AFFECTED SYSTEM OPERATOR (ASO) STUDIES FOR DISTRIBUTED ENERGY RESOURCES (DER)

At RLC Engineering, we bring unmatched expertise to ISO-NE Level III Proposed Plan Application (PPA) studies for Distributed Energy Resources (DER). ISO-NE may require these studies for projects ≥1 MW if there is more than 5 MW of DER at the substation of interconnection or more than 20 MW in the surrounding area. While the Transmission Owner (TO) of the 115 kV substation has jurisdiction for these studies, ISO-NE acts as the Affected System Operator (ASO). Our team specializes in ASO study requirements and ensures your projects meet ISO-NE's rigorous standards.

STEADY STATE

Steady state analysis runs a full list of contingencies to test for violations of steady state thermal and voltage reliability criteria. RLC will create base cases with and without the Project to compare system performance with and without the Project(s) in service to test for significant adverse impact.

TRANSIENT STABILITY

Transient stability study simulates contingencies that are relevant to the Project(s) to ensure that the system meets reliability criteria with the Project(s) in service, along with the corresponding PSS/E Library models.

SHORT CIRCUIT

Short circuit analysis compares interrupting and momentary short circuit fault duties with and without the Project(s) in service to test for excessive fault duty conditions or significant adverse impact.

EMT/PSCAD

RLC performs model validation checks, including:

- Documentation verifications (model documentation, UL certifications, one line diagrams, equipment datasheets)
- Site-specific model verifications (ride-through and protection settings, model parameters matching PSS/E model parameters, one line diagram check, etc.).
- PSS/E to PSCAD benchmarking analysis, typically required for Projects ≥5 MW

RLC performs the following PSCAD studies:

- Transmission SIS's, including Transmission Connected Generation, DER Cluster studies and individual DER.
- Convert PSS/E stability cases into PSCAD models using ETRAN
- Validate and integrate PSCAD models
- Verify ride-through compliance and address any control interactions with surrounding systems.

EMPOWERING ENERGY SOLUTIONS
for the future...today

V 207.621.1077 | F 207.621.1177
INFO@RLC-ENG.COM | RLC-ENG.COM
HALLOWELL | SOUTH PORTLAND | BANGOR