



Oregon

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Summary of October 6 Meeting



At the third workshop the Screens, Study Methods, and Modern Configurations workstream, discussion focused mainly on Level 1 screens, reporting standardized screen results, and the beginnings of discussing Level 2 screens. The following are highlights of the discussion as recorded by Staff, with questions for stakeholders italicized. If you believe anything is missing or in error please reach out to Ted Drennan.

The meeting started with an update; the OPUC will be moving to government Zoom site. As such, meetings scheduled for October 25 and forward will have new dial-in information. This will be reflected in an update to be posted to the UM 2111 website.

Level 1 Screens

The discussion started with comparing the screens in [OAR 860-082-0045](#), small generator interconnection procedures(SGIP), [OAR 860-039-0030](#), net energy metering (NEM) and the [2019 IREC Model Rules](#) as modified by the [2022 Energy Storage Interconnection Toolkit](#). Materials related to the Screens were originally sent to the working group on September 7, and included in the appendix materials for the [September 14](#) and [October 6](#) presentations. There was also discussion of the applicability of Oregon's NEM rules, with Idaho Power noting they are covered by Idaho state rules for net metering¹. The following will break down the discussion by each topic. Also note, the NEM rules consider project sizes as levels, i.e. Level 1 – Level 3, the approach for the SGIP rules uses tiers, i.e. Tier 1- Tier 4. For the document below “Level” will be the preferred nomenclature.

Application

This first issue discussed was inclusion of an interconnection agreement as part of the initial application submittal process. That is, under Oregon's NEM process customers may submit a signed interconnection agreement at the same time as they submit a Level 1 application; the question was, should this process be applicable to Level 1 applications under the SGIP rules. Under the current approach a customer submits a Level 1 application, the utility notifies the customer they passed the Level 1 screens, then the customer submits a signed interconnection agreement. IREC's proposal eliminates an extra step for SGIP applicants, similar to the NEM process.

¹ See [ORS 757.300\(9\)](#).

Parties in general supported the approach, they were open to modifications that would streamline the process. While there have not been many Level 1 applications received over the years, the process could be changed relatively easily through Power Clerk.

Staff would like to know if parties object to including the option for interconnection customers to include a signed interconnection agreement when submitting a Level 1 application under Oregon's SGIP process.

Eligibility Size

The second topic discussed was the eligibility size for Level 1 screens. Currently Level 1 screens are applicable to facilities with a nameplate rating up to 25 kw, and must not be connecting to a transmission line. IREC's proposal would allow for facilities with an export capacity of 25 kw and a nameplate rating of up to 50 kw. Here export capacity is defined as the amount of power that can be transferred from the DER to the Distribution System; either the Nameplate Rating, or a lower amount if limited using acceptable controls. Nameplate rating is the sum total of maximum rated power output of all of a DER's constituent generating units and/or energy storage system as identified on the manufacturer nameplate.

Stakeholders here believed the approach was in line with the modernization of the interconnection rules. Parties did not seem to raise any objections to these proposed eligibility standards.

Staff would like to know if there are any parties who object to the use of export capacity of 25 kw and nameplate rating of 50 kw as the eligibility threshold for Level 1 applications.

Fault Current Screen

Presently there is a fault current screen only for NEM Level 1 applications requiring aggregate generation on the circuit to not contribute more than 10 percent to the circuit's maximum fault current. There is no equivalent screen for Level 1 SGIP connections. Under IREC's proposal the screen would be eliminated for NEM Level 1 interconnections as well. Discussion seemed to indicate that these smaller generators would have negligible impact, especially if the generator is inverter-based. Parties believed standardization across SGIP and NEM procedures here is warranted, and the NEM requirements can be eliminated.

Staff would like to verify this is the correct understanding; stakeholders should confirm that they agree with the standardization approach. Stakeholders who believe the fault current screen should remain for NEM resources should provide the reasoning behind their preferred approach.

Penetration Screen

Discussion on the penetration screen was set aside for a future workshop.

