



EXPERTISE IN THE CAISO REGION

RMS Energy delivers comprehensive interconnection support throughout the CAISO footprint, guiding developers and transmission owners through one of the most complex ISO environments in North America.

- ▶ Decades of direct experience with CAISO's interconnection, deliverability, and planning processes.
- ▶ Expertise across renewables, battery storage, inverter-based resources (IBRs), and large-scale transmission.
- ▶ Trusted partner in navigating **CAISO Tariff, Deliverability Allocation, and Market Participation**.
- ▶ Support across the entire lifecycle: **Feasibility » Interconnection » Deliverability » Facilities » Commissioning**.



GENERATOR INTERCONNECTION UNDER CAISO TARIFF

Cluster Process:

- Submission of Interconnection Request (IR) and deposit (\$120,000 – \$250,000).
- Phase I & Phase II Studies:** power flow, short circuit, stability, deliverability.
- Deliverability allocation:** Full Capacity Deliverability Status (FCDS) vs. Energy-Only.
- Facilities Study:** identifies required upgrades, remedial action schemes, and costs.

RMS Energy Supports:

- Full application packages: one-line diagrams, PSLF/PSCAD/CAPE/ ASPEN models, inverter datasheets.
- Material Modification Assessment (MMA):** evaluating design and technology changes.
- Shadow modeling** and screening studies for project viability.
- Deliverability assessments** to identify and mitigate risks early.

CAISO’S REQUIRED DYNAMIC MODEL VALIDATION

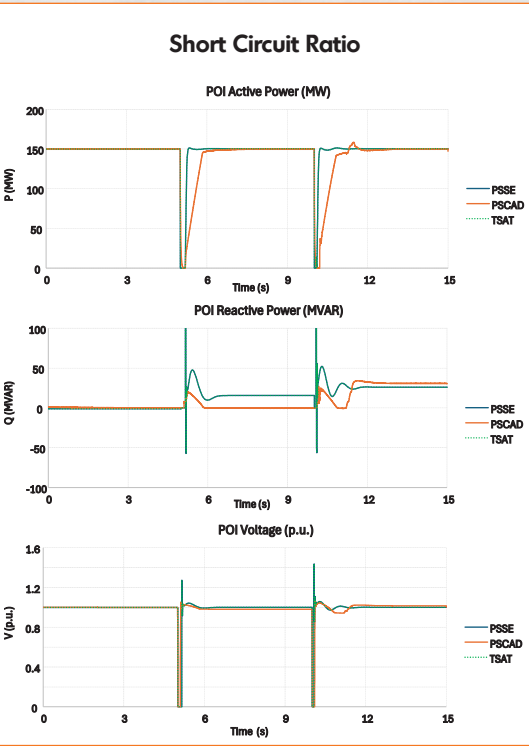
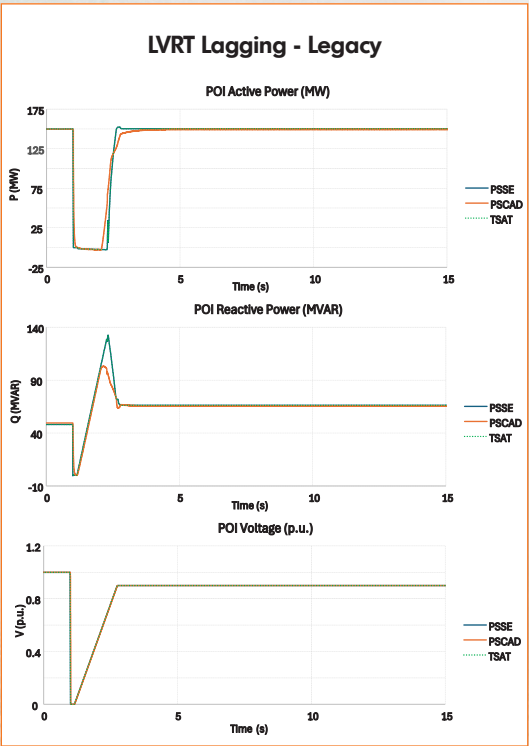
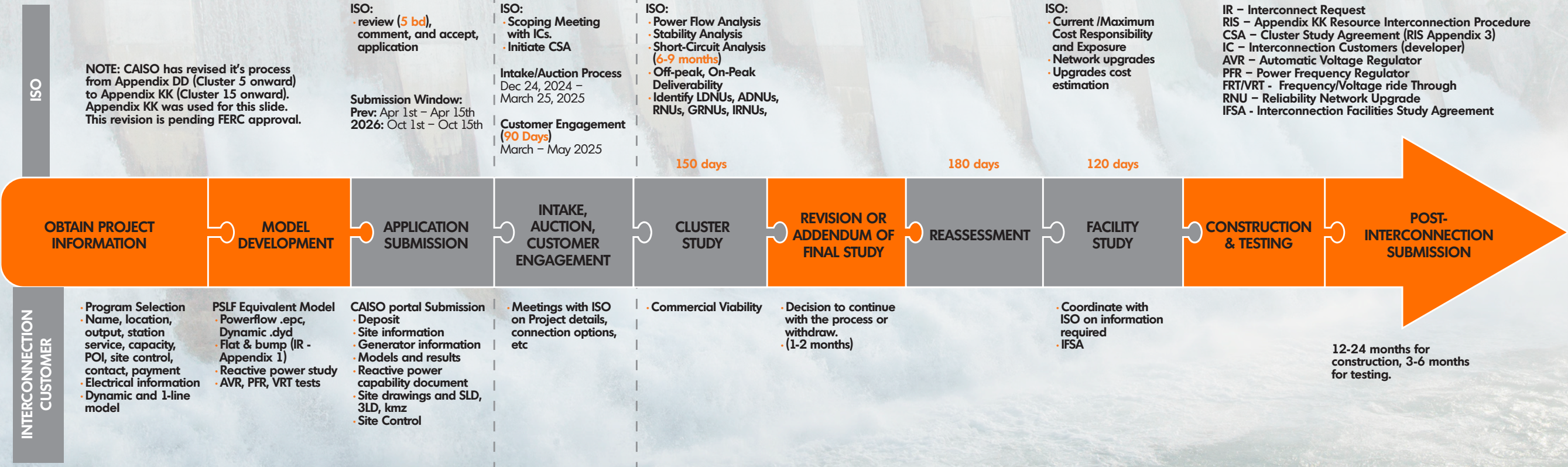
RMS supports clients with mandatory CAISO IBR model tests:

