] https://irecusa.org/resources/decision-options-matrix-for-ieee-1547-2018-adoption-3/.

As a result, Staff's proposal contains updates to many of the policies in Chapter 860, Division 39 and Division 82, as well as the introduction two new rules sections in Division 82 that are also relied on for Division 39 interconnection applications Division: Export Controls (Small Generator: OAR 860-082-0033Net Metering: OAR 860-039-0030(2)) and Supplemental Review (Small Generator: OAR 860-082-0063, Net Metering: OAR 860-039-0030(2)). In addition, this process resulted in several recommendations for the Commission to direct the utilities to perform a range of enabling actions by specific dates.

Staff believes there is general consensus among the parties for the vast majority of changes proposed in the revised Division 82 and 39 rules. Staff is grateful to participants that there are a limited number of major decision points that remain for the Commission. With the exception of the high-speed reclosing requirements for export controls, these areas of Commission decision are issues that are tangential to the implementation of the three core buckets of proposed rules listed above which Staff categorizes as "Other areas of Commission decision." A summary of the areas for Commission decision includes:

- Utility handbook process for incorporating UM 2111 changes, and future updates
- Legacy data update requirements
- Minor equipment modifications
- Interconnection agreement timeline
- Required deposits, and timing
- Requirements on circuits using high-speed reclosing
- NEM eligibility for Tier 1
- Timing of IEEE 1547-2018 compliance requirements

Screen Updates and Addition of Supplemental Review

Both the net metering and small generator rules rely on tiered screens that help fast track interconnections that are safe to proceed without full system impact study. Using the IREC model rules as a jumping off point, participants identified several opportunities to revise the current screening policies to capture advancements from the past two decades which can help facilitate quicker more cost-effective interconnection of DERs. The proposed screens include:

- Export Capacity
- Substation transformer backfeed screen
- Penetration Screen
- Network Screen
- Single-Phase Shared Secondary Screen
- Service Imbalance Screen

- Fault Current Screen*
- Short-Circuit Interrupting Capability Screen*
- Transient Stability Screen*
- Line Configuration Screen*
- Inadvertent Export Screen*

*Used for applicants at Tier 2 or above

In addition, the proposed rules include the addition of a new Supplemental Review process. This is an intermediate opportunity for the utility to review a project that failed the screens in greater detail before proceeding to a full system impact study, or in the case of PacifiCorp, the cluster study process.[6]

Finally, while the net metering rules currently include three "levels" of screens and the small generator rules include four "tiers," the proposed rule changes also standardize to some extent the screening requirements between the two divisions with a focus on export capacity in addition to nameplate capacity.

This is based on the principle that interconnection requirements should focus on the output that the project will place on the system, and do not need to vary based on the compensation framework or position relative to the meter. This will ease understanding of the Commission's screening policies and may help facilitate combination of the rules into one DER interconnection policy in the future. This change also keeps the screens streamlined for systems that include storage.

Parties spent considerable time refining and negotiating the details of each screen and metric. Staff believes that there is consensus support for, or agreement not to oppose the screening and supplemental review policies in Staff's proposed draft rules. That said, Staff highlights a few areas of complexity for the Commission's awareness:

- **Line configuration screen** (OAR 860-082-0050(2)(g); OAR 860-039-0035(2));[7] This screen saw particularly lengthy back and forth between participants;

[6] Staff notes that PGE requested the ability to waive OAR 860-039-0030(3) requirement that a Level 1 net metering customer's application be rejected if it fails to meet one or more of the applicable criteria in Docket No. UM 1613. The Commission approved this waiver in Order No. 22-502. PGE reported back to the Commission on June 26, 2023 noting that out of 277 applicants who failed the screens, the Company was able to safely connect all of them during fo0r the period January 15, 2023 – June 15, 2023. Staff has included an option for utilities to allow for interconnection if it is safe in the updated rules, following the screening requirements in division 82.

[7] Division 39 relies on the screens that are included in Division 82. OAR 860-039-0035(2) The public utility must approve an application for interconnection under the Tier 2 interconnection review if the net

however, Staff believes that the proposed rule will not be contested as long as, for the three-phase, four-wire or mixed three-wire and four-wire, the utility will bear the cost of extending the neutral wire for the applicant.

- **Penetration screen** (OAR 860-082-0045(2)(c) (Tier 1) and OAR 860-082-0050(2)(b) (Tier 2)): There was substantial discussion about whether to screen projects based on the ratio of renewable penetration to load and at what level. After significant discussion and consultation with national experts, a compromise was reached where initial analysis screens for lower penetration levels (90 percent), while the supplemental review uses a higher threshold (100 percent). Staff believes this compromise balances risks to parts of the system that overgeneration and backfeed without protective equipment may pose, with the existence of other screens in supplemental review that are designed to more specifically capture those risks.
- **Tier 3/non-export policies** (OAR 860-0082-0055(1)(c)): Staff notes that the IREC model interconnection policies and the Commission's small generator rules include a Tier 3 screen for non-exporting generators, while the current net metering policies do not include this non-export screen. Staff understands that the Tier 2 screens and export policies discussed in the section below should capture non-exporting net metering projects and has not proposed to add a Tier 3 screen to the net metering rules. However, Staff believes that further consistency could be achieved with more time to consider whether and how Tier 3 screens are needed between the two divisions.

Export Controls

Export controls are designed to help incorporate advanced inverters, storage, islanding, and other modern configurations based on best practices developed in IREC's BATRIES toolkit. As part of the discussion, appropriate requirements for allowing limited- and non-exporting generators was addressed.

While stakeholders were in agreement with the idea of export controls for analyzing interconnection applications, there were some points of disagreement. IREC's proposal did not require protective relays to limit inadvertent export on circuits using high-speed reclosing, believing the controls in the inverters themselves to be sufficient. The JU disagreed with this approach, believing there was the need for protective relays on feeders with high-speed reclosing. The sentence at issue is:

> When a project is located on a circuit using high-speed reclosing the utility may require a maximum delay of less than 2.0 seconds to safely facilitate the reclosing.

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metering facility meets the eligibility requirements in subsection (1) of this rule and the facility meets the Tier 2 interconnection screening criteria set forth at OAR 860-082-0050(2)(a)–(l).

Staff's final proposal includes this requirement for protective relays for non-exporting small generator facilities in 860-082-0033(3)(a)(A) and (B) requirements for Reverse Power Protection (Device 32R) and Minimum Power Protection (Device 32F) respectively. For exporting facilities the requirement is included in 860-082-033(b)(A) Directional Power Protection (Device 32). Staff believes this to be the prudent approach at this point in time, although this may need to be re-examined at some point in the future following more experience with the advanced technologies.

Staff believes the parties are in general consensus with the remainder of the new Export Controls section, but highlights the following changes as noteworthy for the Commission in the formal rulemaking process:

- **Storage size ratings:** Staff's proposal looks to use export capacity for measuring output on the grid, rather than relying solely on the total combined amount of generating and storage equipment the project includes. This is closely related to the capacity of a resource's inverters instead of the capacity of the resource's prime mover. For generating resources, the eligibility for interconnection under the Division 82 and 39 rules will focus on the maximum amount of energy the combined resource can export to the grid at any one time, as well as the nameplate capacity. Staff believes this approach will help enable customer-sited storage.
- **Solar size ratings**: Under the proposed approach, generators will be examined based on the amount of energy the facility can export to the grid. This approach relies on determinations of eligibility for the Division 82 or 39 rules using inverter ratings for inverter-based generation (i.e., the capacity of the facility in AC rather DC). Past approaches have relied solely on the nameplate size of the facility, and for Division 82 adds the generator, and the storage for the nameplate size. For solar, as well as other inverter-based facilities this is based on the generating capacity of the resource's motive force, such as solar panels, which historically have been higher than the actual output measured by the inverters.
- **Implications for rules related to size**: the use of export capacity is expected to improve the precision of utility interconnection analysis, promote the development of more flexible DERs, and may expand the amount of DERs that interconnect in certain areas without triggering major upgrades. The revised rules include the ability for small generators and commercial net metering systems to use advanced technologies including Power control systems (PCS), which are defined under OAR 860-082-0015(35) as "systems or devices which electronically limit or control steady state currents to a programmable limit." Use of PCS will ensure the facility does not put power on the grid in excess of the export capacity limits. Export capacity is the generating system's capacity (which

for a behind the meter solar or solar plus storage system would be determined by the inverters) as impacted by and the PCS. The implementation of this impacts certain size requirements for net metering:

Current	Proposed	
	Residential	Commercial
Level 1	Tier 1	Tier 1
25 kw capacity	25 kw export capacity 25 kw capacity	25 kw export capacity 50 kw capacity
2 MW capacity	NA	Export capacity see 860-082-0050(1)(b) 2 MW capacity

OSSIA has expressed support for changing the residential net metering size limits to match the commercial i.e., 25 kW export capacity, 50 kW capacity. Parties have not expressed consensus support for this proposal; however Staff is interested in encouraging flexible systems with higher system value and would be happy to discuss this further in the formal phase.

Updated IEEE-1547 Standards
The IEEE 1547 provides standard requirements for integration of DERs with electric power grids. While the Commission's current net metering and small generator interconnection rules reference compliance with the 2003 standard, two more modern standards have been adopted that cover the many advancements in engineering practices in the past two decades, including practices and requirements for the utilization of advanced inverters.

IEE 1547-2018, from 2018, focuses on the technical specifications for, and testing of, the interconnection and interoperability between utility electric power systems and DERs.[8] IEEE 1547.1, from 2020, focuses on updating the testing standards for manufacturers. Using the decision matrix developed by IREC, work group participants focused on discussing the following near-term decisions for the implementation of these updated standards:

- Adoption timeline
- Adoption process
- Technical details
    - Abnormal (I, II, III) and Normal (A, B) performance category
    - Alternative performance category
    - Voltage/frequency trips settings

[8] More information is available at: https://standards.ieee.org/ieee/1547/5915/.

- Frequency droop settings
- Voltage regulation modes

Parties reached general agreement on the technical decisions[9] and determined that the appropriate venue for adopting these detailed specifications is in the utilities' interconnection handbooks, which provide detailed guidance for the implementation of the Commission's interconnection policies by each utility. While parties agreed on this venue, outstanding Commission decisions related to the process to review these, and future handbook updates are discussed in the Other areas of Commission decision section below.

Parties also agreed that the Commission should require use of compliant DER systems by interconnection applications by a date certain; however, the availability of the equipment is not certain at this time. It is important to give industry a clear timeframe for the start of this requirement. Staff has included a placeholder rule that requires the use of IEEE 1547-2018 compliant equipment for new applications by no earlier than January 1, 2024. Staff believes that the market can continue to be monitored during the formal rulemaking.

In addition, the Staff proposed rules update the definition of IEEE-1547 to reflect the 2018 updated standard and include the IEEE 1547.1 2020 standard as it is applicable to certain requirements, as well.

There was additional discussion on some of the mid-term issues as well:

- Reference point of applicability (RPA)
- Enter service settings
- Utility required profile (URP)
- Export control and power control systems
- Replacement units
- Interconnection agreements
- Application forms
- Ramp rates

Staff's proposed rules address some of the mid-term issues, such as inclusion of a customer's RPA. Export controls and power control systems have been addressed in Staff's proposal. Items such as interconnection agreements and applications forms may need updating at the conclusion of the formal rulemaking process. Other items will need

[9] See Summary of October 25 Meeting at the following link: https://edocs.puc.state.or.us/efdocs/HAH/um2111hah15918.pdf.

to be addressed in a future proceeding, along with the long-term issues. Additional changes are proposed to incorporate updates to the American National Standards Institute (ANSI) updated reference using the 2022 edition, updated in 2020 as opposed to the current 2001reference. Also incorporated is the requirement for inverters to be compliant with UL 1741standards.

Other areas of Commission decision
While procedural changes are scheduled to be addressed in a subsequent phase of this investigation, adjusting certain rules to reflect changes in scope highlighted other needed rule changes or direction from the Commission.

In addition, the rule revision process highlighted opportunities to make an out-of-scope change that was high priority to a certain party. Staff attempted to limit the amount of these out-of-scope changes to incorporate in the current set of proposed rule changes. While the stakeholder proposals may not be included in this round of updates, Staff believes there has been discussion throughout that will help guide the process in the future. Staff is listing many of these items as lacking consensus. There is the potential that Staff did not capture all of the nuances with parties' positions, so the following list may not contain every area of disagreement. There is the possibility more issues will be raised in the formal rulemaking process.

The discussion below highlights the key related and out-of-scope changes discussed in the development of the proposed rules.

Minor Equipment Modifications
In Staff's proposal there is an opportunity for projects in the interconnection queue to adjust their nameplate by up to ten percent if this does not impact lower queued projects.[10] The ITA suggested that impacting lower queued projects should be allowed as well as a 60 percent reduction in nameplate capacity prior to execution of a system impact study, and an additional 15 percent reduction prior to execution of a facilities study. Staff believes that, with clear rules about how much a higher queued project can change, providing some flexibility to adjust project size during the interconnection process can help facilitate DER development. But other parties are more supportive with an approach that can be done in a manner without incurring cascading changes and confusion in the interconnection process. As such Staff carried through the following language:

> OAR 860-082-0010(27)(c) Includes a reduction in the nameplate rating and/or export capacity of the small generator facility of 10 percent or less

[10] Minor equipment modification is also used in rule OAR 860-082-0025(1)(b) in reference to changes to existing systems.

> provided that a change made to a small generator facility with a pending completed application must not adversely impact lower queued projects.

Staff is happy to participate in continued refinement during the formal phase based on points raised by the ITA.

Utility Handbook process

The revised rules include a process for reviewing the utility interconnection handbooks for two reasons. First, to confirm that the IEEE-1547 working group decisions and this first phase of rules are properly adopted. Second, to articulate an expectation for ongoing notice and review of future changes to the handbooks.

For the first matter, Staff proposes the Commission direct the JU to follow this process:

1. Identify areas where the interconnection requirements are contained, be it tariff, handbook or some other document, collectively referred to as “handbooks”.
2. Ensure handbook information is posted online
3. Follow the process listed in OAR 860-082-0030(1)(b)-(c), and
4. Provide proposed revisions to UM 2111 parties that will align handbooks with rules changes following the conclusion of the formal rulemaking process.
5. Present proposed revisions at a workshop for UM 2111 and any other interested parties

Parties will have an opportunity to raise concerns with the filings, if there are no objections they will be implemented. Parties may request Commission intervention if concerns raised are not addressed by the utility.

On an ongoing basis, Staff proposes the following rules:

> OAR 860-082-0030(1)(b): Interconnection requirements handbook. Each public utility must post an interconnection requirements handbook on its public website. Prior to revising its interconnection requirements handbook, a public utility must provide public notice and an opportunity to comment and the public utility must respond to any comments received.
>
> OAR 860-082-0030(1)(c)Preferred default settings. A public utility must allow small generator facilities to interconnect using the public utility’s preferred default settings, except when the application reviewed under Tier 4, OAR 860-082-0060, or the application fails the Tier 1, Tier 2, or Tier 3 approval criteria in OAR 860-082-0045(2), OAR 860-082-0050(2), or OAR 860-082-0055(2). Interconnection requirements handbooks must

> include preferred default settings. As applicable, the following must be identified in the interconnection requirements handbook.

Staff's proposal does not go as far as some parties would prefer, and relies on a more informal process for updates, i.e. not requiring Commission approval of the entire handbook. Staff's approach does require the JU to provide parties with notification prior to updating the handbooks but does not specify that this will be on OASIS per the JU recommendation. Staff believes that each utility should look to provide notice in an accessible manner that includes Staff, Energy Trust, IREC, and known net metering and small generator stakeholders. Staff envisions that upon notice, Staff and other stakeholders will review for compliance with the Division 82 and 39 rules and best practices. If the utilities do not fully address concerns raised informally, parties, including Staff, can ask the Commission to address their concerns as well. Staff believes this is a reasonable approach, allowing for input while not requiring extensive use of Staff resources to review the totality of the various utility handbooks, and related documents. Staff is happy to continue to refine the notification requirements and the manner in which Staff or other parties can raise disputed changes to the Commission for resolution.

Data Review/Update Process
While working through export controls and screening improvements, it became clear that the utilities have not collected net metering and small generator project data in a manner that allows interconnection analysis to reflect the transition to export capacity. This will require an effort to update data on existing projects and change the data collection approach for new projects moving forward.

Given the new technologies, and the new metrics for measuring the impact of small generators new data will be collected, and old data should be updated to reflect the current understanding of what is on the grid. Both the JU and the Energy Trust have been involved in preliminary analysis of updating the current data. The Energy Trust has a vast database of installations prior to the 2021 timeframe. It appears the utilities could make use of this data in updating the historic data sets.

The JU oppose a requirement that they update all legacy interconnections as there will be a significant effort to do so, requiring time and expense. They also believe the conversion will not have a material impact on the interconnection capacity on any given circuit. The JU did offer a compromise proposal, they would update a circuit under the following conditions:

> (1) the aggregated capacity on the feeder including the new generator is equal to or greater than 90 percent of the relevant minimum load, and

(2) the aggregated capacity on the feeder excluding the new generator is less than 100 percent of the relevant minimum load.

Other parties to the docket, including IREC, ITA, and OSSIA have filed comments asking for the data to be updated by a date certain. Staff believes an approach that combines the JU proposal along with a date certain for updating the data would be the optimal approach. Staff recognizes that there may be issues with updating some of the legacy project data and believes any final order should recognize this. Staff also believes the JU proposal would need some refinement; as currently written, there could be feeders in excess of 100 percent (condition 2) so Staff would suggest eliminating that condition. As for the first condition, Staff would suggest lowering the 90 percent figure to 80 percent. Projects would fail the Penetration Screen at 90 percent of minimum load, lowering the update threshold to 80 percent would allow for some headroom on feeders before they hit the 90 percent threshold.

Staff proposal therefore would have utilities update feeder when, the aggregated capacity on the feeder including the new generator is equal to or greater than 80 percent of the relevant minimum load. The JU would also be required to update other legacy data by a date certain, Staff proposes one year following adoption of the revised. It is Staff's understanding that PacifiCorp believes it could update its systems within 18 months and would prefer longer than the twelve months Staff is proposing.

Note, while there would be consideration given for legacy projects that are difficult to update, Staff is hopeful the majority of the legacy data could be updated through working with the Energy Trust.

IREC has a proposal to address the updating of data as well. Their plan would look to a threshold of 70 percent of the relevant minimum load for updating feeders. The specifics of the proposal are as follows:

1. Within three months of the issuance of this order, PGE and PacifiCorp shall enter into reciprocal data sharing agreements with the Energy Trust of Oregon concerning the attributes of distributed energy resources.
2. Within six months of the issuance of this order, PGE, PacifiCorp, and Idaho Power shall update their distributed energy resources databases to include nameplate rating values in AC for every distributed energy resource connected to a circuit or transformer where the aggregated export capacity exceeds 70 percent of minimum load. If new interconnection applications cause a circuit or transformer's aggregated export capacity to exceed 70 percent of minimum load, utilities will immediately update their DER database to use AC nameplate ratings for existing DERs on that circuit or transformer.

3. Within twelve months of the issuance of an order revising OAR 860-082 to use nameplate rating in AC, PGE, PacifiCorp, and Idaho Power shall update their DER databases to include nameplate rating values in alternating current for every distributed energy resource.

Interconnection Agreement Timelines and Deposits
As part of the development of screening and export control rules, working group participants encountered a limited number of process improvement that could be addressed while updating certain rules for reasons within scope. Process itself is an issue that is intended to be examined in a later phase, but it was necessary to update some of the process items given all of the other changes.

While developing proposals for rules related to the new/revised screens, participants considered a proposal that would require utilities to provide an executed interconnection agreement to applicants upon notice that the applicant passed the screening process. The revised rules streamline the interconnection process by removing “application approval” as a step in the interconnection process with an independent timeline. For example, if a project passes the screens, then the public utility will approve a project at the same time as providing screen results. After providing the screen results the rules allow five days for the utility to provide the customer an executed interconnection agreement.” The applicant would counter-sign the agreement within 15 days and return it with a deposit to the utility.

The utilities would prefer to initially send an unsigned agreement to the applicant but agreed to the compromise proposal with IREC because of the inclusion of a requirement to return the deposit with the counter-signed agreement. The JU argue that not allowing collection of the deposit at that time could lead to an applicant being in breach of the contract.[11]

The ITA raise multiple issues with the compromise approach described above. The first issue is with the deposit, with the ITA proposing the deposit be required on a different timeline, suggesting 20 days before procurement and/or construction activities commence.[12] The parties also disagree with the timeline for return of the counter-signed agreement asking for 30 days as opposed to the proposed 15 business days.[13]

[11] See Joint Utilities’ Comments Regarding Staff’s Initial Redlines, page 5, lines 17-19: Requiring that the deposit be provided at the same time as the counter signed agreement avoids the situation where a customer signs an agreement and is immediately in breach because they have not provided the deposit required under the agreement.
[12] See pages 2-3 of Supplemental Joint Comments on behalf of the Community Renewable Energy Association, Renewable Energy Coalition, and the Oregon Solar + Storage Industry Association.
[13] IBID at page 4.