Network Screen

Network screens evaluate the ratio of distributed energy resources (DER) to load. Under the OR SGIP rules the aggregate nameplate capacity of generators must not exceed five percent of the maximum load, or 50 kw, whichever is less. OR NEM rules do not allow for interconnection on network systems. IREC proposal looks at minimum load data where available. The aggregate nameplate may not exceed 50 percent of the minimum load. If minimum data is not available the five percent of maximum load would be used. It appears only one utility has substantial network systems, and would like time to review the screen to develop their position.

Staff would like to know the extent of network systems for the utilities. Stakeholder should provide their position, and any concerns with allowing use of minimum load data, when available, as included in IREC's proposal.

Single-Phase Shared Secondary Screen

Under current regulations, to interconnect to a single-phase secondary system the aggregated nameplate capacity on the feeder must not exceed 20 kw, for both SGIP and NEM rules. IREC's proposal would use the export capacity of the generation, and limit the amount on a feeder to 65% of the transformer rating, as opposed to the 20 kw metric. There was a good deal of discussion on this screen.

Utilities have transformers in multiple sizes, 25, 50, 75, 100, even 167 kva. Use of the 65% of the transformer rating could decrease DERs on a feeder. The overall impact on the feeder when combined with the use of export capacity instead of nameplate capacity is unclear.

There were concerns raised with the use of export capacity for existing DERs. Utilities believe it could be a heavy lift to go through the existing resources to calculate the export capacity, instead of continued use of nameplate for existing facilities.

The decision to essentially grandfather existing resources at the nameplate, instead of export capacity could have substantial impacts on the amount of DERs that could be sited. For instance, nameplate ratings of inverter-based resources are higher than the inverter DC/AC conversion ratio. The generator/inverter could see ratios of 135% up to 200% for large generators.

Parties did not seem adverse to the change in the screen. The two issues raised revolved around the application of the standard to existing resources, as well as if 65 percent of the

transformer nameplate was the correct value. Parties resolved to continue to review the proposal and follow-up with positions.

Staff would like to know if Stakeholders concur on the use of the metric as proposed by IREC. Is 65% the right value, or is there another value that would be more appropriate? Finally, what is the impact of grandfathering existing resources, i.e. use their nameplate capacity, instead of export capacity. Can the utilities provide an estimate of the number of resources that would be grandfathered, and the impact that could make? Is there an estimate of the amount of time it would take to develop appropriate export capacity values for these resources?

Staff would like to know the difficulty of determining the export capacity for existing resources. Stakeholders who would like something other than use of the default settings should offer a proposal for settings that they would prefer, along with an explanation.

Service Imbalance Screen

The Service Imbalance screen used in the Oregon SGIP and NEM rules requires interconnection of a single-phase generator to a 240-volt service line to not create a current imbalance between the two sides of the service line of no more than 20 percent. This is inline with what IREC considers best practices, and they make no recommendations for changes

If parties believe the current approach to this screen needs to be changed they should offer a proposal, along with an explanation of why that is better than the current approach.

Approval Timeline

Under the SGIP requirements a utility must notify an applicant within fifteen business days if it meets the Level 1 approval criteria. For NEM facilities that timeline is ten business days. IREC's proposal uses seven business days. Current requirements (10 or 15 days) are being met, but it's difficult. Utilities are seeing a dramatic rise in applications, and thus are hesitant to change to a seven-business day standard.

Staff would like to know what parties believe is an appropriate timeline for approval. Would seven-days be too short of a timeline? If so is ten days appropriate for both SGIP and NEM applications? Please provide support for your position.

Deemed Approval

Under current NEM rules, if a utility does not notify an applicant within 20 days that the interconnection is approved, or denied, the application will be deemed approved. The SGIP

rules do not carry such a clause, IREC recommended a similar clause for these rules. Stakeholders did not see an issue with this approach.

Staff would like to hear from any parties who object to including deemed approval for SGIP.

