



UM 2111

**Enforceable Timelines
December 17, 2024**



Agenda



- Welcome
- Staff look at FERC Enforceable Timeline
- Interconnection Trade Alliances (ITA) presentation
- Joint Utilities (JU) Presentation
- Interstate Renewable Energy Council (IREC) presentation
- Break
- Next Steps

Annual Handbook Update Process



- Order 24-068 requires Staff involvement

(W)e direct Staff to hold a workshop or similar process to review and collect feedback on utility handbooks at least annually in order to determine whether Commission engagement with any issues related to the process and content of the utility handbook is warranted.

We direct Staff to work with utilities and interested persons, as a part of the subsequent handbook update process , to deliver a proposal for regular proactive investigation of the potential for inverter specifications and configurations to eliminate the need for additional equipment.

- Jan 22 Workshop – Handbook feedback

- Staff requests parties wanting to provide verbal feedback on the utility interconnection handbooks attend the workshop

- Staff requests the JU provide any updates on inverters that will obviate the need for additional equipment

- Include any work done “with industry toward specification of an inverter model and a set of standardized configurations that can be safely relied upon without additional equipment.”

- Written comments for either topic will be considered as well.

Interconnection Delays



- Multiple complaints on interconnection
 - [UM 2354](#) (Sunset Ridge Solar vs PacifiCorp)
 - [UM 2343](#) (Marble Solar LLC vs PacifiCorp)
 - [UM 2322](#) (Sunthurst vs PAC – 5 projects)
 - [UM 2356](#): (Chapman Creek Solar vs PacifiCorp)
 - [UM 2353](#): (Pine Grove Solar vs PacifiCorp)
- Filed notices of intent
 - [UM 2305](#) (Green Solar vs PacifiCorp)
 - [UM 2342](#) (Blackwell Creek Solar vs PacifiCorp)
 - [UM 2359](#): (Round Lake Solar vs PacifiCorp)

FERC Order 2023



- FERC rationale for changes in approach, from paragraph 964:
We adopt these reforms to remedy the unjust and unreasonable rates stemming from interconnection queue backlogs and to ensure that interconnection customers are able to interconnect to the transmission system in a reliable, efficient, transparent, and timely manner. Specifically, these reforms will help ensure more timely processing of interconnection requests by incentivizing transmission providers to meet interconnection study deadlines

FERC Order 2023



- Eliminating reasonable efforts standard paragraph 966:
The lengthy interconnection study delays and interconnection queue backlogs throughout the country support our conclusion that the reasonable efforts standard does not provide an adequate incentive for transmission providers to complete interconnection studies on time... In response to those ongoing challenges, we find that it is just, reasonable, and not unduly discriminatory or preferential to eliminate the reasonable efforts standard and adopt a penalty structure that reasonably incentivizes transmission providers to ensure the timely processing of interconnection requests.
- Paragraph 967:
The reasonable efforts standard worsens current-day challenges, as it fails to ensure that transmission providers are keeping pace with the changing and complex dynamics of today's interconnection queues.

FERC Order 2023



- Paragraph 971:

Interconnection customers face financial harm when study deadlines are not met, ultimately inhibiting their ability to interconnect to the transmission system in a reliable, efficient, transparent, and timely manner.

FERC Order 2023



- Eliminated reasonable efforts standard (Paragraph 962)
- Imposed study delay penalties
 - Cluster Study: \$1,000 per business day
 - Cluster Restudies: \$2,000 per business day
 - System Study: \$2,000 per business day
 - Facility Study: \$2,500 per business day
- Feature of Study Delay penalties (Paragraph 963)
 - Grace period of 10 business days
 - Deadline extensions of 30 days upon mutual agreement of all study participants
 - Penalties capped at initial study deposits
 - Penalties cannot be recovered through transmission rates
 - Quarterly OASIS post:
 - Total amount of study delay penalties
 - Highest amount paid to single interconnection customer

FERC Order 2023



- Questions:
- Do the FERC-addressed issues with study timelines have similar counterparts with completing interconnections?
- Would timeliness in completing interconnection studies, without timeliness in interconnecting customers be considered unjust and unreasonable?
- Any reasons such a framework would not be applicable on completing interconnections?