Staff's proposed rules reflect the compromise proposal. Staff understands IREC's desire to speed the utility execution of an interconnection agreement, and believes this approach will help. Staff however is not prepared to consider drastic changes in deposit policy with the time available. Staff is also not swayed by arguments that the deposit could be "several hundred thousand or even millions of dollars in some cases."[14] The interconnection applicants may agree to progress payments for the costs of the interconnection facilities. Under such an arrangement the interconnection customer would pay the lesser of $10,000 or 25 percent of the estimated costs.[15] A deposit of $10,000 does not seem unduly burdensome. Likewise, the ITA proposal to give interconnection customers a longer window to accept the interconnection agreement does not seem necessary, as the compromise proposal matches with current requirements.

Staff is happy to continue discussion of this aspect of the proposed rules in the formal rulemaking, but notes its concern about making major changes to deposit policies in isolation from an effort to consider the range of potential process reforms in a future phase of the interconnection investigation.

Length of Generator Interconnection Agreements

The ITA raised the issue of mismatch with the length of a generator interconnection agreement (GIA) and a power purchase agreement (PPA).[16] The worry is that it could be difficult to secure financing if the GIA ends before the PPA will be up for renewal. In response to the concerns raised the JU proposed language to address this issue, allowing GIA terms to match PPAs that are for a specific period of time, the underlined language below is the revised proposal. Staff believes this should alleviate ITA concerns, but is not aware whether the compromise is supported by ITA.

> (3) Before beginning operation of a small generator facility, an interconnection customer or applicant must receive approval of the facility under the small generator interconnection rules and must execute an interconnection agreement with the interconnecting public utility. Applicants or interconnection customers are entitled to a 20-year term for an interconnection agreement, <u>or, if the interconnection customer and the utility have entered a separate Power Purchase Agreement for a specified period of time, to a term that coincides with the length of such Power Purchase Agreement</u>.

[14] IBID at page 4.
[15] See OAR860-0082-0035(5)(a).
[16] IBID at page 15.

Use of Third Parties
On August 1, 2023, REC, OSSIA, and CREA, collectively the Community Solar Interconnection Customers (CSIC) filed comments in the docket seeking to allow third parties to complete interconnection work, along with other steps the Commission should consider. The issues facing CSIC, and their constituents include "significant and ongoing community solar-related interconnection issues on PacifiCorp's system."[17] Staff and other stakeholders have not discussed the issues raised to date in the workshop process. As such Staff cannot make any recommendations on this issue at this point.

CSIC believes the issue should be raised sooner than Group 4, where it is currently slated to be discussed. Staff believes the approach to Phase 1 issues was productive, and also raised other issues that require consideration. It is Staff's intent to caucus with stakeholders in this process prior to the start of Phase 2. This would be similar to the approach used to set the scope for Phase 1, looking to the stakeholders to advise what would be the most important issues to consider in Phase 2, are they the same as those proposed last year, or should the issues be updated.

Conclusion

Staff would like to express appreciation for the collective work of the stakeholders to arrive at consensus on most of the issues addressed in updating the interconnection rules. This has been a collaborative effort, with parties willing to compromise to move forward. The final proposals put forth reflect the parties' joint efforts and will help to ensure modernization of the interconnection screening practices, incorporates current IEEE standards as well as allowing for advanced inverters, storage, islanding, and other modern configurations.

While the majority of the proposal has general consensus from stakeholders, there are still some issues on which there is no consensus, or the Commission has a key decision before them in formal rulemaking.

- Utility handbook process for incorporating UM 2111 changes, and future updates
- Legacy data update requirements
- Minor equipment modifications
- Interconnection agreement timeline
- Required deposits, and timing
- Requirements on circuits using high-speed reclosing
- NEM eligibility for Tier 1

[17] See page one at the following link: https://edocs.puc.state.or.us/efdocs/HAC/um2111hac9226.pdf.

- Timing of IEEE 1547-2018 compliance requirements

PROPOSED COMMISSION MOTION:

Approve Staff's request to issue a notice of proposed rulemaking to adopt changes to Division 82 Small Generator Interconnection Rules, and Division 39 – Net Metering Rules provided in Attachment 1.

UM 2111

Division 39

NET METERING RULES

860-039-0005 Scope and Applicability of Net Metering Facility Rules
860-039-0010 Net Metering Kilowatt Limit
860-039-0015 Installation, Operation, Maintenance, and Testing of Net Metering Facilities
860-039-0020 Net Metering Facility Requirements
860-039-0025 Application for Net Metering Interconnection
860-039-0030 Level 1 Net Metering Interconnection Review
860-039-0035 Level 2 Net Metering Interconnection Review
860-039-0040 Level 3 Net Metering Interconnection Review
860-039-0045 Net Metering Interconnection Fees and Costs
860-039-0050 Requirements After Approval of a Net Metering Interconnection
860-039-0055 Net Metering Billing
860-039-0060 Excess Energy from Net Metering Facilities
860-039-0065 Aggregation of Meters for Net Metering
860-039-0070 Public Utility Maps, Records and Reports
860-039-0075 Public Utility Not to Limit Net Metering Systems
860-039-0080 Net Metering Insurance

860-039-0005
Scope and Applicability of Net Metering Facility Rules
~~(1) OAR 860-039-0010 through 860-039-0080 (the "net met(1)~~(1) OAR 860-039-0010 through 860-039-0080 (the "net metering rules") establish rules governing net metering facilities interconnecting to a public utility as required under ORS 757.300. Net metering is available to a customer-generator only as provided in these rules. These rules do not apply to a public utility that meets the requirements of ORS 757.300(9).
(2) Upon request or its own motion, the Commission may waive any of the division 039 rule for good cause shown. A request for waiver must be made in writing, unless otherwise allowed by the Commission.
(a) A public utility and net metering applicant may mutually agree to reasonable extensions to the required times for notices and submissions of information set forth in these rules for the purpose of allowing efficient and complete review of a net metering application.
(b) If a public utility unilaterally seeks waiver of the timelines set forth in these rules, the Commission must consider the number of pending applications for interconnection review and the type of applications, including review level and facility size.
(3) As used in OAR 860-039-0010 through 860-039-0080:
(a) "ANSI C12.1 standards" means the standards prescribed by the ~~2001~~2022 edition of the American National Standards Institute, Committee C12.1 (ANSI C12.1), entitled "American National Standard for Electric Meters - Code for Electricity Metering," approved by the C12.1 Accredited Standard Committee on ~~July~~June 9, ~~2001~~2022.
(b) "Applicant" means a person who has filed an application to interconnect a net metering facility to an electric distribution system.
~~(c) "Area network" means a type of electric distribution system served by multiple transformers interconnected in an electrical network circuit in order to provide high reliability of service. This term has the same meaning as the term "secondary grid network" as defined in IEEE standard 1547 Section 4.1.4 (published July 2003).~~
~~(d~~(c) “Contiguous” means a single area of land that is considered to be contiguous even if there is an intervening public or railroad right of way, provided that rights of way land on which municipal infrastructure facilities exist (such as street lighting, sewerage transmission, and roadway controls) are not considered contiguous.
(~~e~~d) "Customer-generator" means the person who is the user of a net metering facility and who has applied for and been accepted to receive electricity service at a premises from the serving public utility.
~~(f) "Electric~~ (e) "Distribution system" means that portion of an electric system which delivers electricity from transformation points on the transmission system to points of connection at a customer's premises.
(~~g~~f) "Equipment package" means a group of components connecting an electric generator with an electric distribution system, and includes all interface equipment including switchgear, inverters, or other interface devices. An equipment package may include an integrated generator or electric production source.
(~~h~~g) "Fault current" means electrical current that flows through a circuit and is produced by an electrical fault, such as to ground, double-phase to ground, three-phase to ground, phase-to-phase, and three-phase.
(~~i) "Generation~~h) "Generating capacity" means the nameplate capacity of the power generating device(s) in alternating current (AC). Generation capacity does not include the effects caused by inefficiencies of power conversion or plant parasitic loads.
(~~j~~i) "Good utility practice" means a practice, method, policy, or action engaged in or accepted by a significant portion of the electric industry in a region, which a reasonable utility official would expect, in

light of the facts reasonably discernable at the time, to accomplish the desired result reliably, safely and expeditiously.

(~~k) "~~j) "IEEE ~~standards"~~1547" means the standards published in the ~~2003~~2018 edition of the Institute of Electrical and Electronics Engineers (IEEE) Standard 1547, ~~entitled "Interconnecting~~ titled "IEEE Standard for Interconnection and Interoperability of Distributed Energy Resources with Associated Electric Power Systems~~,"~~ Interfaces" and approved by the IEEE SA Standards Board on ~~June 12, 2003, and~~February 15, 2018.

(k) "IEEE 1547.1" means the standards published in the ~~2005~~2020 edition of the IEEE Standard 1547.1, ~~entitled "~~titled "IEEE Standard Conformance Test Procedures for Equipment Interconnecting Distributed Resources with Electric Power Systems~~,"~~ and Associated Interfaces" and approved by the IEEE SA Standards Board on ~~June 9, 2005~~March 5, 2020.

(l) "Impact study" means an engineering analysis of the probable impact of a net metering facility on the safety and reliability of the public utility's electric distribution system.

(m) "Interconnection agreement" means an agreement between a customer-generator and a public utility, which governs the connection of the net metering facility to the electric distribution system, as well as the ongoing operation of the net metering facility after it is connected to the system. An interconnection agreement will follow the standard form agreement developed by the public utility and filed with the Commission.

(n) "Interconnection facilities study" means a study conducted by a utility for the customer-generator that determines the additional or upgraded distribution system facilities, the cost of those facilities, and the time schedule required to interconnect the net metering facility to the utility's distribution system.

~~(o~~(o) "Nationally recognized testing laboratory" or "NRTL" means a qualified private organization that performs independent safety testing and product certification. Each NRTL must meet the requirements set forth by the United States Occupational Safety and Health Administration.

(p) "Net metering facility" means a net metering facility as defined in ORS 757.300(1)(d).

(~~p~~q) "Non-residential customer" means a retail electricity consumer that is not a residential customer, except "non-residential customer" does not include a customer who would be a residential customer but for the residency provisions of subsection (s) of this rule.

(~~q~~r) "Point of common coupling" means the point beyond the customer-generator's meter where the customer-generator facility connects with the electric distribution system.

(~~r~~s) "Public utility" has the meaning set forth in ORS 757.005 and is limited to a public utility that provides electric service.

~~(s~~(t) "Reference point of applicability" (RPA) means a location proximate to the generation where the interconnection and interoperability performance requirements, as specified by IEEE 1547, apply.

(u) "Residential customer" means a retail electricity consumer that resides at a dwelling primarily used for residential purposes. "Residential customer" does not include retail electricity customers in a dwelling typically used for residency periods of less than 30 days, including hotels, motels, camps, lodges, and clubs. "Dwelling" includes, but is not limited to, single-family dwellings, separately-metered apartments, adult foster homes, manufactured dwellings, and floating homes.

(~~t~~v) "Spot network" means a type of electric distribution system that uses two or more inter-tied transformers protected by network protectors to supply an electrical network circuit. A spot network may be used to supply power to a single customer or a small group of customers.

(~~u~~w) "Written notice" means a required notice sent by the utility via electronic mail if the customer-generator has provided ~~an~~a functioning electronic mail address. If the customer-generator has not provided ~~an~~a functioning electronic mail address, or has requested in writing to be notified by United States mail~~, or if the utility elects to provide notice by United States mail,~~ then written notices from the utility ~~shall~~must be sent via First Class United States mail~~.~~ to the notification address provided by the customer-generator. The utility ~~shall be~~is deemed to have fulfilled its duty to respond under these rules on the day it sends the customer-generator notice via electronic mail or deposits such notice in First Class mail. The customer-generator ~~shall be~~is responsible for informing the utility of any changes to its notification address.

(x) "Export capacity" means the amount of power that can be transferred from the small generator facility to the distribution system. Export capacity is either the nameplate rating, or a lower amount if limited using an acceptable means identified in OAR 860-082-0033.

Statutory/Other Authority: ORS 183, 756 & 757
Statutes/Other Implemented: ORS 756.040 & 757.300
History:
PUC 5-2018, minor correction filed 09/13/2018, effective 09/13/2018
PUC 1-2012, f. & cert. ef. 2-22-12
PUC 6-2011, f. & cert. ef. 9-14-11
PUC 5-2011, f. & cert. ef. 9-7-11
PUC 8-2007, f. & cert. ef. 7-27-07

860-039-0010

Net Metering Kilowatt Limit

(1) For residential customer-generators of a public utility, these rules apply to net metering facilities that have a generating capacity of 25 kilowatts or less.

(2) For non-residential customer-generators of a public utility, these rules apply to net metering facilities that have a generating capacity of two megawatts or less.

(3) Nothing in these rules is intended to limit the number of net metering facilities per customer-generator so long as the net metering facilities in aggregate on the customer-generator's contiguous property do not exceed the applicable kilowatt or megawatt limit.

Statutory/Other Authority: ORS 183, 756 & 757
Statutes/Other Implemented: ORS 756.040 & 757.300
History:
PUC 5-2011, f. & cert. ef. 9-7-11
PUC 8-2007, f. & cert. ef. 7-27-07

860-039-0015

Installation, Operation, Maintenance, and Testing of Net Metering Facilities

(1) Except for customer-generators established as net metering customers prior to the effective date of this rule, a customer-generator of a public utility must install, operate and maintain a net metering facility in compliance with ~~the~~ IEEE ~~standards~~1547 and IEEE 1547.1.

(2) Except for customer-generators established as net metering customers prior to the effective date of this rule, a customer-generator of a public utility must install and maintain a manual disconnect switch that will disconnect the net metering facility from the public utility's system. The disconnect switch must be a lockable, load-break switch that plainly indicates whether it is in the open or closed position. The disconnect switch must be readily accessible to the public utility at all times and located within 10 feet of the public utility's meter.

(a) For customer services of 600 volts or less, a public utility may not require a disconnect switch for a net metering facility that is inverter-based with a maximum rating as shown below.

(A) Service type: 240 Volts, Single-phase, 3 Wire — Maximum size 7.2 kW AC.
(B) Service type: 120/208 Volts, 3-Phase, 4 Wire — Maximum size 10.5 kW AC.
(C) Service type: 120/240 Volts, 3-Phase 4 Wire — Maximum size 12.5 kW AC.
(D) Service type: 277/480, 3-Phase, 4 Wire — Maximum size 25.0 kW AC.
(E) For other service types, the net metering facility must not impact the customer-generator's service conductors by more than 30 amperes.

(b) The disconnect switch may be located more than 10 feet from the public utility meter if permanent instructions are posted at the meter indicating the precise location of the disconnect switch. The public utility must approve the location of the disconnect switch prior to the installation of the net metering facility.
(3) The customer-generator's electric service may be disconnected by the public utility entirely if the net metering facility must be physically disconnected for any reason.
[ED. NOTE: Tables referenced are available from the agency.]
Statutory/Other Authority: ORS 183, 756 & 757
Statutes/Other Implemented: ORS 756.040 & 757.300
History:
PUC 4-2008, f. & cert. ef. 10-9-08
PUC 8-2007, f. & cert. ef. 7-27-07
860-039-0020
Net Metering Facility Requirements
(1) To qualify for the ~~Level~~Tier 1 and the ~~Level~~Tier 2 interconnection review procedures set forth below, a net metering facility must be certified as complying with the following standards, as applicable:
(a) IEEE 1547 standards; and
(b) UL 1741 Inverters, Converters, and Controllers for Use in Independent Power Systems (January 2001).
(2) An equipment package will be considered certified for interconnected operation if it has been submitted by a manufacturer to a ~~nationally recognized testing and certification laboratory,~~NRTL and has been tested and listed by the laboratory for continuous interactive operation with an electric distribution system in compliance with the applicable codes and standards listed in section (1) of this rule.
(3) If the equipment package has been tested and listed in accordance with this section as an integrated package, which includes a generator or other electric source, the equipment package will be deemed certified, and the public utility will not require further design review, testing or additional equipment.
(4) If the equipment package includes only the interface components (switchgear, inverters, or other interface devices), an interconnection applicant must show that the generator or other electric source being utilized with the equipment package is compatible with the equipment package and consistent with the testing and listing specified for the package. If the generator or electric source being utilized with the equipment package is consistent with the testing and listing performed by the ~~nationally recognized testing and certification laboratory~~NRTL, the equipment package will be deemed certified, and the public utility will not require further design review, testing or additional equipment.
(5) A net metering facility must be equipped with metering equipment that can measure the flow of electricity in both directions, comply with ANSI C12.1 standards and OAR 860-023-0015. The public utility will install the required metering equipment at the utility's expense.
Statutory/Other Authority: ORS 183, 756 & 757
Statutes/Other Implemented: ORS 756.040 & 757.300
History:
PUC 8-2007, f. & cert. ef. 7-27-07
860-039-0025
Application for Net Metering Interconnection
(1) An application for interconnection review will be submitted on a standard form, available from the public utility and posted on the public utility's website. The application form will require the following types of information:
(a) The name of the applicant and the public utility involved;
(b) The type and specifications of the net metering facility;

(c) The ~~level~~tier of interconnection review sought; e.g., ~~Level~~Tier 1, ~~Level~~Tier 2 or ~~Level 3~~Tier 4;
(d) The contractor who will install the net metering facility;
(e) Equipment certifications;
(f) The anticipated date the net metering facility will be operational; and
(g) Other information that the utility deems is necessary to determine compliance with these net metering rules.
(2) Within three business days after receiving an application for ~~Level~~Tier 1 or ~~Level~~Tier 2 interconnection review, the public utility will provide written ~~or electronic mail~~ notice to the applicant that it received the application and whether the application is complete. An application for interconnection is deemed complete when the public utility receives the information required by this rule. If the application is incomplete, the written notice will include a list of all of the information needed to complete the application. The applicant must provide the listed information within 10 business days of receipt of the list or the application is deemed withdrawn.
(3) An applicant will retain its original queue position for an interconnection request if the applicant resubmits its application at a higher ~~level~~tier of review within 30 business days of a utility's denial of the application at a lower ~~level~~tier of review.
(4) Each public utility will designate an employee or office from which an applicant can obtain basic application forms and information through an informal process. On request, the public utility must provide all relevant forms, documents, and technical requirements for submittal of a complete application for interconnection review under these net metering rules, as well as specific information necessary to contact the public utility representatives assigned to review the application.
(5) On request, the public utility must meet with an applicant who qualifies for ~~Level~~Tier 2 or ~~Level 3~~Tier 4 interconnection review to assist them in preparing the application.
(6) A public utility will not be responsible for the cost of determining the rating of equipment owned by a customer-generator or of equipment owned by other local customers.
(7) At the time of application, an applicant may choose to simultaneously submit an executed public utility's standard form interconnection agreement.
Statutory/Other Authority: ORS 183, 756 & 757
Statutes/Other Implemented: ORS 756.040 & 757.300
History:
PUC 8-2007, f. & cert. ef. 7-27-07
860-039-0030
~~Level~~Tier 1 Net Metering Interconnection Review
(1) A net metering facility meeting the following criteria is eligible for ~~Level~~Tier 1 interconnection review:
(a) The facility is inverter-based; and
(b) The facility has a capacity of ~~25~~ 50 kilowatts or less and an export capacity of 25 kw or less.
(2) The public utility must approve a complete application for interconnection under ~~the Level~~Tier 1 net metering interconnection review ~~procedure~~ if~~:~~ the net metering facility meets the eligibility requirements in subsection (1) of this rule and the facility meets the Tier 1 interconnection screening criteria set forth at OAR 860-082-0045(2)(a)-(f).
~~(a) The aggregate generation capacity on the distribution circuit to which the net metering facility will interconnect, including the capacity of the net metering facility, will not contribute more than 10 percent to the distribution circuit's maximum fault current at the point on the high voltage (primary) level that is nearest the proposed point of common coupling.~~
~~(b) A net metering facility's point of common coupling will not be on a transmission line, a spot network, or an area network.~~

~~(c) If a net metering facility is to be connected to a radial distribution circuit, the aggregate generation capacity connected to the circuit, including that of the net metering facility, will not exceed 10 percent (15 percent for solar electric generation) of the circuit's total annual peak load, as most recently measured at the substation.~~
~~(d) If a net metering facility is to be connected to a single-phase shared secondary, the aggregate generation capacity connected to the shared secondary, including the net metering facility, will not exceed 20 kilovolt-amps.~~
~~(e) If a single-phase net metering facility is to be connected to a transformer center tap neutral of a 240 volt service, the addition of the net metering facility will not create a current imbalance between the two sides of the 240 volt service of more than 20 percent of nameplate rating of the service transformer.~~
(3) Within 10 business days after the public utility notifies a ~~Level~~Tier 1 applicant that the application is complete, the public utility must notify the applicant ~~that:~~whether the facility meets the Tier 1 screening criteria.
~~(a) The net metering facility meets all applicable criteria and the interconnection will be approved upon installation of any required meter upgrade, completion of any required inspection of the facility, and execution of an interconnection agreement; or~~
~~(b) The net metering facility has failed to meet one or more of the applicable criteria and the interconnection application is denied.~~
(4) If a public utility does not notify a ~~Level~~Tier 1 interconnection applicant in writing ~~or by electronic mail~~ whether the interconnection ~~is approved or denied~~application passes the Tier 1 screening criteria within 20 business days after the receipt of ~~an~~a completed application, the interconnection application will be deemed approved. ~~Interconnections~~Interconnection applications approved under this section remain subject to ~~section~~sections 7 and 8 below.
~~(5~~(5) Approval despite screen failure.
(a) Despite the failure of one or more screening criteria, the public utility, at its sole option, may approve the interconnection provided such approval is consistent with safety and reliability.
(b) If the public utility determines that the customer-generator can be interconnected safely if minor modifications to the transmission or distribution system were made (for example, changing meters, fuses, or relay settings), then the public utility must offer the applicant a good-faith, non-binding estimate of the costs of such proposed minor modifications. Modifications are not considered minor under this subsection if the total cost of the modifications exceeds $10,000. If the applicant authorizes the public utility to proceed with the minor modifications and agrees to pay the entire cost of the modifications, then the public utility must approve the application.
(6) Process after screen failure. If the public utility cannot determine that the customer-generator may nevertheless be interconnected consistent with safety, reliability, and power quality standards, at the time the public utility notifies the applicant of the Tier 1 review results the public utility shall provide the applicant with
(a) The screen results including specific information on the reason(s) for failure in writing using a standard format approved by the Commission,
(b) An executable Supplemental Review Agreement
(c) In addition, the public utility shall allow the applicant to select one of the following, at the applicant's option:
(A) Request an applicant options meeting;
(B) Undergo supplemental review in accordance with OAR 860-082-0063;
(C) Continue evaluating the application under Tier 4.
The applicant must notify the public utility of its selection within 10 business days or the application will be deemed withdrawn.