Inspection Timeline

Currently the SGIP and NEM rules are silent on a timeline for inspection. Under the IREC model rules utilities would be required to conduct an inspection within ten business day of an applicant sending notice of the anticipated start date. If an inspection is not necessary, the utility shall notify the applicant within three business days. There was some discussion on the proper wording, with “witness test” seeming to be the choice for the inspection.

As to the timing of such a requirement, it appears Utah is using the ten day requirement. Utilities were somewhat hesitant at agreeing to the ten day standard without further internal discussions. The incorporation of storage could make witness tests more important, and the actual inspection may take longer. That coupled with the increase in applicants could make ten days difficult.

Staff would like stakeholders to provide a suggested timeline for inspections, along with the rationale for the proposal.

Standardized Screen Results

Following discussion on the Level 1 screens there was a discussion on standardizing the form sent to applicants who fail their screening process. The utilities had different approaches on what was included, some were described as more of a ‘prose’ version. The specific detailed values underlying the screens failed is not always provided to the applicants.

Staff would like more information on what is provided to applicants who fail the screening process. What information would be helpful for developers, are the current reports sufficient? Do stakeholders see value in a standardized form for all utilities to use; are there issues with one form for all utilities?

Level 2 Screens

The final topic of discussion was Level 2 screens. With time constraints, the only screen discussed was fast-track eligibility. Current requirements allow generators with nameplate capacity of two MW or less, and are not interconnected with a transmission line to be fast-tracked. IREC suggests a more complex approach that will vary with the line capacity, and location from the substation. The table below shows the proposal.

Line Capacity	Level 2 Eligibility	
	Regardless of location	On \geq 600 amp line and \leq 2.5 miles from substation
\leq 4 kV	< 1 MW	< 2 MW
5 kV – 14 kV	< 2 MW	< 3 MW
15 kV – 30 kV	< 3 MW	< 4 MW
31 kV – 60 kV	\leq 4 MW	\leq 5 MW

Initial reactions to the suggested table questioned the use of the distance column. Utilities seemed more comfortable with the ‘regardless of location’ column.

Staff would like stakeholders to respond to the proposal further, is the use of export capacity the correct metric here? Do the export capacity values in the ‘regardless of location’ column work and is it appropriate to use the values in the distance column? Please provide the underlying rationale, as well as specific examples.

Next Steps

The following table identifies next steps for the next two workshops. Staff has identified the key areas where redline counter proposals or written justification of positions will be useful, but, as always, invite comments beyond these areas.

Screens, Study Methods, and Modern Configurations Workstream			
Description	Event Date	Workshop Topic	Pre-meeting deliverable
Workshop 4	Nov 8, 2022	Follow-up discussion of non-export and supplemental review issues. Further discussion of Level 1 Screens Further discussion of Level 2 Screens	Comments on key points of discussion by 10/25 (See Staff notes from 9/14 workshop). Please be prepared to discuss italicized issues listed above.
Workshop 5	Dec 7, 2022	Follow up discussion of Level 1 and 2 Screens as needed. Other topics to be developed depending on progress through Workshop 4.	Comments on key points of discussion by 11/23
Workshop 6	Jan 17, 2023	TBD – future workshop topics will be dependent on progress made in the prior meetings.	
Workshop 7	Feb 15, 2023		
Workshop 8	Mar 15, 2023		

Staff appreciates stakeholders taking the time to participate in these discussions. To make these productive as possible, *Staff would like to know, as early as practicable, if utility technical experts are unavailable to attend future workshops.* If necessary we will look to reschedule such meetings.

Please be sure to circulate all discussion, redlines, comments, etc. to the Service List as listed on the [OPUC UM 2111 webpage](#).

For any questions or concerns please contact:

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To receive meeting notices and agendas for this docket, send an email to puc.hearings@puc.oregon.gov, and ask to be added to the service list for Docket No. UM 2111. You will then receive emails with workshop details, when new documents have been added to the docket, or there is a change to the schedule.