

INTERCONNECTION & GRID INTEGRATION STUDIES

At RMS Energy, our experienced team delivers comprehensive steady-state, short-circuit, EMT, and protection and control studies to ensure new generation, storage, or transmission assets are seamlessly integrated into the power grid. We evaluate each interconnection with precision, safeguarding the safety, reliability, and performance of the existing system while supporting efficient, compliant project delivery.



- ⚡ WIDE-AREA THERMAL SCREENING ⚡ PHYSICAL POI VIABILITY ASSESSMENT ⚡
- ⚡ EXPERT INTERCONNECTION PROCESS NAVIGATION AND SUPPORT ⚡
- ⚡ WIDE-AREA LMP SCREENING ⚡ ADVANCE-STAGE STUDIES ⚡

OUR SERVICES

TAILORED SOLUTIONS EMPOWERING SEAMLESS, RELIABLE GRID INTEGRATION.

Interconnection & Grid Integration Challenges

⚡ INTERCONNECTION QUEUE CHALLENGES

- High volume of applications with the surge of renewable and storage projects, contribute to a large backlog.
- Backlogs lead to cluster study delays and uncertain timelines
- Changes in technical or regulatory requirements (e.g. FERC Order No. 2023)

⚡ DATA AND MODELING CHALLENGES

- Generic models now being preferred over User-defined models
- Inaccurate model assumptions that don't match real-world performance.
- Inconsistent or incompatible data formats

⚡ NETWORK UPGRADE CHALLENGES

- Large influx of projects driving costly upgrades resulting in high capital costs
- Lengthy permitting process due to environmental reviews, ROW acquisition, and public approvals
- Project withdrawals during study phases change the upgrade needs and cost allocation
- Integrating new technology and equipment with legacy grid infrastructure
- Public or political resistance to new transmission infrastructure

RMS Energy Offerings

⚡ EXPERT INTERCONNECTION PROCESS SUPPORT

- Support all stages of the interconnection process: application submittal, model and data preparation, layout and diagram preparation, scoping meetings, and studies.
- Providing ISOs with interconnection request documentation, coordination, review, and support for model and data testing.
- Supporting developers with interconnection request submittals and providing guidance through the entire process.

⚡ MODEL AND DATA DEVELOPMENT

- Accurate models and technical data to support successful application submittal.
- Make informed assumptions for greenfield projects, tailored to the project's specific technology, region, and situation.
- Prepare both generic and user-defined models that can be tuned to meet specific ISO requirements.
- Perform initial studies to establish the validity of the models.

⚡ ADVANCED TECHNICAL SUPPORT

- Perform shadow studies to anticipate likely outcomes and be one-step ahead.
- Highly skilled in industry standard software tools to perform various studies.
- We offer valuable insight on project impacts to estimate interconnection costs earlier than ISO study timelines.
- Studies supported include reactive power compensation, material modification determination, and sub-synchronous oscillation studies.

WHY CHOOSE RMS ENERGY?



EXPERTISE



CUSTOMER FOCUS



INNOVATION



RELIABILITY



SAFETY



Connect with us to learn more about how we can support your power system needs and help you achieve your energy goals.



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