(7) Applicant options meeting. If the applicant requests an applicant options meeting, the public utility shall offer to convene a meeting at a mutually agreeable time within 15 business days of the applicant's request. At the applicant options meeting the public utility shall provide the applicant the opportunity to review the screen analysis and related results, to designate a different RPA, to review possible customers-generator propose modifications, and to discuss what further steps are needed to permit the net metering facility to connect safely and reliably.
(8) Within three business days after sending the notice to an applicant that the proposed interconnection application meets the ~~Level~~Tier 1 interconnection requirements, a public utility must notify the applicant whether:
(a) An inspection of the net metering facility for compliance with the net metering rules is required prior to the operation of the facility; and
(b) An interconnection agreement is required for the net metering facilities. If required, the public utility must also execute and send to the applicant a ~~Level~~Tier 1 interconnection agreement, unless the applicant has already submitted such an agreement with its application for interconnection.
(~~6~~9) On receipt of any required executed interconnection agreement from the applicant and satisfactory completion of any required inspection, the public utility will approve the interconnection, conditioned on compliance with all applicable building codes.
(~~7~~10) A customer-generator will notify the public utility of the anticipated start date for operation of the net metering facility at least five business days prior to starting operation, either through the submittal of the interconnection agreement or in a separate notice. If the public utility requires an inspection of the net metering facility, the applicant will not begin operating the facility until satisfactory completion of the inspection.
~~(8) If an application for Level 1 interconnection review is denied because it does not meet one or more of the applicable requirements in this section, an applicant may resubmit the application under the Level 2 or Level 3 interconnection review procedure, as appropriate.~~
Statutory/Other Authority: ORS 183, 756 & 757
Statutes/Other Implemented: ORS 756.040 & 757.300
History:
PUC 8-2007, f. & cert. ef. 7-27-07
860-039-0035
~~Level~~Tier 2 Net Metering Interconnection Review
(1) A public utility must apply the following ~~Level~~Tier 2 interconnection review procedure for an application to interconnect a net metering facility that meets the following criteria:
(a) The facility has a capacity of two megawatts or less; and
(b) The facility does not qualify for ~~or failed to meet applicable Level~~Tier 1 interconnection review procedures.
(2) The public utility must approve an application for interconnection under the ~~Level~~Tier 2 interconnection review ~~procedure~~ if~~:~~
~~(a) The aggregate generation capacity on the distribution circuit to which~~ the net metering facility ~~will interconnect, including~~ meets the eligibility requirements in subsection (1) of this rule and the ~~capacity of the net metering~~ facility~~, will not cause any distribution protective equipment (including, but not limited to, substation breakers, fuse cutouts, and line reclosers), or customer equipment on the electric distribution system, to exceed 90 percent of the short circuit interrupting capability of the equipment. In addition, a net metering facility will not be connected to a circuit that already exceeds 90 percent of the short circuit interrupting capability, prior to~~ meets the Tier 2 interconnection ~~of the facility.~~
~~(b) If there are posted transient stability limits to generating units located in the general electrical vicinity of the proposed point of common coupling, including, but not limited to within three or four transmission voltage level busses, the aggregate generation capacity, including the net metering facility,~~

~~connected to the distribution low voltage side of the substation transformer feeding the distribution circuit containing the point of common coupling will not exceed 10 megawatts.~~

~~(c) The aggregate generation capacity connected to the distribution circuit, including the net metering facility, will not contribute more than 10 percent to the distribution circuit's maximum fault current~~screening criteria set forth at ~~the point on the high voltage (primary) level nearest the proposed point of common coupling.~~OAR 860-082-0050(2)(a)–(l).

~~(d) If a net metering facility is to be connected to a radial distribution circuit, the aggregate generation capacity connected to the electric distribution system by non-public utility sources, including the net metering facility, will not exceed 10 percent (or 15 percent for solar electric generation) of the total circuit annual peak load. For the purposes of this subsection, annual peak load will be based on measurements taken over the 12 months previous to the submittal of the application, measured for the circuit at the substation nearest to the net metering facility.~~

~~(e) If a net metering facility is to be connected to three-phase, three wire primary public utility distribution lines, a three-phase or single-phase generator will be connected phase-to-phase.~~

~~(f) If a net metering facility is to be connected to three-phase, four wire primary public utility distribution lines, a three-phase or single-phase generator will be connected line-to-neutral and will be effectively grounded.~~

~~(g) If a net metering facility is to be connected to a single-phase shared secondary, the aggregate generation capacity on the shared secondary, including the net metering facility, will not exceed 20 kilovolt-amps.~~

~~(h) If a net metering facility is single-phase and is to be connected to a transformer center tap neutral of a 240 volt service, the addition of the net metering facility will not create a current imbalance between the two sides of the 240 volt service that is greater than 20 percent of the nameplate rating of the service transformer.~~

~~(i) A net metering facility's point of common coupling will not be on a transmission line.~~

~~(j) If a net metering facility's proposed point of common coupling is on a spot or area network, the interconnection will meet the following additional requirements:~~

~~(A) For a net metering facility that will be connected to a spot network circuit, the aggregate generation capacity connected to that spot network from the net metering facilities, and any generating facilities, will not exceed five percent of the spot network's maximum load;~~

~~(B) For a net metering facility that utilizes inverter-based protective functions, which will be connected to an area network, the net metering facility, combined with any other generating facilities on the load side of network protective devices, will not exceed 10 percent of the minimum annual load on the network, or 500 kilowatts, whichever is less. For the purposes of this paragraph, the percent of minimum load for solar electric generation net metering facility will be calculated based on the minimum load occurring during an off-peak daylight period; and~~

~~(C) For a net metering facility that will be connected to a spot or an area network that does not utilize inverter-based protective functions, or for an inverter-based net metering facility that does not meet the requirements of paragraphs (A) or (B) of this subsection, the net metering facility will utilize low forward power relays or other protection devices that ensure no export of power from the net metering facility, including inadvertent export (under fault conditions) that could adversely affect protective devices on the network.~~

~~(3) Within 15 business days after notifying a Level 2 applicant that the application is complete,~~(3) The public utility must perform an initial review of the proposed interconnection to determine whether the interconnection meets the applicable criteria. During this initial review, the public utility may, at its own expense, conduct any studies or tests it deems necessary to evaluate the proposed interconnection~~ and provide notice to the applicant~~. Within 15 business days after notifying a Tier 2 applicant that the

application is complete, the public utility must provide the applicant written notice of one of the following determinations:
(a) The net metering facility meets the applicable requirements and that interconnection will be approved following any required inspection of the facility and fully executed interconnection agreement. Within three business days after this notice, the public utility will provide the applicant with an executable interconnection agreement;
(b) The net metering facility failed to meet one or more of the applicable requirements, but the public utility determined that the net metering facility may nevertheless be interconnected consistent with safety, reliability, and power quality. In this case, the public utility will notify the applicant that the interconnection will be approved following any required inspection of the facility and fully executed interconnection agreement. Within five business days after this notice, the public utility will provide the applicant with an executable interconnection agreement;
~~(c) The net metering facility failed to meet one or more of the applicable requirements, but additional review may enable the public utility to determine that the net metering facility may be interconnected consistent with safety, reliability, and power quality. In such a case, the public utility will offer to perform additional review to determine whether minor modifications to the electric distribution system would enable the interconnection to be made consistent with safety, reliability and power quality. The public utility will provide to the applicant a nonbinding, good faith estimate of the costs of such additional review, or such minor modifications, or both. The public utility will undertake the additional review or modifications only after the applicant consents to pay for the review or modifications, or both; or~~
~~(d~~or
(c) The net metering facility failed to meet one or more of the applicable requirements, and that additional review would not enable the public utility to determine that the net metering facility could be interconnected consistent with safety, reliability, and power quality. In such a case, the public utility will notify the applicant that the interconnection application ~~has been denied, and will provide an explanation of~~failed the ~~reason(s) for the denial~~screening criteria, including a list of additional information, or modifications to the net metering facility, or both, which would be required in order to obtain an approval under ~~Level~~Tier 2 interconnection procedures.
~~(4~~(4) Process after screen failure. If the public utility cannot determine that the customer-generator may nevertheless be interconnected consistent with safety and reliability standards, at the time the public utility notifies the applicant of the Tier 2 review results the public utility shall provide the applicant with:
(a)The screen results including specific information on the reason(s) for failure in writing using a standard format approved by the Commission,
(b) An executable Supplemental Review Agreement
(c) In addition, the public utility shall allow the applicant to select one of the following, at the applicant's option:
(A) Request an applicant options meeting;
(B) Undergo supplemental review in accordance with OAR 860-082-0063;
(C) Continue evaluating the application under Tier 4.
The applicant must notify the public utility of its selection within 10 business days or the application will be deemed withdrawn.
(5) Applicant options meeting. If the applicant requests an applicant options meeting, the public utility shall offer to convene a meeting at a mutually agreeable time within 15 business days of the applicant's request. At the applicant options meeting the public utility shall provide the applicant the opportunity to review the screen analysis and related results, to designate a different RPA, to review possible customers-generator propose modifications, and to discuss what further steps are needed to permit the net metering facility to connect safely and reliably.

6) An applicant that receives an interconnection agreement under subsection (3)(a) or (3)(b) of this rule must:
(a) Execute the agreement and return it to the public utility at least 10 business days prior to starting operation of the net metering facility (unless the public utility does not so require); and
(b) Indicate to the public utility the anticipated start date for operation of the net metering facility.
(~~5~~7) The public utility may require a public utility inspection of a net metering facility for compliance with these net metering rules prior to operation, and may require and arrange for witness of commissioning tests as set forth in IEEE ~~standards.~~1547 and IEEE 1547.1. The public utility must schedule any inspections or tests under this section promptly and within a reasonable time after submittal of the application. The applicant may not begin operating the net metering facility until after the inspection and testing is completed.
(~~6~~8) Approval of interconnected operation of any ~~Level~~Tier 2 net metering facility must be conditioned on all of the following occurring:
(a) Approval of the interconnection by the electrical code official with jurisdiction over the interconnection;
(b) Successful completion of any public utility inspection or witnessing, or both, of commissioning tests requested by the public utility; and
(c) Passing of the planned start date provided by the applicant.
~~(7) If an application for Level 2 interconnection review is denied because it does not meet one or more of the requirements in this section, the applicant may resubmit the application under the Level 3 interconnection review procedure.~~
Statutory/Other Authority: ORS 183, 756 & 757
Statutes/Other Implemented: ORS 756.040 & 757.300
History:
PUC 8-2007, f. & cert. ef. 7-27-07
860-039-0040
~~Level 3~~Tier 4 Net Metering Interconnection Review
(1) The public utility must apply the ~~Level 3~~Tier 4 review procedure for an application to interconnect a net metering facility that meets the following criteria:
(a) The facility has a capacity of two megawatts or less; and
(b) The facility does not qualify for or failed to ~~meet Level~~receive approval in Tier 1 or Tier 2 interconnection review procedures.
(2) Following receipt of a ~~Level 3~~Tier 4 application and within three business days of a request from the applicant, the public utility must provide pertinent information to the applicant, such as the available fault current at the proposed interconnection location, the existing peak loading on the lines in the general vicinity of the net metering facility, and the configuration of the distribution lines at the proposed point of common coupling.
(3) Within seven business days after receiving a complete application for ~~Level 3~~Tier 4 interconnection review, the public utility must provide an impact study agreement to the applicant, which will include a non-binding, good faith cost estimate for an impact study to be performed by the public utility. The impact study will be conducted in accordance with good utility practice and must:
(a) Detail the impacts to the electric distribution system that would result if the net metering facility were interconnected without modifications to either the net metering facility or to the electric distribution system;
(b) Identify any modifications to the public utility's electric distribution system that would be necessary to accommodate the proposed interconnection; and
(c) Focus on power flows and utility protective devices, including control requirements; and
(d) Include the following elements, as applicable:

(A) A load flow study;
(B) A short-circuit study;
(C) A circuit protection and coordination study;
(D) The impact on the operation of the electric distribution system;
(E) A stability study, along with the conditions that would justify including this element in the impact study;
(F) A voltage collapse study, along with the conditions that would justify including this element in the impact study; and
(G) Additional elements, if approved in writing by Commission staff prior to the impact study.
(4) After the applicant executes the impact study agreement and pays the public utility the amount of the good faith estimate, the public utility will complete the impact study and will notify the applicant within 30 calendar days of one of the following results:
(a) Only minor modifications to the public utility's electric distribution system are necessary to accommodate interconnection. In such a case, the public utility will send the applicant an interconnection agreement that details the scope of the necessary modifications and a non-binding, good faith estimate of their cost; or
(b) Substantial modifications to the public utility's electric distribution system are necessary to accommodate the proposed interconnection. In such a case, the public utility must provide a non-binding, good faith estimate of the cost of the modifications, which must be accurate to within plus or minus 25 percent. In addition, the public utility must offer to conduct, at the applicant's expense, an interconnection facilities study that must identify the types and cost of equipment needed to safely interconnect the applicant's net metering facility.
(5) If the proposed interconnection may affect electric transmission or delivery systems other than those controlled by the public utility, operators of those other systems may require additional studies to determine the potential impact of the interconnection on those systems. If such additional studies are required, the public utility will coordinate the studies but will not be responsible for their timing. The applicant will be responsible for the costs of any such additional studies required by another affected system. Such studies will be conducted only after the applicant has provided written authorization.
(6) If an applicant requests a facilities study under subsection (4)(b), the public utility must provide an interconnection facilities study agreement. The interconnection facilities study agreement must describe the work to be undertaken in the interconnection facilities study and must include a non-binding, good faith estimate of the cost to the applicant for completion of the study. Upon the execution by the applicant of the interconnection facilities study agreement, the public utility will conduct an interconnection facilities study to identify the facilities necessary to safely interconnect the net metering facility with the public utility's electric distribution system, and to propose a non-binding, good faith estimate of the cost of those facilities and the time required to build and install those facilities.
(7) Upon completion of an interconnection facilities study, the public utility must provide the applicant with the results of the study and an executable interconnection agreement. The agreement must list the conditions and facilities necessary for the net metering facility to safely interconnect with the public utility's electric distribution system, and must include a non-binding, good faith estimate of the cost of those facilities and the estimated time required to build and install those facilities.
(8) If the applicant wishes to interconnect, it must execute the interconnection agreement and return it to the public utility at least 10 business days prior to starting operation of the net metering facility (unless the public utility does not so require), pay a deposit of not more than 50 percent of the estimated cost of the facilities identified in the interconnection facilities study, complete installation of the net metering facility, and agree to pay the public utility the actual installed cost of the facilities needed to interconnect as identified in the interconnection facilities study.

(9) Within 15 business days after notice from the applicant that the net metering facility has been installed, the public utility will inspect the net metering facility and will arrange to witness any commissioning tests required under IEEE standards. The public utility and the applicant will select a date by mutual agreement for the public utility to witness commissioning tests.
(10) If the net metering facility satisfactorily passes required commissioning tests, if any, the public utility must notify the applicant in writing, within three business days after the tests, of one of the following:
(a) The interconnection is approved and the net metering facility may begin operation; or
(b) The interconnection facilities study identified necessary construction that has not been completed, the date upon which the construction will be completed and the date when the net metering facility may begin operation.
(11) If the commissioning tests are not satisfactory, the applicant will repair or replace the unsatisfactory equipment and reschedule a commissioning test.
Statutory/Other Authority: ORS 183, 756 & 757
Statutes/Other Implemented: ORS 756.040 & 757.300
History:
PUC 8-2007, f. & cert. ef. 7-27-07
860-039-0045
Net Metering Interconnection Fees and Costs
(1) A public utility may not charge an application, or other fee, to an applicant that requests ~~Level~~Tier 1 interconnection review. However, if an application for ~~Level~~Tier 1 interconnection review is denied ~~because it does not meet the requirements for Level 1 interconnection review~~, and the applicant resubmits the application under another review procedure, the public utility may impose a fee for the resubmitted application, consistent with this section.
(2) For a ~~Level~~Tier 2 interconnection review, the public utility may charge fees of up to $50.00 plus $1.00 per kilowatt of the net metering facility's capacity, plus the reasonable cost of any required minor modifications to the electric distribution system or additional review. Costs for such minor modifications or additional review will be based on the public utility’s non-binding, good faith estimates and the ultimate actual installed costs. Costs for engineering work done as part of any additional review will not exceed $100.00 per hour. A public utility may adjust the $100.00 hourly rate once in January of each year to account for inflation and deflation as measured by the Consumer Price Index.
(3) For a ~~Level 3~~Tier 4 interconnection review, the public utility may charge fees of up to $100.00 plus $2.00 per kilowatt of the net metering facility's capacity, as well as charges for actual time spent on any required impact or facilities studies. Costs for engineering work done as part of an impact study or interconnection facilities study will not exceed $100.00 per hour. A public utility may adjust the $100.00 hourly rate once in January of each year to account for inflation and deflation as measured by the Consumer Price Index. If the public utility must install facilities in order to accommodate the interconnection of the net metering facility, the cost of such facilities will be the responsibility of the applicant.
Statutory/Other Authority: ORS 183, 756 & 757
Statutes/Other Implemented: ORS 756.040 & 757.300
History:
PUC 8-2007, f. & cert. ef. 7-27-07
860-039-0050
Requirements After Approval of a Net Metering Interconnection
(1) A public utility may not require an applicant whose facility meets the criteria for interconnection approval under the ~~Level~~Tier 1 or ~~Level~~Tier 2 interconnection review procedure to perform or pay for additional tests, except if agreed to by the applicant.