Interconnection Trade Alliance Presentation



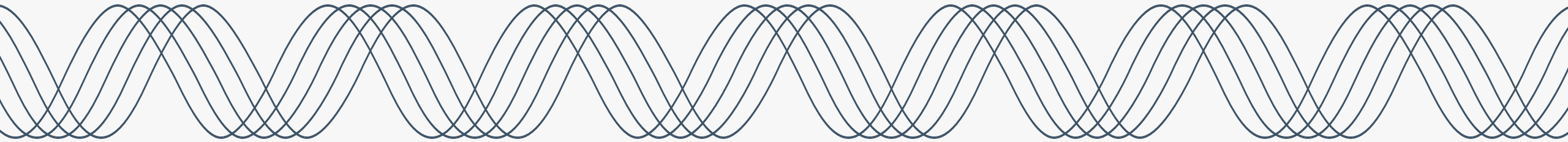
Joint Utilities Presentation





Interconnection Delays

UM 2111 Policy Discussion
Joint Utilities' Presentation
December 17, 2024



Two Phases

Two phases of interconnection will be discussed separately:

1. Interconnection Study Process: from Application through execution of Interconnection Agreement
2. Interconnection Construction Process: from execution of Interconnection Agreement through energization/interconnection

This discussion focuses on issues relevant to small generator interconnections. But many of the issues apply equally, or more so, to large generator interconnections.

Typical Issues Delaying the Interconnection Study Process

- Interconnection customers not timely returning necessary documents/responding to requests for information
- Need for restudies after a project drops out
- Sheer volume of requests
- Delays from Affected Systems (rare, but possible for small generators)

Overview of Interconnection Construction Process and Timing



- Each utility uses Commission-approved SGAs.
- The SGIA will include an attachment that includes project-specific milestones. Typical milestones include:
 - Date by which customer provides initial project design
 - Date when utility will begin engineering and procurement
 - Date by which customer obtains necessary permits/ROW
 - Date by which customer provides final design
 - Date when engineering is complete
 - Date when construction begins
 - Date when construction ends
 - Commercial Operation Date (COD)
- Milestones typically developed to meet an agreed upon COD
- Intervals for milestones are project-specific and will change if the assumptions underlying the milestone change
- The SGIA will also include an attachment with project-specific progress payments that are tied to milestones (OAR 860-082-0035(5))

Engineering Design

- Interconnection studies will identify requirements for interconnection (e.g., necessary equipment) and those requirements will set forth in the SGIA
- The requirements identified during the study process are based on simplified one-line diagrams—not detailed engineering plans for the construction of the actual facilities
 - Reflects a trade-off between having faster and lower cost studies that require detailed design post-SGIA execution
- After the SGIA is signed, and upon receipt of progress payment funds, the utility will begin the detailed engineering work necessary to take the one-line diagram and turn it into a construction-ready plan
 - Requires on-the-ground survey work to understand where interconnection facilities can be located and how the utility facilities will be tied to customer facilities
 - Not uncommon to discover issues during this process that requires redesigns to accommodate real-world conditions that were unknown/unknowable during the study process
 - Requires regular coordination between utility and customer through all phases of the project.

Construction

- Construction timelines are project-specific and vary depending on the complexity of the interconnection requirements.



Typical Issues Delaying the Interconnection Construction Process

- Customer failing to make required progress payments
 - SGIA typically states that failure to make progress payments results in a work stoppage
 - Repeated starts and stops increases the costs and time to interconnect
- Customers missing milestones
 - For example, delaying the initial design package will delay the utility engineering, which will lead to cascading delays of all other milestones
- Difficulty obtaining required permits or easements
 - Customers are typically required to obtain all necessary permits and easements, even for utility facilities
 - Delay in obtaining required permits or easements will likely delay construction
 - Denial of required permit or easement (or a change to the expected easement) may also require redesign of facilities, which will cause further delays
 - Constructing across federal land can lead to longer construction timelines

Typical Issues Delaying the Interconnection Construction Process



- Supply chain constraints
- Failure to coordinate
 - Can require redesign of utility facilities to match what customer constructed
- Constructing facilities that do not match what is required
 - Placing poles in the wrong place
 - Building roads in the wrong place or of the wrong size
 - Building a customer line to the wrong place for connecting to a utility line
- Sale to new owner, which can cause delays because the prior owner failed to meet its obligations anticipating the sale and the new owner fails to understand its obligations.
- Affected system issues, including both construction required by affected systems (like BPA) or need to install utility equipment in an affected system substation
- Unanticipated construction issues
 - On-the-ground conditions differ from what was expected
- Many of these delay issues are compounded for large generator interconnections given the likelihood of more complex design and construction requirements



Thank you

Interstate Renewable Energy Council - Presentation



Break



Next Steps



- Options to move forward
 - Additional workshops?
 - Move to contested case?
 - Stakeholder suggestions?
- Staff to provide notes on workshop
 - Will suggest process to move workstream forward
- January 22 workshop
 - Utility Interconnection Handbooks: Feedback requested from Stakeholders
 - Inverter discussion – are there inverters available to avoid additional protection equipment?
 - Continuation of DTT workstream?

Conclusion



Thank you for participating