- Flat Run** – Model steady-state stability.
- Bump Test** – Fault-clearing validation.
- Voltage Reference Step Change** – Reactive response.
- Frequency Reference Step Change** – Active power response.
- Voltage Ride-Through** – Compliance with PRC-024 standards.
 - Tests conducted at **different SCR levels (2–3 typical)**.
 - Both **stand-alone Thevenin equivalent** and **WECC full-loop** validations required.

RMS Energy Capabilities

- Full PSLF, CAPE, ASPEN, PSCAD** model build, tuning, and submission.
- EMT modeling for **grid-forming BESS** and **offshore wind inverter compliance**.
- Specialized expertise in **short-circuit, stability, and deliverability studies** to meet CAISO’s evolving RIS.

CAISO INTERCONNECTION PROCESS: CLUSTER 15 AND BEYOND



WHY RMS ENERGY?



- ▶ **Proven CAISO Track Record:** direct support for CAISO Transmission Planning Process (TPP) cycles and interconnection studies.
- ▶ **Comprehensive Technology Coverage:** Offshore & Onshore Wind, Solar PV, BESS, Hydro, Thermal, HVDC, FACTS.
- ▶ **OEM Model Expertise:** SMA, Sungrow, Power Electronics, Tesla, GE, Vestas, Siemens Gamesa, ABB, Siemens.
- ▶ **Full Lifecycle Support:** from feasibility and screening through commissioning and compliance.
- ▶ **Policy & Market Insight:** active engagement with FERC Orders 2023 & 1920, CAISO IPE reforms, and deliverability allocation.

RMS Energy Value

RMS Energy is uniquely positioned to help developers, utilities, and investors succeed in the CAISO market—delivering reliable, compliant, and optimized interconnection solutions.