(2) A public utility may not charge any fee or other charge for connecting to the public utility's distribution system or for operation of a net metering facility for the purposes of net metering, except for the fees provided for under these net metering rules.
(3) Once a net metering interconnection has been approved under these net metering rules, the public utility may not require a customer-generator to test or perform maintenance on its facility except for the following:
(a) An annual test in which the net metering facility is disconnected from the public utility's equipment to ensure that the inverter stops delivering power to the grid;
(b) Any manufacturer-recommended testing or maintenance;
(c) Any post-installation testing necessary to ensure compliance with IEEE ~~standards~~1547 or to ensure safety; and
(d) The customer-generator replaces a major equipment component that is different from the originally installed model.
(4) When an approved net metering facility undergoes maintenance or testing in accordance with the requirements of these net metering rules, the customer-generator must retain written records for seven years documenting the maintenance and the results of testing.
(5) A public utility has the right to inspect a customer-generator's facility after interconnection approval is granted, at reasonable hours and with reasonable prior notice to the customer-generator. If the public utility discovers that the net metering facility is not in compliance with the requirements of these net metering rules, the public utility may require the customer-generator to disconnect the net metering facility until compliance is achieved.
Statutory/Other Authority: ORS 183, 756 & 757
Statutes/Other Implemented: ORS 756.040 & 757.300
History:
PUC 8-2007, f. & cert. ef. 7-27-07
860-039-0055
Net Metering Billing
(1) Each monthly billing period, the public utility will charge the customer-generator the minimum monthly charge and all applicable charges for the net electricity that the public utility supplied. Subject to sections (2) and (3) of this rule, if in a monthly billing period a customer-generator supplies to the public utility more electricity than the public utility supplies the customer-generator, the public utility will apply the excess kilowatt-hours as a cumulative credit to the customer-generator’s next monthly bill. The credit for the excess kilowatt-hours will be applied at the full retail rate for each rate component on the bill that uses kilowatt-hours as the billing determinant.
(2) Unless the public utility and the customer-generator otherwise agree, the annual billing cycle will end at the end of the March billing month of each year. Should the public utility and a customer-generator reach an agreement for a billing cycle ending other than at the end of the March billing month, the public utility must inform the Commission in writing of the alternative billing period within 30 calendar days of the agreement’s execution.
(3) The alternative billing period must be for a period of twelve months or less.
Statutory/Other Authority: ORS 183, 756 & 757
Statutes/Other Implemented: ORS 756.040 & 757.300
History:
PUC 8-2007, f. & cert. ef. 7-27-07
860-039-0060
Excess Energy from Net Metering Facilities
(1) Any unused kilowatt-hour credit accumulated by a customer-generator of a public utility at the conclusion of the annual billing cycle will be transferred, in a manner approved by the Commission, to

customers enrolled in the public utility's low-income assistance programs. The public utility will value any unused kilowatt-hour credit at the applicable average annual avoided cost tariff rate.
(2) The customer-generator may not elect to receive a credit or payment for any unused credit accumulated at the conclusion of the annual billing cycle.
(3) The public utility will report in writing to the Commission by July 1 each year the unused kilowatt-hour credits and the dollar amount transferred to the low-income assistance program in the previous billing year.
Statutory/Other Authority: ORS 183, 756 & 757
Statutes/Other Implemented: ORS 756.040 & 757.300
History:
PUC 8-2007, f. & cert. ef. 7-27-07
860-039-0065
Aggregation of Meters for Net Metering
(1) For the purpose of measuring electricity usage under the net metering program, a public utility must, upon request from a customer-generator, aggregate for billing purposes the meter that is physically attached to the net metering facility ("designated meter") with one or more meters ("aggregated meter") in the manner set out in this rule. This rule is mandatory upon the public utility only when:
(a) The aggregated meters are located on the customer-generator's premises or property that is contiguous to such premises;
(b) The electricity recorded by the designated meter and any aggregated meters is for the customer-generator's requirements, and;
(c) The designated meter and the aggregated meters are served by the same primary feeder at the time of application.
(2) When a customer-generator aggregates one or more meters that are subject to a different rate schedule than the designated meter, the facilities capacity limit in OAR 860-039-0010 is determined by the rate applicable to the designated meter.
(3) A customer-generator must give at least 60 days notice to the utility to request that additional meters be included in meter aggregation. The specific meters must be identified at the time of such request. In the event that more than one additional meter is identified, the customer-generator must designate the rank order for the aggregated meters to which net metering credits are to be applied, and must rank aggregated meters subject to the same rate schedule as the designated meter above any other meters. At least 60 days in advance of the beginning of the next annual billing period, a customer-generator may amend the rank order of the aggregated meters, subject to the requirements of this rule.
(4) The aggregation of meters will apply only to charges that use kilowatt-hours as the billing determinant. All other charges applicable to each meter account will be billed to the customer-generator.
(5) The utility will first apply the kWh credit to the charges for the designated meter and then to the charges for the aggregated meters in the rank order specified by the customer-generator. If in a monthly billing period the net metering facility supplies more electricity to the public utility than the energy usage recorded by the customer-generator's designated and aggregated meters, the utility will apply credits to the next monthly bill for the excess kilowatt-hours first to the designated meter, then to aggregated meters in the rank order specified by the customer-generator. Public utilities subject to ORS 757.300(2) through (8) must specify in tariffs how the kWh credits will be applied when rate schedules have non-uniform kWh charges.
(6) With the Commission's prior approval, a public utility may charge the customer-generator requesting to aggregate meters a reasonable fee to cover the administrative costs of this provision pursuant to a tariff approved by the Commission.
Statutory/Other Authority: ORS 183, 756 & 757

Statutes/Other Implemented: ORS 756.040 & 757.300
History:
PUC 5-2011, f. & cert. ef. 9-7-11
PUC 8-2007, f. & cert. ef. 7-27-07
860-039-0070
Public Utility Maps, Records and Reports
(1) Each public utility must maintain current maps and records of customer-generator net metering facilities showing size, location, generator type, and date of installation.
(2) By April 1 of each year, the public utility will submit to the Commission an annual report with the following summary information for the previous year:
(a) The total number of net metering facilities by resource type; and
(b) The total estimated rated generating capacity of net metering facilities by resource type.
(3) Upon request, each public utility must file with the Commission maps, records, and reports to identify, locate and summarize net metering facilities. All maps, records, and reports which the Commission may require the public utility to file must be in a form satisfactory to the Commission.
Statutory/Other Authority: ORS 183, 756 & 757
Statutes/Other Implemented: ORS 756.040 & 757.300
History:
PUC 8-2007, f. & cert. ef. 7-27-07
860-039-0075
Public Utility Not to Limit Net Metering Systems
A public utility will not limit the cumulative generating capacity of net metering systems in any manner except as expressly ordered by the Commission under ORS 757.300(6).
Statutory/Other Authority: ORS 183, 756 & 757
Statutes/Other Implemented: ORS 756.040 & 757.300
History:
PUC 8-2007, f. & cert. ef. 7-27-07
860-039-0080
Net Metering Insurance
A public utility will not require a customer-generator whose net metering facility is in compliance with the standards in paragraphs (a) and (b) of ORS 757.300(4) and the safety standards contained in these rules to purchase additional liability insurance or to name the utility as an additional insured on the customer-generator's liability insurance policy.
Statutory/Other Authority: ORS 183, 756 & 757
Statutes/Other Implemented: ORS 756.040 & 757.300
History:
PUC 8-2007, f. & cert. ef. 7-27-07

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860-082-0070 Metering and Monitoring
860-082-0075 Temporary Disconnection
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860-082-0005 Scope and Applicability
(1) OAR 860-082-0005 through 860-082-0085 (the "small generator interconnection rules") govern the interconnection of a small generator facility with a nameplate ~~capacity~~rating of 10 megawatts or less to a public utility's transmission or distribution system. These rules do not apply if the interconnection between the small generator facility and the public utility is subject to the jurisdiction of the Federal Energy Regulatory Commission (FERC).
(2) Except as specified in OAR 860-082-0025(1)(b), the small generator interconnection rules do not apply retroactively to a small generator facility that was interconnected to a public utility's transmission or distribution system prior to the effective date of the small generator interconnection rules (an "existing small generator facility"). These rules become applicable to an existing small generator facility at the expiration of the agreement governing the terms of the interconnection of the existing small generator facility to the ~~interconnected~~interconnecting public utility's transmission or distribution system. If an existing agreement does not have an expiration date, then the small generator interconnection rules become applicable to the existing small generator facility 10 years after the effective date of the rules. An existing small generator facility must submit an application under OAR 860-082-0025(1)(e) to the ~~interconnected~~interconnecting public utility no later than 60 business days before the date that the small generator interconnection rules become applicable.
~~(3)~~(3) Except where explicitly noted in OAR chapter 860, division 039, the small generator interconnection rules do not apply to the interconnection of a net metering facility, which is governed by ~~OAR chapter 860,~~ division 039.
(4) A small generator facility that qualifies as a "small power production facility" under OAR 860-029-0010(25) must also comply with the rules in OAR chapter 860, division 029. If there is a conflict between the small generator interconnection rules and the rules in OAR chapter 860, division 029, then the small generator interconnection rules control.
Statutory/Other Authority: ORS 183, 756 & 757
Statutes/Other Implemented: ORS 756.040 & 756.060
History:
PUC 10-2009, f. & cert. ef. 8-26-09

860-082-0010
Waiver
(1) Upon request or its own motion, the Commission may waive any of the Division 082 rules for good cause shown. A request for waiver must be made in writing, unless otherwise allowed by the Commission.
(2) A public utility and an applicant or interconnection customer may agree to reasonable extensions to the required timelines in these rules without requesting a waiver from the Commission.
(a) If a public utility and an applicant or interconnection customer are unable to agree to waive a timeline, then the public utility, applicant, or interconnection customer may request that the Commission grant a waiver.
(b) In deciding whether to grant a waiver of a timeline, the Commission will consider the number of pending applications for interconnection review and the type of applications, including review level, facility type, and facility size.
(c) Waiver of a timeline, whether by agreement or Commission order, does not affect an application's queue position.

Statutory/Other Authority: ORS 183, 756 & 757
Statutes/Other Implemented: ORS 756.040 & 756.060
History:
PUC 6-2011, f. & cert. ef. 9-14-11
PUC 10-2009, f. & cert. ef. 8-26-09

860-082-0015
Definitions
As used in 860-082-0005 through 860-082-0085:
(1) “Adverse system impact” means a negative effect caused by the interconnection of a small generator facility that may compromise the safety or reliability of a transmission or distribution system.
(2) “Affected system” means a transmission or distribution system, not owned or operated by the interconnecting public utility, which may experience an adverse system impact from the interconnection of a small generator facility.
(3) “Aggregated ~~nameplate~~export capacity” means the total combined ~~nameplate~~export capacity of:
   (a) A proposed small generator facility;
   (b) Existing small generator facilities, net metering facilities, FERC jurisdictional generators, and state jurisdictional generators with a nameplate rating greater than 10 megawatts; and
   (c) Small generator facilities, net metering facilities, FERC jurisdictional generators, and state jurisdictional generators with a nameplate ~~capacity~~rating greater than 10 megawatts that have pending completed applications with higher queue positions than the proposed small generator facility.
(4) ~~(4)~~ “Aggregated nameplate rating” means the total combined nameplate rating of:
   (a) A proposed small generator facility;
   (b) Existing small generator facilities, net metering facilities, FERC jurisdictional generators, and state jurisdictional generators with a nameplate rating greater than 10 megawatts; and
   (c) Small generator facilities, net metering facilities, FERC jurisdictional generators, and state jurisdictional generators with a nameplate rating greater than 10 megawatts that have pending completed applications with higher queue positions than the proposed small generator facility.
~~(4)~~(5) “Applicant” means a person who has submitted an application to interconnect a small generator facility to a public utility’s transmission or distribution system.
~~(5)~~(6) “Application” means a written request to interconnect a small generator facility with a public utility’s transmission or distribution system~~.~~, which must follow the standard form developed by the public utility and approved by the Commission
~~(6)~~(7) “Area network” means a type of distribution system served by multiple transformers interconnected in an electrical network circuit in order to provide high reliability of service. ~~This term has the same meaning as the term “secondary grid network” as defined in IEEE 1547, section 4.1.4.~~
~~(7)~~(8) “Certificate of completion” means a certificate signed by an applicant and an interconnecting public utility attesting that a small generator facility is complete, meets the applicable requirements of the small generator interconnection rules, ~~and has been inspected, tested~~has passed all applicable federal, state, and local inspection requirements, and certified as physically ready for operation. A certificate of completion includes the “as built”

specifications and initial settings for the small generator facility and its associated interconnection equipment.

~~(8)~~(9) "Distribution system" means the portion of an electric system that delivers electricity from transformation points on the transmission system to points of connection on a customer's premises.

(10) "Energy storage system" or "ESS" means a mechanical, electrical, or electrochemical means to store and release electrical energy, and its associated interconnection and control equipment. For the purposes of these rules, an ESS can be considered part of a small generator facility or a small generator facility in whole that operates in parallel with the distribution system.

(11) "Export capacity" means the amount of power that can be transferred from the small generator facility to the distribution system. Export capacity is either the nameplate rating, or a lower amount if limited using an acceptable means identified in OAR 860-082-0033.

~~(9)~~(12) "Fault current" means an electrical current that flows through a circuit during a fault condition. A fault condition occurs when one or more electrical conductors contact ground or each other. Types of faults include phase to ground, double-phase to ground, three-phase to ground, phase to phase, and three-phase.

~~(10)~~(13) "Field-tested equipment" means interconnection equipment that is identical to equipment that was approved by the interconnecting public utility for a different small generator facility interconnection ~~under Tier 4 review~~ and successfully completed a witness test ~~within three years~~under the requirements included in the current version of the public utility's interconnection requirements handbook before the date of the submission of the current application.

(14) ~~(11)~~ "Host load" means electrical power, less the small generator facility auxiliary load, consumed by the customer at the location where the small generator facility is connected.

~~(11)~~(15) "IEEE 1547" means the standards published in the ~~2003~~2018 edition of the Institute of Electrical and Electronics Engineers (IEEE) Standard 1547, titled "~~Interconnecting~~ IEEE Standard for Interconnection and Interoperability of Distributed Energy Resources with Associated Electric Power Systems Interfaces" and approved by the IEEE SA Standards Board on ~~June 12, 2003~~February 15, 2018.

~~(12)~~(16) ~~(12)~~ "IEEE 1547.1" means the standards published in the ~~2005~~2020 edition of the IEEE Standard 1547.1, titled "IEEE Standard Conformance Test Procedures for Equipment Interconnecting Distributed Resources with Electric Power Systems and Associated Interfaces" and approved by the IEEE SA Standards Board on ~~June 9, 2005~~March 5, 2020.

(17) ~~(13)~~ "Inadvertent export" means the unscheduled export of active power from a small generator facility, exceeding a specified magnitude and for a limited duration, generally due to fluctuations in load-following behavior.

~~(13)~~(18) "Interconnection agreement" means a contract between an applicant or interconnection customer and an interconnecting public utility that governs the interconnection of a small generator facility to the public utility's transmission or distribution system and the ongoing operation of the small generator facility after it is interconnected. An interconnection agreement will follow the standard form agreement developed by the public utility and filed with the Commission.

~~(14)~~(19) "Interconnection customer" means a person with one or more small generator facilities interconnected to a public utility's transmission or distribution system.

~~(15)~~(20) "Interconnection equipment" means a group of components or an integrated system provided by an interconnection customer or applicant to connect a small generator facility to a public utility's transmission or distribution system.

~~(16)~~(21) "Interconnection facilities" means the facilities and equipment required by a public utility to accommodate the interconnection of a small generator facility to the public utility's transmission or distribution system and used exclusively for that interconnection. Interconnection facilities do not include system upgrades.

(22) ~~(17)~~ "Interconnection facilities study" means a study conducted by a utility for the customer-generator that determines the additional or upgraded distribution system facilities, the cost of those facilities, and the time schedule required to interconnect the small generator facility to the public utility's distribution system.

~~(17)~~(23) "Interconnection service" means service provided by an interconnecting public utility to an interconnection customer.

~~(18)~~(24) "Lab-tested equipment" means interconnection equipment that has been designed to comply with IEEE 1547, tested in accordance with IEEE 1547.1, and certified and labeled as compliant with these IEEE standards at the point of manufacture by a nationally recognized testing lab. For interconnection equipment to be considered lab-tested equipment under these rules, the equipment must be used in a manner consistent with the certification.

(25) ~~(19)~~ "Limited export" means the exporting capability of a small generator facility whose export capacity is limited by the use of any configuration or operating mode described in OAR 860-082-0033.

~~(19)~~(26) "Line section" means that portion of a public utility's transmission or distribution system that is connected to an interconnection customer and bounded by automatic sectionalizing devices or the end of a distribution line.

~~(20)~~(27) "Minor equipment modification" means a change to a small generator facility or its associated interconnection equipment that:

~~(a) Does not affect the application of the approval requirements in Tiers 1, 2, or 3;~~

(a) ~~(b) Does~~Includes a change or replacement of equipment that is a like-kind substitution in size, ratings, impedances, efficiencies, or capabilities of the equipment specified in the original interconnection application. Minor variations that do not affect safety, performance, or interoperability are acceptable;

(b) Includes a replacement of existing inverters with new inverters that conform to standards in effect at the time of replacement;

(c) Includes a reduction in the nameplate rating and/or export capacity of the small generator facility of 10 percent or less provided that a change made to a small generator facility with a pending completed application must not adversely impact lower queued projects; or

~~(a)~~(d) For changes not specified in subsections (a) through (c) of this definition, the change must not, in the interconnecting public utility's reasonable opinion, have a material impact on the safety or reliability of the public utility's transmission or distribution system or an affected system~~; and~~.

~~(c) Does not affect the nameplate capacity of a small generator facility.~~

~~(21) "Nameplate capacity" means the full-load electrical quantities assigned by a facility's designer to a generator and its prime mover or other piece of electrical equipment, such as transformers and circuit breakers, under standardized conditions, as expressed in amperes, kilovoltamperes, kilowatts, volts, megawatts, or other appropriate units. Nameplate capacity is usually indicated on a nameplate attached to the individual device.~~

(e) ~~(22)~~Applicants must inform the interconnecting public utility of minor equipment modifications, prior to making the change.

(28) "Nameplate rating" means the sum total of maximum rated power output of all of a small generator facility's constituent generating units and/or ESS as identified on the manufacturer nameplate in Alternating Current (AC), regardless of whether it is limited by any approved means. For a generating unit that uses an inverter to change direct current energy supplied to an AC quantity, the nameplate rating will be the manufacturer's AC output rating for the inverter(s).

~~(21)~~(29) "Nationally recognized testing laboratory" or "NRTL" means a qualified private organization that performs independent safety testing and product certification. Each NRTL must meet the requirements set forth by the United States Occupational Safety and Health Administration.

~~(22)~~(30) "Net metering facility" has the meaning set forth in ORS 757.300(1)(d).

(31) ~~(24)~~ "Non-export or non-exporting" means when the small generator facility is sized and designed, and operated using any of the methods in OAR 860-082-0033, such that the output is used for host load only and no electrical energy (except for any inadvertent export) is transferred from the small generator facility to the distribution system.

~~(23)~~(32) "Pending completed application" means an application for interconnection of a small generator facility, a net metering facility, or a FERC jurisdictional generator that an interconnecting public utility has deemed complete.

~~(25) "Person" has the meaning set forth in OAR 860-011-0035(8).~~

(33) ~~(26)~~ "Person" includes individuals, joint ventures, partnerships, corporations and associations or their officers, employees, agents, lessees, assignees, trustees or receivers, as supplemented to include governmental entities.

~~(24)~~(34) "Point of interconnection" means the point where a small generator facility is electrically connected to a public utility's transmission or distribution system. This term has the same meaning as "point of common coupling" as defined in IEEE 1547~~, section 3.1.13. This term does not have the same meaning as "point of common coupling" as defined in OAR 860-039-0005(3)(p).~~.

(35) ~~(27)~~ "Power control system" means systems or devices which electronically limit or control steady state currents to a programmable limit.

~~(25)~~(36) "Primary line" means a distribution line with an operating voltage greater than 600 volts.

~~(26)~~(37) "Public utility" has the meaning set forth in ORS 757.005 and is limited to a public utility that provides electric service.

~~(27)~~(38) "Queue position" means the rank of a pending completed application, relative to all other pending completed applications, that is established based on the date and time that the interconnecting public utility receives the completed applications, including application fees.

(39) ~~(30)~~ "Reference point of applicability" (RPA) means a location proximate to the generation where the interconnection and interoperability performance requirements, as specified by IEEE 1547, apply.

(40) "Relevant minimum load" means the lowest measured load coincident with the generating facility's production. For solar-only facilities this is the daytime minimum load (i.e. 10 a.m. to 4 p.m. for fixed panel systems and 8 a.m. to 6 p.m. for PV systems utilizing tracking systems).

~~(28)~~(41) “Scoping meeting” means an initial meeting between representatives of an applicant and an interconnecting public utility that is conducted to discuss the RPA; to discuss alternative interconnection options; to exchange information, including any relevant transmission or distribution system data and earlier studies that would reasonably be expected to affect the interconnection options; to analyze such information; and to determine the potentially feasible points of interconnection.

~~(29)~~(42) “Secondary line” means a service line with an operating voltage of 600 volts or less.

~~(30)~~(43) “Small generator facility” means a facility, that operates in parallel with the distribution system, for the production of electrical energy that has a ~~nameplate~~maximum installed instantaneous power production capacity of the completed Facility, expressed in MW (AC), and measured at the Point of Interconnection of 10 ~~megawatts or less. A small~~MW, when operated in compliance with the Generation Interconnection Agreement and consistent with the recommended power factor and operating parameters provided by the manufacturer of the generator~~ facility does not include interconnection~~, inverters, energy storage devices, or other equipment~~, interconnection facilities, or system upgrades.~~ within the Facility affecting the Facility's capability to deliver useful electric energy to the grid at the Point of Interconnection.

~~(31)~~(44) “Spot network” means a type of transmission or distribution system that uses two or more intertied transformers protected by network protectors to supply an electrical network circuit. A spot network may be used to supply power to a single customer or a small group of customers.

~~(32)~~(45) “System upgrade” means an addition or modification to a public utility’s transmission or distribution system or to an affected system that is required to accommodate the interconnection of a small generator facility.

~~(33)~~(46) “Transmission line” means any electric line operating at or above 50,000 volts.

~~(34)~~(47) “Transmission system” means a public utility’s high voltage facilities and equipment used to transport bulk power or to provide transmission service under the public utility’s open access transmission tariff.

~~(35)~~(48) “Witness test” means the on-site visual verification of the interconnection installation and commissioning as required in IEEE 1547~~, sections 5.3 and 5.4.~~. For interconnection equipment that does not meet the definition of lab-tested equipment, the witness test may, at the discretion of the public utility, also include a ~~system design~~type test and ~~production~~small generator facility evaluation according to IEEE 1547~~, sections 5.1 and 5.2,~~ as applicable to the specific interconnection equipment used.

