Definition of Qualified Change for Purposes of External Facility Interconnections FAC-001-4 and FAC-002-4

Version 1: Effective January 1, 2024

Applicability:

"Interconnection" in the context of this Qualified Change definition shall mean any new or existing request as submitted to BPA via the "Large Generation Interconnection Procedures", "Small Generation Interconnection Procedures".

In the NERC's pro-forma interconnection procedures, the term Material Modification refers to impacts on cost and schedule to higher queued generation interconnection projects. Whereas in the NERC Standards FAC-001 and FAC-002, governing facility interconnection requirements and studies, Material Modification refers to reliability impacts to the system. In Order RD-22-5-000 FERC agreed with NERC to clarify Standards FAC-001 and FAC-002 by using the term Qualified Change instead of Material Modification in the Standards.

Standard FAC-001 expressly governs interconnection requirements to a Transmission Owner's (TO) transmission system so that entities seeking to interconnect to the TO's system will have the necessary information. Standard FAC-002 governs studies of the reliability impact of new interconnections, or existing interconnections seeking to make a qualified change. These requirements are applicable to third parties that either request interconnection to the BPA transmission system through BPA's interconnection queue, or third parties already interconnected seeking a qualified change.

In the next future update, this definition will be migrated and maintained under the "<u>Technical</u> Requirements for Interconnection to the BPA Transmission Grid" available on the BPA webpage.

Qualified Change for Generation Facilities

Any Generating Facility seeking to modify a generator or energy storage system that is connected to the BPA transmission system, that includes but is not limited to:

- Changing the MVA rating (real and reactive power) of the Generating Facility or of any individual generator in a facility with multiple generating units.
- Changing the fuel type (coal to gas conversion, gas to biofuel conversion, etc.
- Changing the inverter, turbine, generator, power converter, plant protection, plant controls or OEM control equipment associated with a Facility with an aggregate real and reactive power rating of three MVA or greater, unless the replacement is in-kind.
- Changing the main power transformer or any modifications that would result in changes to the impedance and/or other electrical parameters of the gen tie line or collector system.
- Changes to the governor, exciter, voltage regulator, or power system stabilizer.
- Changing any voltage control and reactive power devices.
- Changing or adding a Point of Interconnection (POI) for a generator or energy storage system
 that delivers or receives power from the transmission system to a facility with an aggregate real
 and reactive power rating of three MVA or greater.



Qualified Change for Interconnection Transmission Facilities

Any Modification to existing third party transmission facilities interconnected to BPA that includes but is not limited to:

- System topology that alters flows on the BES.
- · Facility ratings.
- Protective relaying and power system control settings.
- Fault clearing speed or fault duty capabilities.
- Voltage control devices (changes in number or size).
- Changes in impedance or operating voltage.

Qualified Change for End-User Facilities

Any end-user Facility seeking to modify a previously interconnected load or interconnected load service facility, that includes but is not limited to:

- Increasing the aggregate demand by 25 MW or more for a load connected and co-located with a Generator Owner's Facility.
- Increasing the aggregate demand by 25 MW or more for a load connected to a Transmission Service Provider's system.
- Moving a Point of Interconnection (POI) to a new electrical bus on a different transmission circuit.
- Annual Increase in Demand exceeding 10%.
- Increase in Demand of 75 MW or greater within the next two years; or
- Increase in Demand of 20 MW or greater within the next two years for a third-party Facility interconnected to a Generator Owner's Facility.
- Adding or removing equipment that would impact the composite load model used to represent a Facility.
- Changing protection schemes or settings that would impact under-frequency or under-voltage load shedding.
- Changing load type or load characteristics that would affect electrical harmonic levels or transient response.
- Changing end-user Facility topology that may affect power flows on the BES.

If you have a change that meets this definition, please contact the BPA Interconnection Administrator via email at: lnterconnection@bpa.gov. BPA will contact you within 5 business days to set up a meeting to discuss the specifics and determine next steps.