~~(36)~~(49) “Written notice” means a ~~notice~~ required notice sent by the ~~small~~ public utility via electronic mail if the customer-generator ~~interconnection rules~~ has provided a functioning electronic mail address. If the customer-generator has not provided a functioning electronic mail address, or has requested in writing to be notified by United States mail, then written notices from the public utility must be sent via First Class United States mail~~.~~ to the notification address provided by the customer-generator. The ~~duty to provide written notice~~ public utility is deemed to have fulfilled its duty to respond under these rules on the day ~~that the~~ it sends the customer-generator notice via electronic mail or deposits such notice in First Class mail. The customer-generator is ~~deposited in the mail. A public utility and an applicant or interconnection customer may agree in writing to accept written notice via electronic mail. If using electronic mail by agreement, then the duty to provide written notice is deemed~~

~~fulfilled on the day the notice is sent. A public utility and an applicant or interconnection customer are~~ responsible for informing ~~one another~~the public utility of any changes to ~~the physical or electronic address used to receive notifications~~its notification address.

Statutory/Other Authority: ORS 183, 756 & 757
Statutes/Other Implemented: ORS 756.040 & 756.060
History:
PUC 10-2009, f. & cert. ef. 8-26-09

860-082-0020
Pre-Application Process

(1) Each public utility must designate an employee or office from which relevant information about the small generator interconnection process, the public utility's transmission or distribution system, and affected systems may be obtained through informal requests for a potential applicant proposing a small generator facility at a specific site. The public utility must post contact information for the employee or office on the public utility's website. The information provided by the public utility in response to a potential applicant's request must include relevant existing studies and other materials that may be used to understand the feasibility of interconnecting a small generator facility at a particular point on the public utility's transmission or distribution system. The public utility must comply with reasonable requests for access to or copies of such information, except to the extent that providing such materials would violate security requirements, confidentiality obligations to third parties, or be contrary to federal or state regulations. The public utility may require a person to sign a confidentiality agreement if required to protect confidential or proprietary information. For a potential small generator ~~facilities~~facility requiring Tier 4 review, and at the potential applicant's request, the public utility must meet with the potential applicant to exchange information. A public utility employee with relevant technical expertise must attend any such meeting.

(2) A person requesting information under section (1) must reimburse the public utility for the reasonable costs of gathering and copying the requested information.

Statutory/Other Authority: ORS 183, 756 & 757
Statutes/Other Implemented: ORS 756.040 & 756.060
History:
PUC 10-2009, f. & cert. ef. 8-26-09

860-082-0025
Applications to Interconnect a Small Generator Facility

(1) A person may not interconnect a small generator facility to a public utility's transmission or distribution system without authorization from the public utility.

(a) A person proposing to interconnect a new small generator facility to a public utility's transmission or distribution system must submit an application to the public utility.

(b) A person with an existing interconnected small generator facility who proposes to make any change to the facility, other than a minor equipment modification, must submit an application to the public utility. This includes changes affecting the nameplate ~~capacity~~rating of the existing interconnected small generator facility or the output capacity authorized in the agreement governing the terms of the interconnection.

(c) An applicant with a pending completed application to interconnect a small generator facility must submit a new application if the applicant proposes to make any change to the small

generator facility other than a minor equipment modification. This includes changes affecting the nameplate ~~capacity~~rating of the proposed small generator facility.
(A) The applicant relinquishes the queue position assigned to the pending completed application, and the public utility assigns a new queue position based on the date and time the public utility receives the new application.
(B) If the new application is submitted within 30 business days of the date of submission of the original application, then the public utility must apply the original application fee to the application fee required for the new application.
(d) A person with a pending completed application to interconnect a net metering facility or a FERC jurisdictional generator who proposes to change the facility to a small generator facility must submit a new application under the small generator interconnection rules.
(A) The applicant relinquishes the queue position assigned to the pending completed application, and the public utility assigns a new queue position based on the date and time that the interconnecting public utility receives the small generator interconnection application.
(B) If the small generator interconnection application is received within 30 business days of the date of submission of the original net metering or FERC jurisdictional generator interconnection application, then the public utility must apply the original application fee to the application fee required for the new application.
(e) An interconnection customer must submit an application to renew an existing small generator facility interconnection before the expiration of the interconnection agreement between the interconnection customer and the ~~interconnected~~interconnecting public utility. The application must be submitted no later than 60 business days before the interconnection agreement's expiration date.
(A) A public utility may not unreasonably refuse to grant expedited review of an application to renew an existing small generator facility interconnection if there have been no changes to the small generator facility other than minor equipment modifications.
(B) A public utility may not require an existing small generator facility to undergo Tier 4 review if there have been no changes to the small generator facility other than minor equipment modifications and there have been no material changes to the portion of the public utility's transmission or distribution system affected by the interconnection of the small generator facility.
(C) A public utility may require the interconnection customer to pay for interconnection facilities, system upgrades, or changes to the small generator facility or its associated interconnection equipment that are necessary to bring the small generator facility interconnection into compliance with the small generator interconnection rules or IEEE 1547 or 1547.1.
(D) If the public utility has not completed its review of an application to renew and a new interconnection agreement is not signed before the expiration of the current interconnection agreement governing the interconnection of an existing small generator facility to a public utility's transmission or distribution system, then the current interconnection agreement remains in effect until the renewal process is completed and a new interconnection agreement is signed.
(2) All applications must be made using the appropriate application form, and must follow the standard form applications developed by the public utility and approved by the Commission. The public utility must provide separate application forms for review under Tier 1 and for review under Tiers 2, 3, and 4. The Tier 1 application form must include an unexecuted interconnection agreement. The public utility must provide a copy of an application form to any person upon request and must post copies of the application forms on the public utility's website.

(a) Applicants ~~must~~may use the Tier 1 application form only for a small generator ~~facilities~~facility that ~~will not be interconnected with a transmission line and will~~meets the requirements of OAR 860-082-0045(1).
(b) All applicants may use ~~lab-tested, inverter-based interconnection equipment with a nameplate capacity of 25 kilowatts or less.~~
~~(b) Applicants must use~~ the application form for ~~review under~~ Tiers 2, 3, or 4 ~~for interconnection of all other small generator facilities~~.
(3) A public utility may require payment of a nonrefundable application processing fee. The amount of the fee depends upon the review tier requested in the application and is intended to cover the reasonable costs of processing and evaluating the application.
(a) The application fee may not exceed $100 for Tier 1 review, $500 for Tier 2 review, and $1000 for review under Tiers 3 and 4.
(b) An applicant must pay the reasonable costs incurred by the public utility to perform any studies and engineering evaluations permitted by these rules and necessary to evaluate the proposed application to interconnect. Before the public utility may assess any costs in excess of the application fee, the public utility must receive written authorization from the applicant. If the applicant does not authorize the additional costs, then the application is deemed withdrawn and the original application fee is forfeited.
(c) If an application is denied at one review tier, and the applicant resubmits the application at a higher review tier within 15 business days after the date the applicant received notification of the denial, then the applicant maintains the queue position assigned to the original application and the public utility must apply the original application fee and any other fees paid in conjunction with the original application to the fees applicable to the resubmitted application.
(4) If an applicant proposes to interconnect multiple small generator facilities to the public utility's transmission or distribution system at a single point of interconnection, then the public utility must evaluate the applications based on the combined total nameplate ~~capacity~~rating for all of the small generator facilities. If the combined total nameplate ~~capacity~~rating exceeds 10 megawatts, then the small generator interconnection rules do not apply.
(5) An applicant must provide documentation of site control with an interconnection application. Site control may be demonstrated through ownership of the site, a leasehold interest in the site, or an option or other right to develop the site for the purpose of constructing the small generator facility. Site control may be documented by a property tax bill, deed, lease agreement, or other legally binding contract.
(6) A public utility may propose to interconnect multiple small generator facilities at a single point of interconnection to minimize costs, and an affected applicant or interconnection customer may not unreasonably refuse such a proposal. An applicant or interconnection customer may, however, elect to maintain a separate point of interconnection if the applicant or interconnection customer agrees to pay the entire cost of the separate interconnection facilities.
(7) Application review process.
(a) Within 10 business days of receipt of an application to interconnect a small generator facility, the interconnecting public utility must provide written notice to the applicant stating whether the application is complete.
(A) If the application is incomplete, then the public utility must provide the applicant with a detailed list of the information needed to complete the application. An application is deemed complete when the public utility receives the listed information. The applicant must provide the

listed information within 10 business days of receipt of the list or the application is deemed withdrawn.
(B) If a public utility does not have a record of receipt of an application or cannot locate an application, then the applicant must provide an additional copy of the application to the public utility. If the applicant can demonstrate that a complete application was originally delivered to the public utility at a particular time on a particular date, then the public utility must assign a queue position to the application based on the original time and date of delivery.
(b) Once the public utility deems an application to be complete, the public utility must assign the application a queue position. An applicant must meet all applicable deadlines in the small generator interconnection rules to maintain its queue position unless the deadlines have been waived by agreement with the interconnecting public utility or by Commission order.
(c) If the public utility determines during the evaluation process that supplemental or clarifying information is required, then the public utility must request the information from the applicant~~.~~, and the applicant must provide the requested information within 15 business days of the request, or the application will be deemed withdrawn. The time necessary to complete the evaluation of the application may be extended by the time required for the receipt of the additional information. Requests for information do not affect the applicant's queue position.
(d) A public utility must use IEEE 1547 and IEEE 1547.1 to evaluate small generator interconnection applications unless otherwise specified in these rules or unless the Commission grants a waiver to use different or additional standards.
(e) Reference Point of Applicability Review.
(A) For Tier 4 applications, the public utility will raise any concerns about the RPA in the scoping meeting.
(B) For Tier 1 through Tier 3 applications, the public utility notifies an applicant if the proposed RPA is appropriate when it provides screen results. If the RPA is inappropriate the public utility will notify the applicant in writing, including an explanation as to why it requires correction. The applicant must resubmit the application with the corrected RPA within ten business days. If the applicant does not provide ~~an executable~~the appropriate RPA, a request for an extension of time, or request an applicant options meeting within the deadline, the application will be deemed withdrawn.
(f) Interconnection Agreement. If the proposed interconnection ~~agreement~~is approved and requires no construction of facilities by the public utility, the public utility must provide the applicant an executed interconnection agreement no later than five business days after ~~the date of approval of an interconnection application.~~approving the interconnection. If the proposed interconnection is approved and requires construction of facilities, the public utility must provide the applicant an executed interconnection agreement ~~must follow the standard form~~, along with a non-binding good faith cost estimate and construction schedule for any required upgrades, no later than fifteen 15 business days after approving the interconnection. If the applicant does not return a countersigned interconnection agreement ~~developed by the public utility~~ and ~~approved by the Commission. The applicant must return an executed interconnection agreement~~any required deposit to the public utility, or request negotiation of a non-standard interconnection agreement, within 15 business days of receipt ~~or~~of an executed interconnection agreement, the application is deemed withdrawn.
(A) An applicant or a public utility is entitled to the terms in the standard form agreement, but may choose to negotiate for different terms.

(B) If negotiated changes to a standard interconnection agreement are materially inconsistent with the small generator interconnection rules, then the applicant and the public utility must seek Commission approval of the negotiated interconnection agreement.
(~~f~~g) The applicant must provide the public utility written notice at least 20 business days before the planned commissioning for the small generator facility.
(A) The public utility has the option of conducting a witness test at a mutually agreeable time within 10 business days of ~~the scheduled commissioning~~receipt of the certificate of completion.
(B) The public utility must provide written notice to the applicant indicating whether the public utility plans to conduct a witness test or will waive the witness test within three business days of receipt of the certificate of completion.
(C) If the public utility notifies the applicant that it plans to conduct a witness test, but fails to conduct the witness test within 10 business days of ~~the scheduled commissioning date~~receipt of the certificate of completion or within a time otherwise agreed upon by the applicant and the public utility, then the witness test is deemed waived.
(D) If the witness test is conducted and is successful, or if the public utility waives the witness test, the public utility must provide the countersigned certificate of completion within five business days of conducting the witness test or waiver of witness test.
(E) If the witness test is conducted and is not acceptable to the public utility, then the public utility must provide written notice to the applicant describing the deficiencies within five business days of conducting the witness test. The public utility must give the applicant 20 business days from the date of the applicant's receipt of the notice to resolve the deficiencies. If the applicant fails to resolve the deficiencies to the reasonable satisfaction of the public utility within 20 business days or at a mutually agreeable time, then the application is deemed withdrawn.
(~~g~~h) A public utility must meet all applicable deadlines in the small generator interconnection rules unless the deadlines have been waived by agreement with an applicant or interconnection customer or by Commission order. If the public utility cannot meet an applicable deadline, then the public utility must provide written notice to the applicant or interconnection customer explaining the reasons for the failure to meet the deadline and an estimated alternative deadline. A public utility's failure to meet an applicable deadline does not affect an applicant's queue position.
Statutory/Other Authority: ORS 183, 756 & 757
Statutes/Other Implemented: ORS 756.040 & 756.060
History:
PUC 10-2009, f. & cert. ef. 8-26-09

860-082-0030
Construction, Operation, Maintenance, and Testing of Small Generator Facilities
(1) IEEE 1547. An interconnection customer or applicant must construct, operate, and maintain a small generator facility and its associated interconnection equipment in compliance with IEEE ~~1547 and 1547.1~~ 1547 and 1547.1. New interconnection applicants will be required to use IEEE 1547-2018 compliant equipment by no earlier than January 1, 2024. For purposes of OAR 860-082-0030, capitalized terms not otherwise defined in Division 082 have the meaning set forth in IEEE 1547.
(a) Small generator facilities compliant with IEEE 1547 must conform with the following minimum requirements:

(A) Abnormal performance requirements: Category III Ride-Through capabilities must be supported for inverter-based small generator facilities. Rotating small generator facilities must meet Category I Ride-Through capabilities, at minimum.
(B) Normal performance requirements: Inverter-based small generator facilities must meet reactive power requirements of IEEE 1547 Category B. Rotating small generator facilities must meet Category A, and may meet Category B.
(C) Inverter-based interconnection equipment will be tested to and certified as being compliant with UL 1741 Third Edition, Supplement SB, by a NRTL. Equipment that is not certified by a NRTL may require additional evaluation and commissioning testing to confirm compliance with IEEE 1547.
(b) Interconnection requirements handbook. Each public utility must post an interconnection requirements handbook on its public website. Prior to revising its interconnection requirements handbook, a public utility must provide public notice and an opportunity to comment and the public utility must respond to any comments received.
(c) Preferred default settings. A public utility must allow small generator facilities to interconnect using the public utility's preferred default settings, except when the application reviewed under Tier 4, OAR 860-082-0060, or the application fails the Tier 1, Tier 2, or Tier 3 approval criteria in OAR 860-082-0045(2), OAR 860-082-0050(2), or OAR 860-082-0055(2). Interconnection requirements handbooks must include preferred default settings. As applicable, the following must be identified in the interconnection requirements handbook:
(A) Voltage and frequency trip settings;
(B) Frequency droop settings;
(C) Activated reactive power control function and default settings;
(D) Voltage active power (volt-watt) mode activation and default settings; and
(E) Communication protocols and ports requirements.
(2) The applicant must provide written notice to the interconnecting public utility 10 business days before beginning operation of an approved small generator facility.
(3) Before beginning operation of a small generator facility, an interconnection customer or applicant must receive approval of the facility under the small generator interconnection rules and must execute an interconnection agreement with the interconnecting public utility. Applicants or interconnection customers are entitled to a ~~maximum 20-year term for an interconnection~~20-year term for an interconnection agreement, or, if the interconnection customer and the public utility have entered a separate Power Purchase Agreement for a specified period of time, to a term that coincides with the length of such Power Purchase Agreement.
(4) A small generator facility must be capable of being isolated from the interconnecting public utility's transmission or distribution system. An interconnection customer may not disable an isolation device without the prior written consent of the ~~interconnected~~interconnecting public utility.
(a) For a small generator ~~facilities~~facility interconnecting to a primary line, the interconnection customer or applicant must use a lockable, visible-break isolation device readily accessible to the public utility.
(b) For a small generator ~~facilities~~facility interconnecting to a secondary line, the interconnection customer or applicant must use a lockable isolation device that is readily accessible by the public utility. The status of the isolation device must be clearly indicated. An exception from the requirement to use a lockable isolation device is allowed for a small generator facility that has a

maximum total output of 30 amperes or less; is connected to a secondary line; uses lab-tested, inverter-based interconnection equipment; and is interconnected to the distribution system through a metered service owned by the ~~interconnected~~interconnecting public utility. In this limited case, the meter base may serve as the required isolation device if it is readily accessible to the public utility.
(A) A draw-out type circuit breaker with the provision for padlocking at the draw-out position can be considered an isolation device.
(B) The interconnection customer or applicant may elect to provide the public utility access to an isolation device that is contained in a building or area that may be unoccupied and locked or not otherwise readily accessible to the public utility. The interconnection customer or applicant must provide a lockbox capable of accepting a lock provided by the public utility that provides ready access to the isolation device. The interconnection customer or customer must install the lockbox in a location that is readily accessible by the public utility and must affix a placard in a location acceptable to the public utility that provides clear instructions to utility personnel on how to access the isolation device.
(c) Other than the exception in (4)(b), all isolation devices must be installed, owned, and maintained by the interconnection customer or applicant; must be capable of interrupting the full load of the small generator facility; and must be located between the small generator facility and the point of interconnection.
(5) An interconnecting public utility must have access to an interconnection customer's or an applicant's premises for any reasonable purpose related to an interconnection application or an interconnected small generator facility. The public utility must request access at reasonable hours and upon reasonable notice. In the event of an emergency or hazardous condition, the public utility may access the interconnection customer's or applicant's premises at any time without prior notice, but the public utility must provide written notice within five business days after entering the interconnection customer's or applicant's premises that describes the date of entry, the purpose of entry, and any actions performed on the premises.
(6) When a small generator facility undergoes maintenance or testing in compliance with the small generator interconnection rules, IEEE 1547, or IEEE 1547.1, the interconnection customer must retain written records for at least seven years documenting the maintenance and the results of testing. The interconnection customer must provide copies of these records to the ~~interconnected~~interconnecting public utility upon request.
Statutory/Other Authority: ORS 183, 756 & 757
Statutes/Other Implemented: ORS 756.040 & 756.060
History:
PUC 10-2009, f. & cert. ef. 8-26-09

860-082-~~0035~~0033
Export Controls
(1) If a small generator facility uses any configuration or operating mode in subsection (3) to limit the export of electrical power across the Point of Interconnection, then the export capacity is only the amount capable of being exported (not including any Inadvertent export). To prevent impacts on system safety and reliability, any inadvertent export from a small generator facility must comply with the limits identified in this Section. The export capacity specified by the interconnection customer in the application will subsequently be included as a limitation in the interconnection agreement.

(2) An application proposing to use a configuration or operating mode to limit the export of electrical power across the Point of Interconnection must include proposed control and/or protection settings.

(3) Acceptable export control methods.

(a) Export control methods for non-exporting small generator facility:

(A) Reverse Power Protection (Device 32R): To limit export of power across the Point of Interconnection, a reverse power protective function is implemented using a utility grade protective relay. The default setting for this protective function is 0.1 percent (export) of the service transformer's nominal base nameplate power rating, with a maximum 2.0 second time delay to limit inadvertent export. When a project is located on a circuit using high speed reclosing the public utility may require a maximum delay of less than 2.0 seconds to safely facilitate the reclosing.

(B) Minimum Power Protection (Device 32F): To limit export of power across the Point of Interconnection, a minimum import protective function is implemented utilizing a utility grade protective relay. The default setting for this protective function is 5 percent (import) of the small generator facility's total nameplate rating, with a maximum 2.0 second time delay to limit Inadvertent export. When a project is located on a circuit using high speed reclosing the public utility may require a maximum delay of less than 2.0 seconds to safely facilitate the reclosing.

(C) Relative distributed energy resource rating: This option requires the small generator facility's nameplate rating to be so small in comparison to its host facility's minimum load that the use of additional protective functions is not required to ensure that power will not be exported to the electric distribution system. This option requires the small generator facility's nameplate rating to be no greater than 50 percent of the interconnection customer's verifiable minimum host load during relevant hours over the past 12 months. This option is not available for interconnections to area networks or spot networks.

(b) Export control methods for limited export small generator facility:

(A) Directional Power Protection (Device 32): To limit export of power across the Point of Interconnection, a directional power protective function is implemented using a utility grade protective relay. The default setting for this protective function is be the export capacity value, with a maximum 2.0 second time delay to limit Inadvertent export. When a project is located on a circuit using high speed reclosing the public utility may require a maximum delay of less than 2.0 seconds to safely facilitate the reclosing.

(B) Configured power rating: A reduced output power rating utilizing the power rating configuration setting may be used to ensure the small generator facility does not generate power beyond a certain value lower than the nameplate rating. The configuration setting corresponds to the active or apparent power ratings in Table 28 of IEEE Std 1547-2018, as described in subclause 10.4. A local small generator facility communication interface is not required to utilize the configuration setting as long as it can be set by other means. The reduced power rating may be indicated by means of a nameplate rating replacement, a supplemental adhesive nameplate rating tag to indicate the reduced nameplate rating, or a signed attestation from the customer confirming the reduced capacity.

(c) Export control methods for non-exporting small generator facility or limited export small generator facility:

(A) Certified power control systems: Small generator facility may use certified power control systems to limit export. Small generator facility utilizing this option must use a power control system and inverter certified per UL 1741 by a NRTL with a maximum open loop response time of no more than 30 seconds to limit Inadvertent export. NRTL testing to the UL Power Control System Certification Requirement Decision must be accepted until similar test procedures for power control systems are included in a standard. This option is not available for interconnections to area networks or spot networks.

(B) Agreed-upon means: Small generator facility may be designed with other control systems and/or protective functions to limit export and inadvertent export if mutual agreement is reached with the Distribution Provider. The limits may be based on technical limitations of the interconnection customer's equipment or the electric distribution system equipment. To ensure inadvertent export remains within mutually agreed-upon limits, the interconnection customer may use an uncertified power control system, an internal transfer relay, energy management system, or other customer facility hardware or software if approved by the Distribution Provider.

860-082-0035

Cost Responsibility

(1) Study costs. Whenever a study is required under Tier 4 of the small generator interconnection rules, the applicant must pay the public utility for the reasonable costs incurred in performing the study. The public utility must base study costs on the scope of work determined and documented in the feasibility study agreement, the system impact study agreement, or the facilities study agreement, as applicable. The estimated engineering costs used in calculating study costs must not exceed $100 per hour. A public utility may adjust the $100 hourly rate once in January of each year to account for inflation and deflation as measured by the Consumer Price Index. Before beginning a study, a public utility may require an applicant to pay a deposit of up to 50 percent of the estimated costs to perform the study or $1000, whichever is less.

(2) Interconnection facilities. For interconnection review under Tier 4, a public utility must identify the interconnection facilities necessary to safely interconnect the small generator facility with the public utility’s transmission or distribution system. The applicant must pay the reasonable costs of the interconnection facilities. The public utility constructs, owns, operates, and maintains the interconnection facilities.

(3) Interconnection equipment. An applicant or interconnection customer must pay all expenses associated with constructing, owning, operating, maintaining, repairing, and replacing its interconnection equipment. Interconnection equipment is constructed, owned, operated, and maintained by the applicant or interconnection customer.

(4) System upgrades. A public utility must design, procure, construct, install, and own any system upgrades to the public utility’s transmission or distribution system necessitated by the interconnection of a small generator facility. A public utility must identify any adverse system impacts on an affected system caused by the interconnection of a small generator facility to the public utility’s transmission or distribution system. The public utility must determine what actions or upgrades are required to mitigate these impacts. Such mitigation measures are

considered system upgrades as defined in these rules. The applicant must pay the reasonable costs of any system upgrades.
(5) A public utility may not begin work on interconnection facilities or system upgrades before an applicant receives the public utility's good-faith, non-binding cost estimate and provides written notice to the public utility that the applicant accepts the estimate and agrees to pay the costs. A public utility may require an applicant to pay a deposit before beginning work on the interconnection facilities or system upgrades.
(a) If an applicant agrees to make progress payments on a schedule established by the applicant and the interconnecting public utility, then the public utility may require the applicant to pay a deposit of up to 25 percent of the estimated costs or $10,000, whichever is less. The public utility and the applicant must agree on progress billing, final billing, and payment schedules before the public utility begins work.
(b) If an applicant does not agree to make progress payments, then the public utility may require the applicant to pay a deposit of up to 100 percent of the estimated costs. If the actual costs are lower than the estimated costs, then the public utility must refund the unused portion of the deposit to the applicant within 20 business days after the actual costs are determined.
Statutory/Other Authority: ORS 183, 756 & 757

Statutes/Other Implemented: ORS 756.040 & 756.060
History:
PUC 10-2009, f. & cert. ef. 8-26-09

860-082-0040
Insurance(1) A public utility may not require an applicant or an interconnection customer with a small generator facility with a nameplate ~~capacity~~rating of 200 kilowatts or less to obtain liability insurance in order to interconnect with the public utility's transmission or distribution system.
(2) A public utility may require an applicant or an interconnection customer with a small generator facility with a nameplate ~~capacity~~rating greater than 200 kilowatts to obtain prudent amounts of general liability insurance in order to interconnect to the public utility's transmission or distribution system.
Statutory/Other Authority: ORS 183, 756 & 757
Statutes/Other Implemented: ORS 756.040 & 756.060
History:
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860-082-0045
Tier 1 Interconnection Review
(1) A public utility must use the Tier 1 review procedures ~~for~~when an applicant submits an application to interconnect a small generator facility that meets the following requirements:
(a) The small generator facility must have an export capacity not greater than 25 kilowatts, a nameplate rating not greater than 50 kilowatts, and use ~~lab-tested,~~a UL 1741 certified inverter~~-based interconnection equipment;~~; and
(b) The small generator facility must ~~have a nameplate capacity of 25 kilowatts or less; and~~
~~(c) The small generator facility must~~ not be interconnected to a transmission line, or an area network.

(2) Tier 1 Approval Criteria. A public utility must approve an application for interconnection under the Tier 1 interconnection review procedures if the small generator facility meets the approval criteria in subsections (a) through (e). A public utility may not impose different or additional approval criteria.
(a) A Tier 1 small generator facility interconnection must use existing public utility facilities.
(b) Substation transformer backfeed screen. Where existing protective devices and equipment cannot adequately support backfeed, the aggregated export capacity on the substation transformer must be less than 80 percent of the relevant minimum load for the substation transformer.
(c) Penetration Screen for interconnection ~~of a small generator facility~~ to a radial distribution circuit~~, the aggregated nameplate~~.
(A) If 12 months of minimum load data (including onsite load but not station service load served by the proposed small generator facility) are available for the line section, the aggregated export capacity on the line section is less than 90 percent of the relevant minimum load for all line sections bounded by automatic sectionalizing devices upstream of the proposed small generator facility;
(B) If 12 months of minimum load data (including onsite load but not station service load served by the proposed small generator facility) are not available for line section, the aggregated export capacity on the circuit is less than 90 percent of the relevant minimum load for the feeder;
(C) If minimum load data are not available for the line section or the circuit, the aggregated export capacity on the circuit must not exceed 15 percent of the line section annual peak load as most recently measured at the substation or calculated for the line section.
~~(c)~~(d) Network Screen. For interconnection of a small generator facility ~~to the load side of~~within a spot network~~ protectors~~, the ~~aggregated~~aggregate nameplate ~~capacity on the load side~~rating may not exceed 20 percent of the spot network ~~protectors must not exceed~~ or area network's anticipated minimum load. The public utility may select any of the following methods to determine anticipated minimum load:
(A) The spot network's measured minimum load in the previous year, if available;
(B) Five percent of ~~a~~the spot ~~network's~~network's maximum load ~~or 50 kilowatts, whichever is less.~~in the previous year;
~~(d)~~(C) The applicant's good faith estimate, if provided; or
(D) The public utility's good faith estimate if provided in writing to the applicant along with the reasons why the public utility considered the other methods to estimate minimum load inadequate.
(e) Single-Phase Shared Secondary Screen. For interconnection of a small generator facility to a single-phase shared secondary line, the aggregated ~~nameplate~~export capacity on the ~~line~~shared secondary must not exceed ~~20 kilowatts~~65 percent of the transformer nameplate power rating.
(~~e)~~f) Service Imbalance Screen. For interconnection of a single-phase small generator facility to the center tap neutral of a 240-volt service line, the addition of the small generator facility must not create a current imbalance between the two sides of the 240-volt service line of more than 20 percent of the nameplate power rating of the service transformer.
(3) In addition to the timelines and requirements in OAR 860-082-0025, the public utility must provide written notice to the applicant stating whether the small generator facility meets the Tier 1 approval criteria no later than 15 business days from the date a Tier 1 interconnection application is deemed complete. If a public utility does not notify an applicant whether the

interconnection is approved or denied within 20 business days after the application, is deemed complete, the interconnection will be deemed approved.
~~(4) The interconnection process is not complete until:~~
~~(a) The public utility approves the application;~~
(4) Interconnection after passing screens. If the proposed interconnection passes the screens, the public utility must follow the requirements in OAR 860-082-0025(7)(f).
(5) Approval despite screen failure. Despite the failure of one or more screens, the public utility, at its sole option, may approve the interconnection provided such approval is consistent with safety and reliability. If the public utility determines that the small generator facility can be interconnected safely if minor modifications to the transmission or distribution system were made (for example, changing meters, fuses, or relay settings), then the public utility must offer the applicant a good-faith, non-binding estimate of the costs of such proposed minor modifications. Modifications are not considered minor under this subsection if the total cost of the modifications exceeds $10,000. If the applicant authorizes the public utility to proceed with the minor modifications and agrees to pay the entire cost of the modifications, then the public utility must approve the application~~(b~~.
(6) Process after screen failure. If the public utility cannot determine that the small generator facility may nevertheless be interconnected consistent with safety, reliability, and power quality standards, at the time the public utility notifies the applicant of the Tier 1 review results, the public utility must provide the applicant with:
(a) The screen results including specific information on the reason(s) for failure in writing using a standard format approved by the Commission; and
(b) An executable Supplemental Review Agreement.
(c) In addition, the public utility must allow the applicant to select one of the following, at the applicant's option:
(A) Request an applicant options meeting;
(B) Undergo supplemental review in accordance with OAR 860-082-0063; or
(C) Continue evaluating the application under Tier 4.
The applicant must notify the public utility of its selection within 10 business days or the application will be deemed withdrawn.
(7) Applicant options meeting. If the applicant requests an applicant options meeting, the public utility will offer to convene a meeting at a mutually agreeable time within 15 business days of the applicant's request. At the applicant options meeting with the public utility, there will be an opportunity to review possible small generator facility modifications, opportunity to designate a different RPA, and opportunity to review the screen analysis and related results, to determine what further steps are needed to permit the small generator facility to be connected safely and reliably.
(8) The interconnection process is not complete until:
(a) The witness test, if conducted by the public utility, is successful; and
~~(c~~

(b) The applicant and public utility execute a certificate of completion. The certificate of completion must follow the standard form certificate developed by the public utility and approved by the Commission.
~~(5) If a small generator facility is not approved under the Tier 1 interconnection review procedure, then the applicant may submit a new application under the Tier 2, Tier 3, or Tier 4~~

~~review procedures. At the applicant's request, the public utility must provide a written explanation of the reasons for denial within five business days of the request.~~
Statutory/Other Authority: ORS 183, 756 & 757
Statutes/Other Implemented: ORS 756.040 & 756.060
History:
PUC 10-2009, f. & cert. ef. 8-26-09

860-082-0050
Tier 2 Interconnection Review
(1) A public utility must use the Tier 2 interconnection review procedures ~~for~~when an applicant submits an application requesting Tier 2 review to interconnect a small generator facility that meets the following requirements:
(a) The small generator facility does not qualify for ~~or failed to meet~~ the Tier 1 interconnection review~~ requirements~~;
(b) If the small generator facility ~~must have a nameplate~~is inverter-based, the small generator facility's export capacity does not exceed the limits identified in the table below, which vary according to the voltage of ~~two megawatts or less;~~the line at the proposed point of interconnection.
~~(c)~~

Line Voltage	Export Capacity for Tier 2 Eligibility	
	Regardless of location	On > 600 amp line and < 2.5 line miles from substation
< 5 kV	< 1 MW	< 2 MW
5 kV – 14 kV	< 2 MW	< 3 MW
15 kV – 30 kV	< 3 MW	< 4 MW
31 kV – 69 kV	< 4 MW	< 5 MW

Inverter-based small generator facilities located within 2.5 line miles of a substation and on a main distribution line with minimum 600-amp capacity are eligible for Tier 2 interconnection under higher thresholds:
(A) If the small generator facility ~~must be interconnected to either a radial distribution circuit or a spot network distribution circuit limited to serving one customer~~is not inverter-based, the small generator facility's export capacity is two megawatts or less;
(~~d~~B) The small generator facility must not ~~be interconnected~~interconnect to a transmission line, or area network; and
(~~e~~C) The small generator facility must use interconnection equipment that is either lab-tested equipment or field-tested equipment. For equipment to gain status as field-tested equipment, the applicant must provide all the documentation from the prior ~~Tier 4 study, review, and~~public utility approval~~,~~ including any interconnection studies and the certificate of completion.
(2) Tier 2 Approval Criteria. A public utility must approve an application to interconnect a small generator facility under the Tier 2 interconnection review procedures if the facility meets the approval criteria in subsections (a) through (l). A public utility may not impose different or additional approval criteria.
(a) Substation transformer backfeed screen. Where existing protective devices and equipment cannot adequately support backfeed, the aggregated export capacity on the substation

transformer must be less than 80 percent of the relevant minimum load for the substation transformer.
(b) Penetration Screen for interconnection ~~of a small generator facility~~ to a radial distribution circuit~~, the aggregated nameplate~~.
(A) If 12 months of minimum load data (including onsite load, but not station service load served by the proposed small generator facility) are available for the line section, the aggregated export capacity on the line section is less than 90 percent of the relevant minimum load for all line sections bounded by automatic sectionalizing devices upstream of the proposed small generator facility;
(B) If 12 months of minimum load data (including onsite load but not station service load served by the proposed small generator facility) are not available for line section, the aggregated export capacity on the circuit is less than 90 percent of the relevant minimum load for the feeder;
(C) If minimum load data are not available for the line section or the circuit, the aggregated export capacity on the circuit must not exceed 15 percent of the line section annual peak load as most recently measured at the substation or calculated for the line section.
~~(b)~~(c) Network Screen. For interconnection of a small generator facility ~~to the load side of~~within a spot network~~ protectors~~, the ~~aggregated~~aggregate nameplate ~~capacity on the load side of the spot network protectors must~~rating may not exceed ~~the lesser of five~~20 percent of ~~a spot network's~~the spot network's anticipated relevant minimum load. The public utility may select any of the following methods to determine anticipated minimum load:
(A) The spot network's measured minimum load in the previous year, if available;
(B) Five percent of the spot network's maximum load in the previous year;
(C) The applicant's good faith estimate, if provided; or~~ 50 kilowatts.~~
~~(c) The aggregated nameplate capacity must~~(D) The public utility's good faith estimate if provided in writing to the applicant along with the reasons why the public utility considered the other methods to estimate minimum load inadequate.
(d) Fault Current Screen. The small generator facility, aggregated with other generation on the distribution circuit, will not contribute more than 10 percent to the distribution circuit's maximum fault current at the point on the primary voltage distribution line nearest the point of interconnection.
(~~d)~~e) Short-Circuit Interrupting Capability Screen. The aggregated nameplate ~~capacity~~rating on the distribution circuit must not cause any distribution protective devices and equipment (including substation breakers, fuse cutouts, and line reclosers) or other public utility equipment on the transmission or distribution system to be exposed to fault currents exceeding 90 percent of the short circuit interrupting capability. The small generator facility's point of interconnection must not be located on a circuit that already exceeds 90 percent of the short circuit interrupting capability.
~~(e) The aggregated nameplate capacity on~~(f) Transient Stability Screen. The small generator facility's nameplate rating, in aggregate with other small generator facilities interconnected to the distribution side of a substation transformer feeding the circuit where the small generator facility proposes to interconnect must not exceed 10 megawatts in an area where there are known or posted transient stability limitations to generating units located in the general electrical vicinity (for example, three or four distribution busses from the point of interconnection).
~~(f) If~~(g) Line Configuration Screen. Using the ~~small generator facility~~table below, determine the type of interconnection ~~is~~ to a primary ~~line on the~~ distribution ~~system, then~~line. This screen

includes a review of the ~~interconnection must meet~~ type of electrical service provided to the ~~following criteria:~~
~~(A) If the small generator facility is three-phase or single-phase~~project, including line configuration and ~~will be connected to a three-phase, three-wire primary line, then~~the transformer connection to limit the ~~small generator facility must be connected phase-to-phase.~~
~~(B) If the small generator facility is three-phase or single-phase and will be connected~~potential for creating over-voltages on the interconnecting public utility's electric power system due to a ~~three-phase, four-wire primary line, then~~loss of ground during the ~~small generator facility must be connected line-to-neutral and effectively grounded.~~operating time of any anti-islanding function
~~(g)~~

Primary Distribution Line Type	Type of Interconnection to Primary Distribution Line Required To Pass Screen
Three-phase, three-wire	Interface connection transformer high side is phase-to-phase
Three-phase, four-wire	For single phase generation, the interface connection transformer high side is phase-to-neutral; For three-phase inverter-based generation, the interface connection transformer is (1) Yg-yg, or (2) Yg-delta with a relay on the transformer high side that can detect faults; or For three-phase rotating generation, the small generator facility high side is connected phase-to-neutral and effectively grounded.
Three-phase, four-wire or mixed three-wire and four-wire	The public utility will extend the neutral wire to the point of interconnection and treat the small generator facility as an interconnection to a three-phase, four-wire system.

(h) Single-Phase Shared Secondary Screen. For interconnection of a small generator facility to a single-phase shared service line on the transmission or distribution system, the aggregated ~~nameplate~~export capacity on the shared secondary ~~line~~ must not exceed ~~20 kilowatts~~65 percent of the transformer nameplate power rating.
~~(h)~~(i) Service Imbalance Screen. For interconnection of a single-phase small generator facility to the center tap neutral of a 240-volt service line, the addition of the small generator facility must not create a current imbalance between the two sides of the 240-volt service line of more than 20 percent of the nameplate power rating of the service transformer.
(~~i~~j) Except as provided in subsection (~~2)(l~~4), the interconnection of the small generator facility must not require system upgrades or interconnection facilities different from or in addition to the applicant’s proposed interconnection equipment.
~~(j) The aggregated nameplate capacity, in combination with exiting transmission loads, must not cause the transmission system circuit directly connected to the distribution circuit where the small generator facility interconnection is proposed to exceed its design capacity.~~

(k) If the public utility's distribution circuit uses high speed reclosing with less than two seconds of interruption, then the small generator facility must not be a synchronous machine. If the small generator facility is a synchronous machine, then the applicant must submit a Tier 4 application. ~~(l) If the small generator facility fails to meet one or more of the criteria in subsections (2)(a) through (k), but the public utility determines that the small generator facility could be interconnected safely if minor modifications to the transmission or distribution system were made (for example, changing meters, fuses, or relay settings), then the public utility must offer the applicant a good-faith, non-binding estimate of the costs of such proposed minor modifications.~~ (l) Inadvertent Export Screen. For interconnection of a proposed small generator facility that can introduce inadvertent export, where the nameplate rating minus the export capacity is greater than 250 kilowatts, the following inadvertent export screen is required. With a power change equal to the nameplate rating minus the export capacity, the change in voltage at the point on the medium voltage (primary) level nearest the point of interconnection does not exceed three percent. Voltage change will be estimated applying the following formula:

$$\frac{(\mathbf{R_{SOURCE}} \times \Delta\mathbf{P}) - (\mathbf{X_{SOURCE}} \times \Delta\mathbf{Q})}{\mathbf{V^2}}$$

Where:

$$\Delta\mathbf{P} = (\textbf{DER apparent power Nameplate Rating} - \textbf{Export Capacity}) \times \mathbf{PF},$$

$$\Delta\mathbf{Q} =$$

$$(\textbf{DER apparent power Nameplate Rating} - \textbf{Export Capacity}) \times \sqrt{(1 - \mathbf{PF^2})},$$

$\mathbf{R_{SOURCE}}$ **is the grid resistance,** $\mathbf{X_{SOURCE}}$ **is the grid reactance,**
V is the grid voltage, PF is the power factor

~~Modifications are not considered minor under this subsection if the total cost of the modifications exceeds $10,000. If the applicant authorizes the public utility to proceed with the minor modifications and agrees to pay the entire cost of the modifications, then the public utility must approve the application under Tier 2.~~

(3) Timelines. In addition to the timelines and requirements in OAR 860-082-0025, and if a net metering facility, OAR 860-039, the following timelines and requirements apply to Tier 2 interconnection reviews:

~~(a) A public utility must schedule a scoping meeting within 10 business days after notifying an applicant that its application is complete. The public utility and the applicant may agree to waive the scoping meeting requirement.~~

~~(b~~(a) Within 20 business days after a public utility notifies an applicant that its application is complete ~~or a scoping meeting is held, whichever is later~~, the public utility must:

(A) Evaluate the application using the Tier 2 approval criteria in section (2);

(B) Review any independent analysis of the proposed interconnection provided by the applicant that was performed using the Tier 2 approval criteria; and

(C) Provide written notice to the applicant stating whether the public utility approved the application. If the proposed interconnection passes the screens, the public utility must follow the requirements in OAR 860-082-0025(7)(f). If applicable, the public utility must include a comparison of its evaluation to the applicant's independent analysis.

(4) Approval despite screen failure. Despite the failure of one or more screens, the public utility, at its sole option, may approve the interconnection provided such approval is consistent with safety and reliability. If the public utility determines that the small generator facility could be interconnected safely if minor modifications to the transmission or distribution system were made (for example, changing meters, fuses, or relay settings), then the public utility must offer the applicant a good-faith, non-binding estimate of the costs of such proposed minor modifications. Modifications are not considered minor under this subsection if the total cost of the modifications exceeds $10,000. If the applicant authorizes the public utility to proceed with the minor modifications and agrees to pay the entire cost of the modifications, then the public utility must approve the application.
(5) Process after screen failure. If the public utility cannot determine that the small generator facility may nevertheless be interconnected consistent with safety and reliability standards, at the time the public utility notifies the applicant of the Tier 2 review results, the public utility must provide the applicant with:
(a) The screen results, including specific information on the reason(s) for failure in writing using a standard format approved by the Commission; and
(b) An executable Supplemental Review Agreement.
(c) In addition, the public utility must allow the applicant to select one of the following, at the applicant's option:
(A) Request an applicant options meeting;
(B) Undergo supplemental review in accordance with OAR 860-082-0063; or
(C) Continue evaluating the application under Tier 4.
The applicant must notify the public utility of its selection within 10 business days or the application will be deemed withdrawn.
(6) Applicant options meeting. If the applicant requests an applicant options meeting, the public utility must offer to convene a meeting at a mutually agreeable time within 15 business days of the applicant's request. At the applicant options meeting with the public utility there will be an opportunity to review possible small generator facility modifications or the screen analysis, opportunity to designate a different RPA and related results, to determine what further steps are needed to permit the small generator facility to be connected safely and reliably.
(7) The interconnection process is not complete until:
(a) The public utility approves the application;
~~(4) The interconnection process is not complete until:~~
~~(a) The public utility approves the application;~~
(b) Any minor modifications to the transmission or distribution system required under subsection ~~(2)(1~~ (4) are complete;
(c) The witness test, if conducted by the public utility, is successful; and
(d) The applicant and public utility execute a certificate of completion. The certificate of completion must follow the standard form certificate developed by the public utility and approved by the Commission.
~~(5) If a small generator facility is not approved under the Tier 2 interconnection review procedure, then the applicant may submit a new application under the Tier 3 or Tier 4 review procedures. At the applicant's request, the public utility must provide a written explanation of the reasons for denial within five business days of the request.~~
Statutory/Other Authority: ORS 183, 756 & 757
Statutes/Other Implemented: ORS 756.040 & 756.060

History:
PUC 10-2009, f. & cert. ef. 8-26-09

860-082-0055
Tier 3 Interconnection Review
(1) A public utility must use the Tier 3 interconnection review procedures ~~for~~when an applicant submits an application requesting Tier 3 review to interconnect a small generator facility that meets the following requirements:
(a) The small generator facility ~~does not qualify for or failed to meet the Tier 1 or Tier 2 interconnection review requirements;~~
~~(b) The small generator facility~~ must have a nameplate ~~capacity~~rating of 10 megawatts or less;
(b) The small generator facility must not be connected to a transmission line;
(c) The small generator facility must not ~~be connected to a transmission line;~~
~~(d) The small generator facility must not~~ export power beyond the point of interconnection; and
(~~e~~d) The small generator facility must use low forward power relays or other protection functions that prevent power flow onto the area network.
(2) Tier 3 Approval Criteria. A public utility must approve an application to interconnect a small generator facility under the Tier 3 interconnection review procedures if the small generator facility meets the Tier 2 approval criteria in OAR 860 082 0050(2)(a~~) (h), (j)~~), (b), (i), and the additional approval criteria in subsections (a), (b), or (c) of this section. A public utility may not impose different or additional approval criteria.
(a) For a small generator facility to interconnect to the load side of an area network distribution circuit, the small generator facility must meet the following criteria:
(A) The nameplate ~~capacity~~rating of the small generator facility must be 50 kilowatts or less;
(B) The small generator facility must use lab-tested, inverter-based interconnection equipment;
(C) The aggregated nameplate ~~capacity~~rating on the area network must not exceed five percent of an area network's maximum load or 50 kilowatts, whichever is less; and
(D) Except as allowed in subsection (2)(c), the interconnection of the small generator facility must not require system upgrades or interconnection facilities different from or in addition to the applicant's proposed interconnection equipment.
(b) For a small generator facility to interconnect to a distribution circuit that is not networked, the small generator facility must meet the following criteria:
(A) The ~~small generator facility must have a nameplate capacity of 10 megawatts or less;~~
~~(B) The~~ aggregated nameplate ~~capacity~~rating on the circuit must be 10 megawatts or less;
~~(C) The small generator facility must not export power beyond the point of interconnection;~~
~~(D~~(B) The small generator facility's point of interconnection must be to a radial distribution circuit;
(~~E~~C) The small generator facility must not be served by a shared transformer;
(~~F~~D) Except as allowed in subsection (2)(c), the interconnection of the small generator facility must not require system upgrades or interconnection facilities different from or in addition to the applicant's proposed interconnection equipment; and
(~~G~~E) If the public utility's distribution circuit uses high speed reclosing with less than two seconds of interruption, then the small generator facility must not be a synchronous machine. If the small generator facility is a synchronous machine, then the applicant must submit a Tier 4 application.

(c) If the small generator facility fails to meet one or more of the Tier 3 approval requirements, but the public utility determines that the small generator facility could be interconnected safely if minor modifications to the transmission or distribution system were made (for example, changing meters, fuses, or relay settings), then the public utility must offer the applicant a good-faith, non-binding estimate of the costs of such proposed minor modifications. Modifications are not considered minor under this subsection if the total cost of the modifications exceeds $10,000. If the applicant authorizes the public utility to proceed with the minor modifications and agrees to pay the entire cost of the modifications, then the public utility must approve the application under Tier 3.

(3) In addition to the timelines and requirements in OAR 860-082-0025, the following timelines and requirements apply to Tier 3 interconnection reviews:

(a) An interconnecting public utility must schedule a scoping meeting within 10 business days after notifying an applicant that its application is complete. ~~The public utility and~~ The applicant may agree to waive the scoping meeting requirement.

(b) Within 20 business days after a public utility notifies an applicant its application is complete or a scoping meeting is held, whichever is later, the public utility must:

(A) Evaluate the application using the Tier 3 approval criteria;

(B) Review any independent analysis of the proposed interconnection provided by the applicant that was performed using the Tier 3 approval criteria; and

(C) Provide written notice to the applicant stating whether the public utility approved the application. If the proposed interconnection passes the screens, the public utility must follow the requirements in OAR 860-082-0025(7)(f). If applicable, the public utility must include a comparison of its evaluation to the applicant's independent evaluation.

~~(4~~(4) Approval despite screen failure. Despite the failure of one or more screens, the public utility, at its sole option, may approve the interconnection provided such approval is consistent with safety and reliability.

(5) Process after screen failure. If the public utility cannot determine that the small generator facility may nevertheless be interconnected consistent with safety and reliability standards, at the time the public utility notifies the applicant of the Tier 3 review results, the public utility must provide the applicant with:

(a) The screen results, including specific information on the reason(s) for failure in writing using a standard format approved by the Commission; and

(b) An executable Supplemental Review Agreement.

(c) In addition, the public utility will allow the applicant to select one of the following, at the applicant's option:

(A) Request an applicant options meeting;

(B) Undergo supplemental review in accordance with OAR 860-082-0063; or

(C) Continue evaluating the application under Tier 4.

The applicant must notify the public utility of its selection within 10 business days or the application will be deemed withdrawn

(6) Applicant options meeting. If the applicant requests an applicant options meeting, the public utility must offer to convene a meeting at a mutually agreeable time within 15 business days of the applicant's request. At the applicant options meeting with the public utility there will be an opportunity to review possible small generator facility modifications, opportunity to designate a different RPA, or the screen analysis and related results, to determine what further steps are needed to permit the small generator facility to be connected safely and reliably.

(7) The interconnection process is not complete until:
(a) The public utility approves the application;
(b) Any minor modifications to the transmission or distribution system required under subsection (2)(c) are complete;
(c) The witness test, if conducted by the public utility, is successful; and
(d) The applicant and public utility execute a certificate of completion. The certificate of completion must follow the standard form certificate developed by the public utility and approved by the Commission.
~~(5) If a small generator facility is not approved under the Tier 3 interconnection review procedures, then the applicant may submit a new application under the Tier 4 review procedures. At the applicant's request, the public utility must provide a written explanation of the reasons for denial within five business days of the request.~~
Statutory/Other Authority: ORS 183, 756 & 757
Statutes/Other Implemented: ORS 756.040 & 756.060
History:
PUC 10-2009, f. & cert. ef. 8-26-09

860-082-0060
Tier 4 Interconnection Review
(1) A public utility must use the Tier 4 interconnection review procedures ~~for~~when an applicant submits an application requesting Tier 4 review to interconnect a small generator facility ~~that meets~~meeting the following ~~requirements~~:
(a) The small generator facility ~~does not qualify for or failed to meet the Tier 1, Tier 2, or Tier 3 interconnection review requirements; and~~
~~(b) The small generator facility~~ must have a nameplate ~~capacity~~rating of 10 megawatts or less.
(b) An applicant whose Tier 1, Tier 2, or Tier 3 application was denied may request that the public utility treat that existing application already in the public utility's possession as a new Tier 4 application. Within ten business days of receipt of the applicant's request to use the existing application, the public utility will transfer the existing application to the Tier 4 process and notify the applicant whether or not the application is complete. If the application is incomplete, the public utility must provide a written list detailing all information that the applicant must provide to complete the application. The applicant will have ten business days after receipt of the list to submit the listed information. Otherwise, the application will be deemed withdrawn. The public utility must notify the applicant within ten business days of receipt of the revised application whether the revised application is complete or incomplete. The public utility may deem the application withdrawn if it remains incomplete.
(2) A public utility must approve an application to interconnect a small generator facility under the Tier 4 interconnection review procedures if the public utility determines that the safety and reliability of the public utility's transmission or distribution system will not be compromised by interconnecting the small generator facility. The applicant must pay the reasonable costs of any interconnection facilities or system upgrades necessitated by the interconnection.
(3) In addition to the timelines and requirements in OAR 860-082-0025, the timelines and requirements in sections (5) through (12) of this rule apply to Tier 4 interconnection reviews.
(4) A public utility and an applicant may agree to waive the requirement for a scoping meeting~~,~~ ~~the feasibility study,~~ the system impact study, or the facilities study. The applicant may waive the requirement for a feasibility study.

(5) A public utility must schedule a scoping meeting within 10 business days after notifying an applicant that its application is complete.
(a) The public utility and the applicant must bring to the scoping meeting all personnel, including system engineers, as may be reasonably required to accomplish the purpose of the meeting.
(b) The public utility and applicant must discuss whether the public utility should perform a feasibility study or proceed directly to a system impact study, a facilities study, or an interconnection agreement.
(c) If the public utility determines that no studies are necessary, then the public utility must ~~approve the application within 15 business days of the scoping meeting~~must follow the requirements in OAR 860-082-0025(7)(f) if:
(A) The application meets the criteria in section (2); and
(B) The interconnection of the small generator facility does not require system upgrades or interconnection facilities different from or in addition to the applicant's proposed interconnection equipment.
(d) If the public utility determines that no studies are necessary and that the small generator facility could be interconnected safely if minor modifications to the transmission or distribution system were made (for example, changing meters, fuses, or relay settings), then the public utility must offer the applicant a good-faith, non-binding estimate of the costs of such proposed minor modifications. Modifications are not considered minor under this subsection if the total cost of the modifications exceeds $10,000. If the applicant authorizes the public utility to proceed with the minor modifications and agrees to pay the entire cost of the modifications, then the public utility must ~~approve the application~~send the applicant an executed interconnection agreement within 15 business days of receipt of the applicant's agreement to pay for the minor modifications.
(6) If ~~a public utility reasonably concludes that an adequate evaluation of an application requires~~the applicant requests a feasibility study~~, then~~ the public utility must provide the applicant with an executable feasibility study agreement within five business days of the date of the scoping meeting.
(a) The feasibility study agreement must include a detailed scope for the feasibility study, a reasonable schedule for completion of the study, and a good-faith, non-binding estimate of the costs to perform the study.
(b) The feasibility study agreement must follow the standard form agreement developed by the public utility and approved by the Commission.
(c) The applicant must execute the feasibility study agreement within 15 business days of receipt of the agreement or the application is deemed withdrawn.
(d) The public utility must make reasonable, good-faith efforts to follow the schedule set forth in the feasibility study agreement for completion of the study.
(e) The feasibility study must identify any potential adverse system impacts on the public utility's transmission or distribution system or an affected system that may result from the interconnection of the small generator facility. In determining possible adverse system impacts, the public utility must consider the aggregated nameplate rating or export capacity when applicable of all generating facilities that, on the date the feasibility study begins, are directly interconnected to the public utility's transmission or distribution system, have a pending completed application to interconnect with a higher queue position, or have an executed interconnection agreement with the public utility.

(f) The public utility must evaluate multiple potential points of interconnection at the applicant's request. The applicant must pay the costs of this additional evaluation.
(g) The public utility must provide a copy of the feasibility study to the applicant within five business days of the study's completion.
(h) If the feasibility study identifies any potential adverse system impacts, then the public utility must perform a system impact study.
(i) If the feasibility study does not identify any adverse system impacts, then the public utility must perform a facilities study if the public utility reasonably concludes that a facilities study is necessary to adequately evaluate the application.
(A) If the public utility concludes that a facilities study is not required, then the public utility must approve the application~~ with 15 business days of completion of the feasibility study~~ if the application meets the criteria in section (2) and the interconnection of the small generator facility does not require system upgrades or interconnection facilities different from or in addition to the applicant's proposed interconnection equipment.
(B) If the public utility concludes that a facilities study is not required and that the small generator facility could be interconnected safely if minor modifications to the transmission or distribution system were made (for example, changing meters, fuses, or relay settings), then the public utility must offer the applicant a good-faith, non-binding estimate of the costs of such proposed minor modifications. Modifications are not considered minor under this subsection if the total cost of the modifications exceeds $10,000. If the applicant authorizes the public utility to proceed with the minor modifications and agrees to pay the entire cost of the modifications, then the public utility must approve the application~~ within 15 business days of receipt of the applicant's agreement to pay for the minor modifications~~.
(7) If a public utility is required to perform a system impact study under subsection (6)(h), or if an applicant and a public utility agree in the scoping meeting to waive the feasibility study and proceed directly to the system impact study, then the public utility must provide the applicant with an executable system impact study agreement within five business days of completing the feasibility study or from the date of the scoping meeting, whichever is applicable.
(a) The system impact study agreement must include a detailed scope for the system impact study, a reasonable schedule for completion of the study, and a good-faith, non-binding estimate of the costs to perform the study.
(b) The system impact study agreement must follow the standard form agreement developed by the public utility and approved by the Commission.
(c) The applicant must execute the system impact study agreement within 15 business days of receipt of the agreement or the application is deemed withdrawn.
(d) The public utility must make reasonable, good-faith efforts to follow the schedule set forth in the system impact study agreement for completion of the study.
(e) The system impact study must identify and detail the impacts on the public utility's transmission or distribution system or on an affected system that would result from the interconnection of the small generator facility if no modifications to the small generator facility or system upgrades were made. The system impact study must include evaluation of the adverse system impacts identified in the feasibility study and in the scoping meeting.
(f) In determining possible adverse system impacts, the public utility must consider the aggregated nameplate rating, or export capacity when applicable, of all generating facilities that, on the date the system impact study begins, are directly interconnected to the public utility's transmission or distribution system, have a pending completed application to interconnect with a

higher queue position, or have an executed interconnection agreement with the public utility. If the small generator facility limits export pursuant to OAR 860-082-0033, the system impact study must use export capacity instead of the nameplate rating, except when assessing fault current contribution. To assess fault current contribution, the system impact study must use the rated fault current if the customer provides the relevant information, or provide a written explanation for cases where they do not want to rely on customer-provided data. An example of customer-provided data would include provision of manufacturer test data (pursuant to the fault current test described in IEEE 1547.1-2020 clause 5.18) showing that the fault current is independent of the nameplate rating. The public utility must provide an explanation for any cases where they do not want to rely on customer-provided data.

(g) The system impact study must include:

(A) A short circuit analysis;

(B) A stability analysis;

(C) A power flow analysis;

(D) Voltage drop and flicker studies;

(E) Protection and set point coordination studies;

(F) Grounding reviews;

(G) The underlying assumptions of the study;

(H) The results of the analyses; and

(I) Any potential impediments to providing the requested interconnection service.

(h) If an applicant provides an independent system impact study to the public utility, then the public utility must evaluate and address any alternative findings from that study.

(i) The public utility must provide a copy of the system impact study to the applicant within five business days of completing the study.

(j) If a public utility determines in a system impact study that interconnection facilities or system upgrades are necessary to safely interconnect a small generator facility, then the public utility must perform a facilities study.

(k) If the public utility determines that no interconnection facilities or system upgrades are required, and the public utility concludes that the application meets the criteria in section (2), then the public utility must approve the application with 15 business days of completion of the system impact study.

(l) If the public utility determines that no interconnection facilities or system upgrades are required and that the small generator facility could be interconnected safely if minor modifications to the transmission or distribution system were made (for example, changing meters, fuses, or relay settings), then the public utility must offer the applicant a good-faith, non-binding estimate of the costs of such proposed minor modifications. Modifications are not considered minor under this subsection if the total cost of the modifications exceeds $10,000. If the applicant authorizes the public utility to proceed with the minor modifications and agrees to pay the entire cost of the modifications, then the public utility must approve the application within 15 business days of the applicant’s agreement to pay for the minor modifications.

(8) If a public utility is required to perform a facilities study under subsection (6)(i) or 7(j), or if an applicant and a public utility agree in the scoping meeting to waive the system impact study and proceed directly to the facilities study, then the public utility must provide the applicant with an executable facilities study agreement within five business days of completing the system impact study or within five business days from the date of the scoping meeting, whichever is applicable.

(a) The facilities study agreement must include a detailed scope for the facilities study, a reasonable schedule for completion of the study, and a good-faith, non-binding estimate of the costs to perform the study.
(b) The facilities study agreement must follow the standard form agreement developed by the public utility and approved by the Commission.
(c) The applicant must execute the interconnection facilities study agreement within 15 business days after receipt of the agreement or the application is deemed withdrawn.
(d) The public utility must make reasonable, good-faith efforts to follow the schedule set forth in the facilities study agreement for completion of the study.
(e) The facilities study must identify the interconnection facilities and system upgrades required to safely interconnect the small generator facility and must determine the costs for the facilities and upgrades, including equipment, engineering, procurement, and construction costs. Design for any required interconnection facilities or system upgrades must be performed under the facilities study agreement. The public utility must also identify the electrical switching configuration of the equipment, including transformer, switchgear, meters, and other station equipment.
(f) The public utility may contract with a third-party consultant to complete the interconnection facilities and system upgrades identified in the facilities study. A public utility and an applicant may agree in writing to allow the applicant to hire a third-party consultant to complete the interconnection facilities and system upgrades, subject to public utility oversight and approval.
(g) The interconnection facilities study must include a detailed estimate of the time required to procure, construct, and install the required interconnection facilities and system upgrades.
(h) If the applicant agrees to pay for the interconnection facilities and system upgrades identified in the facilities study, then the public utility must approve the application ~~within 15 business days of the applicant's agreement~~.
(9) The public utility may contract with a third-party consultant to complete a feasibility study, system impact study, or facilities study. A public utility and an applicant may agree in writing to allow the applicant to hire a third-party consultant to complete a feasibility study, system impact study, or facilities study, subject to public utility oversight and approval.
(10) The interconnection process is not complete until:
(a) The public utility approves the application;
(b) Any interconnection facilities or system upgrades have been completed;
(c) Any minor modifications to the public utility's transmission or distribution system required under subsections (5)(d), 6(i)(B), or (7)(l) have been completed;
(d) The witness test, if conducted by the public utility, is successful; and
(e) The applicant and public utility execute a certificate of completion.
(11) If a small generator facility is not approved under the Tier 4 interconnection review procedures, then the public utility must provide a written explanation of the denial to the applicant.
Statutory/Other Authority: ORS 183, 756 & 757
Statutes/Other Implemented: ORS 756.040 & 756.060
History:
PUC 10-2009, f. & cert. ef. 8-26-09

860-082-~~0065~~0063
Supplemental Review
(1) To accept the offer of a supplemental review, the applicant must submit a signed copy of the

Supplemental Review Agreement and pay a supplemental review fee of $1,000, both within ten (10) business days of the offer. If the written agreement and fee have not been received within that timeframe, the Application will be deemed withdrawn unless the applicant has notified the public utility that they wish to continue being evaluated under the Tier 4 review procedures.

(2) Within 20 business days of an applicant's election to undergo supplemental review, the public utility must perform supplemental review using the screens set forth below, notify the applicant of the results, and include with the notification a written report of the analysis and data underlying the public utility's determinations under the screens.

(a) Supplemental Review Penetration Screen: Where 12 months of line section minimum load data (including onsite load, but not station service load served by the proposed small generator facility) are available, can be calculated, can be estimated from existing data, or can be determined from a power flow model, the aggregate export capacity on the feeder or line section is less than 100 percent of the relevant minimum load on the feeder. If minimum load data are not available, or cannot be calculated, estimated, or determined, the aggregated export capacity on the line section is less than 30 percent of the peak load for all line Sections bounded by automatic sectionalizing devices upstream of the proposed project.

(A) Load that is co-located with load-following, non-exporting, or export-limited projects should be appropriately accounted for. The public utility may take the impacts of non-export or export limited generation on the calculation of daytime minimum load when evaluating potential system impacts.

(B) The interconnecting public utility will not consider as part of the aggregate export capacity for purposes of this screen the export capacity of generators known to be already reflected in the minimum load data, including combined heat and power (CHP) facility capacity.

(b)Voltage and Power Quality Screen. In aggregate with existing generation on the line section:

(A) The voltage regulation on the line section can be maintained in compliance with relevant requirements under all system conditions;

(B) The voltage fluctuation is within acceptable limits as defined by IEEE Std 1547™;

(C) The harmonic levels meet IEEE 1547 limits at the Point of Interconnection; and

(D) Substation transformer backfeed screen. Where existing protective devices and equipment cannot adequately support backfeed, the aggregated export capacity on the substation transformer must be less than 80 percent of the relevant minimum load for the substation transformer.

(E) Supplemental Grounding Screen: If the project failed the Line Configuration Screen, apply this Supplemental Grounding Screen:

- i. For projects with a rotating machine, if effective grounding is maintained, the project passes the screen.
- ii. For projects with a three-phase inverter, apply one of the following screens:
    - I. If the line-to-neutral connected load on the feeder or line section is greater than 33 percent of peak load on the feeder or line-section, the project passes the screen.
    - II. If using a supplemental grounding software tool:
        1. If the tool determines that supplemental grounding is not required to maintain effective grounding, the project passes this screen.
        2. If the tool determines that supplemental grounding is required, the applicant must agree to modify the project to include supplemental grounding. If the applicant does not agree to modify the project, the project fails this screen.

iii. If using detailed hosting capacity analysis that incorporates evaluation of temporary overvoltage risk for inverters, the project passes the screen if the nameplate rating of the project is below the available hosting capacity at the Point of Interconnection.

If the project limits export pursuant to Section 860-082-0033 , the export capacity must be included in any analysis including power flow simulations.

(c) Safety and Reliability Screen. The location of the proposed small generator facility and the aggregate export capacity on the line section do not create impacts to safety or reliability that cannot be adequately addressed without application of the study process. If the project limits export pursuant to OAR 860-082-0033, the export capacity must be included in any analysis, including power flow simulations, except when assessing fault current contribution. To assess fault current contribution, the analysis must use the rated fault current; for example, the applicant may provide manufacturer test data (pursuant the fault current test described in IEEE 1547.1-2020 clause 5.18) showing that the fault current is independent of the nameplate rating. The interconnecting public utility may consider the following factors and others in determining potential impacts to safety and reliability in applying this screen:

(A) Whether the line section has significant minimum loading levels dominated by a small number of customers (i.e., several large commercial customers).

(B) Whether the loading along the line section is uniform or even.

(C) Whether the project is located in close proximity to the substation (i.e., less than 2.5 electrical circuit miles), and whether the line section from the substation to the Point of Interconnection is a Mainline rated for normal and emergency ampacity.

(D) Whether the project incorporates an adjustable time delay function to prevent reconnection of the generator to the system until system voltage and frequency are within normal limits for a prescribed time.

(E) Whether operational flexibility is reduced by the project, such that transfer of the line section(s) of the Project to a neighboring distribution circuit/substation may trigger overloads or voltage issues.

(F) Whether the project employs equipment or systems certified by a recognized standards organization to address technical issues such as, but not limited to, islanding, reverse power flow, or voltage quality.

(3) If the proposed interconnection passes the supplemental screens, the Application must be approved and the public utility will provide the applicant an executed Interconnection Agreement pursuant to the procedure set forth in OAR 860-082-0025(7)(e).

(4) After receiving an Interconnection Agreement executed by the public utility, the applicant must proceed under the terms of the applicable level of review under which the Application was initially studied.

(5) Applicants undergoing Supplemental Review will be able to access, review, and verify minimum load calculations except in cases where the minimum load data contain identifiable individual customer data.

860-082-0065

Recordkeeping and Reporting Requirements

(1) The public utility must maintain a record of the following information for at least two years:

(a) The number of complete small generator interconnection applications received;

(b) The time required to complete the review process for each application; and

(c) The reasons for the approval or denial of each application.

(2) For as long as an interconnection customer's small generator facility is interconnected to a public utility's transmission or distribution system, the interconnecting public utility must maintain copies of the interconnection application, interconnection agreement, and certificate of completion for the small generator facility. The public utility must provide a copy of the interconnection customer's records to the interconnection customer within 15 business days after receipt of a written request.
(3) The public utility must submit an annual report to the Commission summarizing the public utility's interconnection activities for the previous calendar year. The annual report must be filed by May 30 and must include the following information:
(a) The number of complete small generator interconnection applications received;
(b) The number of small generator facility interconnections completed;
(c) The types of small generator facilities applying for interconnection and the nameplate ~~capacity~~rating of the facilities;
(d) The location of completed and proposed small generator facilities by zip code;
(e) For each Tier 3 and Tier 4 small generator interconnection approval, the basic telemetry configuration, if applicable; and
(f) For each Tier 4 small generator interconnection approval:
(A) The interconnection facilities required to accommodate the interconnection of a small generator facility and the estimated costs of those facilities; and
(B) The system upgrades required to accommodate the interconnection of a small generator facility and the estimated costs of those upgrades.
Statutory/Other Authority: ORS 183, 756 & 757
Statutes/Other Implemented: ORS 756.040 & 756.060
History:
PUC 10-2009, f. & cert. ef. 8-26-09

860-082-0070
Metering and Monitoring
(l) The public utility must install, maintain, test, repair, operate, and replace any metering and data acquisition equipment necessary under the terms of the public utility's interconnection agreement, power purchase agreement, or power service agreement with an applicant or interconnection customer. The applicant or interconnection customer is responsible for all reasonable costs associated with the metering and data acquisition equipment. The public utility and the applicant or interconnection customer must have unrestricted access to such equipment as necessary to conduct routine business or respond to an emergency.
(2) Except as provided in subsection 3(b), a public utility may not require an applicant or interconnection customer with a small generator facility with a nameplate ~~capacity~~rating of less than three megawatts to provide or pay for the data acquisition or telemetry equipment necessary to allow the public utility to remotely monitor the small generator facility's electric output.
(3) At its discretion, a public utility may require an applicant or interconnection customer to pay for the purchase, installation, operation, and maintenance of the data acquisition or telemetry equipment necessary to allow the public utility to remotely monitor the small generator facility's electric output if:
(a) The small generator facility has a nameplate ~~capacity~~rating greater than or equal to 3 megawatts; or

(b) The small generator facility meets the criteria in OAR 860-082-0055(1) for Tier 3 interconnection review and the aggregated nameplate ~~generation~~rating on the circuit exceeds 50 percent of the line section annual peak load.
(4) A public utility and an applicant or interconnection customer may agree to waive or modify the telemetry requirements in this rule.
(5) Telemetry Requirements.
(a) The communication must take place via a private network link using a frame relay, fractional T-1 line, or other suitable device. Dedicated remote terminal units from the interconnected small generator facility to a public utility's substation and energy management system are not required.
(b) A single communication circuit from the small generator facility to the public utility is sufficient.
(c) Communications protocol must be DNP 3.0 or another reasonable standard used by the public utility.
(d) The small generator facility must be capable of sending telemetric monitoring data to the public utility at a minimum rate of every two seconds from the output of the small generator facility's telemetry equipment to the public utility's energy management system.
(e) A small generator facility must provide the following minimum data to the public utility:
(A) Net real power flowing out or into the small generator facility (analog);
(B) Net reactive power flowing out or into the small generator facility (analog);
(C) Bus bar voltage at the point of common coupling (analog);
(D) Data processing gateway heartbeat (used to certify the telemetric signal quality); and
(E) On-line or off-line status (digital).
(f) If an applicant or interconnection customer operates the equipment associated with the high voltage switchyard interconnecting the small generator facility to the transmission or distribution system and is required to provide monitoring and telemetry, then the interconnection customer must provide the following data to the public utility in addition to the data in subsection (e):
(A) Switchyard line and transformer megawatt and mega volt ampere reactive values;
(B) Switchyard bus voltage; and
(C) Switching device status.
Statutory/Other Authority: ORS 183, 756 & 757
Statutes/Other Implemented: ORS 756.040 & 756.060
History:
PUC 10-2009, f. & cert. ef. 8-26-09

860-082-0075
Temporary Disconnection
(1) Under emergency conditions, a public utility or an interconnection customer may suspend interconnection service and temporarily disconnect a small generator facility from the public utility's transmission or distribution system at any time and for as long as reasonably necessary.
(a) A public utility must notify an interconnection customer immediately after becoming aware of an emergency condition that may reasonably be expected to affect a small generator facility's operation. To the extent possible, the notice must describe the emergency condition, the extent of the damage or deficiency, the expected effect on the small generator facility, the anticipated duration of the condition, and the necessary corrective action.
(b) An interconnection customer must notify the public utility immediately after becoming aware of an emergency condition that may reasonably be expected to affect the public utility's

transmission or distribution system. To the extent possible, the notice must describe the emergency condition, the extent of the damage or deficiency, the expected effect on the public utility's transmission or distribution system, the anticipated duration of the condition, and the necessary corrective action.

(2) A public utility or an interconnection customer may suspend interconnection service and temporarily disconnect a small generator facility to perform routine maintenance, construction, or repairs. A public utility or an interconnection customer must provide written notice five business days before suspending interconnection service or temporarily disconnecting the small generator facility. A public utility and an interconnection customer must use reasonable efforts to coordinate interruptions caused by routine maintenance, construction, or repairs.

(3) A public utility must use reasonable efforts to provide written notice to an interconnection customer affected by a forced outage of the public utility's transmission or distribution system at least five business days before the forced outage. If prior written notice is not given, then the public utility must provide the interconnection customer written documentation explaining the circumstances of the disconnection within five business days after the forced outage.

(4) A public utility may disconnect a small generator facility if the public utility determines that operation of the small generator facility will likely cause disruption or deterioration of service to other customers served by the public utility's transmission or distribution system, or if the public utility determines that operation of the small generator facility could cause damage to the public utility's transmission or distribution system.

(a) The public utility must provide written notice to the interconnection customer of the disconnection at least five business days before the disconnection. If the condition requiring disconnection can be remedied, then the public utility must describe the remedial action necessary.

(b) If requested by the interconnection customer, the public utility must provide documentation supporting the public utility's decision to disconnect.

(c) The public utility may disconnect the small generator facility if the interconnection customer fails to perform the remedial action identified in the notice of disconnection within a reasonable time, but no less than five business days after the interconnection customer received the notice of disconnection.

(5) A public utility may temporarily disconnect a small generator facility if an interconnection customer makes any change to the facility, other than a minor equipment modification, without the public utility's prior written authorization. The public utility may disconnect the small generator facility for the time necessary for the public utility to evaluate the ~~affect~~effect of the change to the small generator facility on the public utility's transmission or distribution system.

(6) A public utility has the right to inspect an interconnection customer's small generator facility at reasonable hours and with reasonable prior written notice to the interconnection customer. If the public utility discovers that the small generator facility is not in compliance with the requirements of the small generator interconnection rules, then the public utility may require the interconnection customer to disconnect the small generator facility until compliance is achieved.

Statutory/Other Authority: ORS 183 & 756

Statutes/Other Implemented: ORS 756.040 & 756.060

History:

PUC 10-2009, f. & cert. ef. 8-26-09

860-082-0080

Arbitration of Disputes

(1) An interconnecting public utility or an interconnection applicant may petition the Commission for arbitration of disputes arising during review of an application to interconnect a small generator facility or during negotiation of an interconnection agreement. If the public utility or the applicant petitions the Commission to arbitrate their dispute, then the Commission will use an administrative law judge (ALJ) as arbitrator unless workload constraints necessitate the use of an outside arbitrator.

(2) A petition for arbitration of an interconnection agreement must contain:

(a) A statement of all unresolved issues;

(b) A description of each party's position on the unresolved issues; and

(c) A proposed agreement addressing all issues, including those on which the parties have reached agreement and those that are in dispute.

(3) A petition for arbitration of a dispute arising during review of an application to interconnect a small generator facility must contain:

(a) A statement of all unresolved issues;

(b) A description of each party's position on the unresolved issues; and

(c) A proposed resolution for each unresolved issue.

(4) Respondent may file a response within 25 calendar days of the petition for arbitration. In the response, the respondent must address each issue listed in the petition, describe the respondent's position on those issues, and present any additional issues for which the respondent seeks resolution.

(5) The filing of a petition for arbitration of a dispute arising during review of an application to interconnect a small generator facility does not affect the application’s queue position.

(6) The arbitration is conducted in a manner similar to a contested case proceeding, and the arbitrator has the same authority to conduct the arbitration process as an ALJ has in conducting hearings under the Commission's rules, but the arbitration process is streamlined. The arbitrator holds an early conference to discuss processing of the case. The arbitrator establishes the schedule and decides whether an oral hearing is necessary. After the oral hearing or other procedures (for example, rounds of comments), each party submits its final proposed interconnection agreement or resolution of disputed issues. The arbitrator chooses between the two final offers. If neither offer is consistent with applicable statutes, Commission rules, and Commission policies, then the arbitrator will make a decision that meets those requirements.

(7) The arbitrator may allow formal discovery only to the extent deemed necessary. Parties are required to make good faith attempts to exchange information relevant to any disputed issue in an informal, voluntary, and prompt manner. Unresolved discovery disputes are resolved by the arbitrator upon request of a party. The arbitrator will order a party to provide information if the arbitrator determines the requesting party has a reasonable need for the requested information and that the request is not overly burdensome.

(8) Only the two negotiating parties have full party status. The arbitrator may confer with Commission staff for assistance throughout the arbitration process.

(9) To keep the process moving forward, appeals to the Commission are not allowed during the arbitration process. An arbitrator may certify a question to the Commission if the arbitrator believes it is necessary.

(10) To accommodate the need for flexibility, the arbitrator may use different procedures so long as the procedures are fair, treat the parties equitably, and substantially comply with the procedures listed here.
(11) The arbitrator must serve the arbitration decision on the interconnecting public utility and the interconnection applicant. The parties may file comments on the arbitration decision with the Commission within 10 calendar days after service.
(12) The Commission must accept, reject, or modify an arbitration decision within 30 calendar days after service of the decision.
(13) Within 14 calendar days after the Commission issues an order on a petition for arbitration of an interconnection agreement, the petitioner must prepare an interconnection agreement complying with the terms of the decision and serve it on respondent. Respondent must either sign and file the interconnection agreement or file objections to it within 10 calendar days of service of the agreement. If objections are filed, respondent must state how the interconnection agreement fails to comply with the Commission order and offer substitute language complying with the decision. The Commission must approve or reject a filed interconnection agreement within 20 calendar days of its filing or the agreement is deemed approved.
(14) If petitioner, without respondent's consent, fails to timely prepare and serve an interconnection agreement on respondent, respondent may file a motion requesting the Commission dismiss the petition for arbitration with prejudice. The Commission may grant such motion if the petitioner's failure to timely prepare and serve the interconnection agreement was the result of inexcusable neglect on the part of petitioner.
(15) The public utility and the applicant may agree to hire an outside arbitrator rather than file a petition with the Commission. The public utility and the applicant must share equally the costs of an outside arbitrator unless they mutually agree to a different payment arrangement.
Statutory/Other Authority: ORS 756
Statutes/Other Implemented: ORS 756.040 & 756.500
History:
PUC 10-2009, f. & cert. ef. 8-26-09

860-082-0085
Complaints for Enforcement
(1) This rule specifies the procedure for a public utility, an interconnection customer, or an applicant to file a complaint for the enforcement of an interconnection agreement. Filing dates for enforcement complaint proceedings are calculated and enforced per OAR 860-001-0150.
(2) At least 10 days prior to filing a complaint for enforcement, complainant must give written notice to defendant and the Commission that complainant intends to file a complaint for enforcement. The notice must identify the provisions in the agreement that complainant alleges were or are being violated and the specific acts or failure to act that caused or are causing the violation, and whether complainant anticipates requesting temporary or injunctive relief. On the same day the notice is filed with the Commission, complainant must serve a copy of the notice on defendant’s authorized representative, attorney of record, or designated agent for service of process. Complainant must also serve the notice on all persons designated in the interconnection agreement to receive notices;
(3) A complaint for enforcement must:

(a) Contain a statement of specific facts demonstrating that the complainant conferred with defendant in good faith to resolve the dispute, and that despite those efforts the parties failed to resolve the dispute;
(b) Include a copy of the written notice, required by section (2), indicating that the complainant intends to file a complaint for enforcement;
(c) Include a copy of the interconnection agreement or the portion of the agreement that the complainant contends that defendant violated or is violating. If a copy of the entire agreement is provided, complainant must specify the provisions at issue;
(d) Contain a statement of the facts or law demonstrating defendant's failure to comply with the interconnection agreement and complainant's entitlement to relief. The statement must indicate that the remedy sought is consistent with the dispute resolution provisions in the agreement, if any. Statements of facts must be supported by written testimony with affidavits made by persons competent to testify and having personal knowledge of the relevant facts. Statements of law must be supported by appropriate citations. If exhibits are attached to the affidavits, the affidavits must contain the foundation for the exhibits;
(e) Designate up to three persons to receive copies of pleadings and documents;
(f) Include an executive summary, filed as a separate document not to exceed 8 pages, outlining the issues and relief requested; and
(g) Include any motions for affirmative relief, filed as a separate document and clearly marked. Nothing in this subsection precludes complainant from filing a motion subsequent to the filing of the complaint if the motion is based upon facts or circumstances unknown or unavailable to complainant at the time the complaint was filed.
(4) On the same day the complaint is filed with the Commission, complainant must serve a copy of the complaint on defendant's authorized representative, attorney of record, or designated agent for service of process. Service may be by telephonic facsimile, electronic mail, or overnight mail, but the complaint must arrive at defendant's location on the same day the complaint is filed with the Commission. Service by facsimile or electronic mail must be followed by a physical copy of the complaint the next day by overnight delivery.
(5) Within 10 business days after service of the complaint, defendant may file an answer with the Commission. Any allegations raised in the complaint and not addressed in the answer are deemed admitted. The answer must:
(a) Contain a statement of specific facts demonstrating that the defendant conferred with complainant in good faith to resolve the dispute and that despite those efforts the parties failed to resolve the dispute;
(b) Respond to each allegation in the complaint and set forth all affirmative defenses;
(c) Contain a statement of the facts or law supporting defendant's position. Statements of facts must be supported by written testimony with affidavits made by persons competent to testify and having personal knowledge of the relevant facts. Statements of law must be supported by appropriate citations. If exhibits are attached to the affidavits, then the affidavits must contain the foundation for the exhibits; and
(d) Designate up to three persons to receive copies of other pleadings and documents.
(6) On the same day as the answer is filed, the defendant must also file its response to any motion filed by complainant and its motions for affirmative relief. Each response and each motion must be filed as a separate filing. Nothing in this section precludes defendant from filing a motion subsequent to the filing of the answer if the motion is based upon facts or circumstances unknown or unavailable to defendant at the time the answer was filed.

(7) On the same day the answer is filed with the Commission, the defendant must serve a copy of the answer to the complainant's authorized representative, attorney of record, or designated agent for service of process.

(8) Complainant must file a reply to an answer that contains affirmative defenses within 5 business days after the answer is filed. On the same day the reply is filed with the Commission, complainant must serve a copy of the reply to defendant's authorized representative, attorney of record, or designated agent for service of process.

(9) A cross-complaint or counterclaim must be answered within the 10-business day time frame allowed for answers to complaints.

(10) The Commission will conduct a conference regarding each complaint for enforcement of an interconnection agreement.

(a) The administrative law judge (ALJ) schedules a conference within 5 business days after the answer is filed, to be held as soon as practicable. At the discretion of the ALJ, the conference may be conducted by telephone.

(b) Based on the complaint and the answer, all supporting documents filed by the parties, and the parties' oral statements at the conference, the ALJ determines whether the issues raised in the complaint can be determined on the pleadings and submissions without further proceedings or whether further proceedings are necessary. If further proceedings are necessary, the ALJ establishes a procedural schedule. Nothing in this subsection is intended to prohibit the bifurcation of issues where appropriate.

(c) In determining whether further proceedings are necessary, the ALJ must consider, at a minimum, the positions of the parties, the need to clarify evidence through the examination of witnesses, the complexity of the issues, the need for prompt resolution, and the completeness of the information presented.

(d) The ALJ may make oral rulings on the record during the conference on all matters relevant to the conduct of the proceeding.

(11) A party may file with the complaint or answer a request for discovery, stating the matters to be inquired into and their relationship to matters directly at issue.

(12) When warranted by the facts, the complainant or defendant may file a motion requesting that an expedited procedure be used. The moving party must file a proposed expedited procedural schedule along with its motion. The ALJ must schedule a conference to be held as soon as practicable to determine whether an expedited schedule is warranted.

(a) The ALJ will consider whether the issues raised in the complaint or answer involve a risk of imminent, irrevocable harm to a party or to the public interest.

(b) If a determination is made that an expedited procedure is warranted, the ALJ will establish a procedure that ensures a prompt resolution of the merits of the dispute, consistent with due process and other relevant considerations. The ALJ will consider, but is not bound by, the moving party's proposed expedited procedural schedule.

(c) In general, the ALJ will not entertain a motion for expedited procedure where the dispute solely involves the payment of money.