

FERC 881 PLAYBOOK

for Transmission & IT leaders

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FERC

Understanding the compliance requirements

Transmission Providers to implement AAR for near-term (up to 10 days) transmission requests

Transmission Providers to implement Seasonal ratings for long-term (more than 10 days) transmission requests

RTO/ISOs to implement systems/procedure to allow transmission owners to electronically update ratings at least hourly

Transmission providers to use uniquely determined emergency ratings

Public utility transmission owners to share their transmission ratings and methodology with transmission providers and ISO/RTO

Transmission providers to share their transmission owner's line ratings & methodologies with any providers upon request

Transmission providers to maintain a database of their owner's line ratings and methodologies on the providers OASIS or another password-protected website

Transmission Providers to post on OASIS any uses of exceptions or temporary alternate ratings

Transmission Providers to provide AAR Implementation timelines

December 2021

Order released

2022-2023

First filing

November 2024

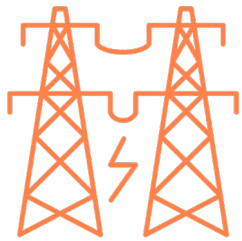
Second filing

July 2025

Deadline

Updates to Transmission Model Management Tools

What changes need to happen to comply with FERC 881?



Changes to line models



Updates to seasonal ratings calculations



Model changes flow to downstream systems



Coordination to other product teams

How can Logic20/20 help?



Requirements scoping



Stakeholder engagement and discussions

Documentation updates




What changes need to happen with regards to documentation?

- ✓ FRM update
- ✓ Compliance filing
- ✓ Design documents
- ✓ Prototypes

Why is this step required?

- ✓ Solution development based on FRM
- ✓ Documentation changes need committee approvals
- ✓ Design documents useful for project roadmap and planning

How can Logic20/20 help?

-  Updating FRM Language
-  Facilitating designs and Industry expertise
-  High-level requirement capturing and roadmap planning



Buy vs build: What tools are required for FERC 881 implementation



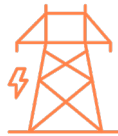
Rating calculations and usage

Dependencies



Weather forecasts

Model data



Clearance affected lines



Ratings exchange

Dependencies



Coordination and data exchanges with ISO/RTOs



Joint owners



Transparency

Dependencies



Posting on Public Portal



Compliance and Audits

Buy vs build + Logic20/20

Buying from a vendor

- ✓ Understanding of Vendor Landscape
- ✓ Requirement scoping, RFPs, Demos
- ✓ Vendor Procurement and Management

 Hitachi Energy



SIEMENS

In-house building

- ✓ Functional Specifications
- ✓ Software Development
- ✓ Internal Resourcing

How can Logic20/20 help?



Requirements gathering



Assistance with vendor procurement and management



Project management support



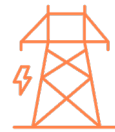
Business process design

Project Execution: Implementation, testing, and go-live

Execution workflow



Stakeholders



Facility rating engineers



Transmission engineering



IT & technology services



Real-time operations



Real-time and long-term planning



Business & project management

How can Logic20/20 help?

Facilitating design workshops and support

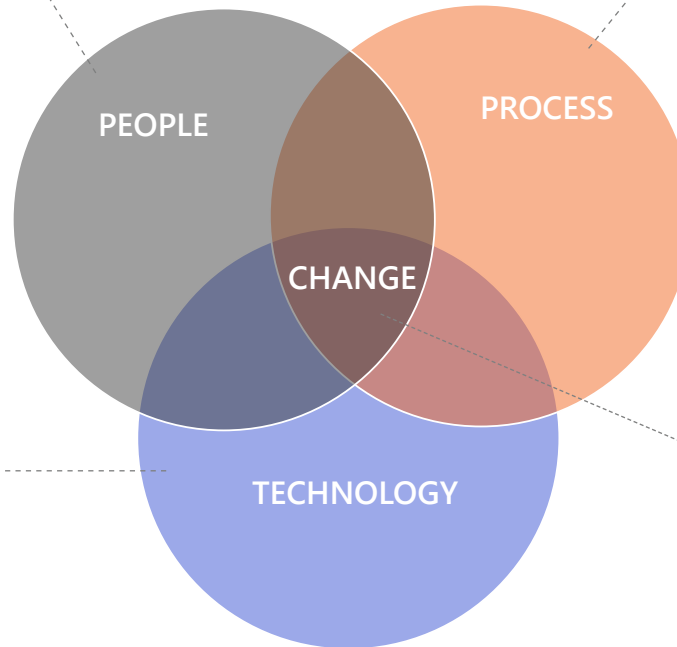
Test plan creation and testing support

PM support and stakeholders engagement

Change Management with FERC 881/DLR Implementation to Maximize Benefits

PEOPLE: Key Considerations

- ✓ Training & up-skilling is required for software implementation & usage
- ✓ Expansion of responsibilities for system operators, Facility Ratings Engineers & control centers
- ✓ Change of mindset as grid management transitions from reactive & preventive to a more proactive management system



PROCESS: Key Considerations

- ✓ A scalable framework is required to **define, prioritize & extend EMS capabilities**
- ✓ A **transparent process** is required in engaging impacted key stakeholders
- ✓ A adaptable mechanism is needed to **track emerging regulatory & other constraints**

TECH: Key Considerations

- ✓ Utility systems (OT/IT) readiness analysis is required to enable seamless integration of softwares
- ✓ **Standard & interoperable interfaces required** to integrate new technologies and software solutions
- ✓ **Scalable & modular systems** enhances overall systems flexibility as grid requirements continue to evolve

CHANGE: Key Considerations

- ✓ A well-structured & executed **change management strategy** is required to enable least resistance & high adoption
- ✓ A well-defined **transition planning** is needed across people, process & technology outlining movement from current state to future state
- ✓ Continuous assessment of the **extent of business impact** is required

Contact the Logic20/20 team



Alex Lago – Managing Director, Grid Operations | alexl@logic2020.com

Alex has decades of experience in the implementation of diverse systems and applications in the regulated and deregulated energy industry. His expertise spans all phases of system and application deployments related to functional areas including gathering requirements, product evaluation, gap analysis, cost analysis, planning, vendor selection, product acquisition, development, implementation, and integration. Alex has also led the growth of the GT&D group for a leading supplier of consulting services in the grid operations space and transitioned to the Global Grid Operations Lead after the company acquisition. His area of expertise includes power operations, market operations, DERMS, SCADA, EMS, DMS, OMS, and GMS systems, as well as market operator systems. As a Utilities Subject Matter Expert, Alex has supported, identified, and integrated numerous process improvements and systems implementations throughout his tenure, resulting in operational transformation and efficiencies.



Aaditya Kulkarni- Senior Consultant, Grid Operations | aadityak@logic2020.com

Aaditya has over 5 years of experience in the Power & Utilities industry. His expertise lies in OT Systems with areas such as Project Delivery and Business Development. Aaditya has worked for one of the leading OT vendor and implemented various grid automation projects across the United States. He has implemented systems such as DMS, OMS, SOM Planner, DERMS and EMS, and has Business Development experience of working through the process of RFP/Demos, Requirement Gap analysis and Product management.



Syed Ali – Manager, Grid Operations | syeda@logic2020.com

Syed has over 6 years of professional experience in the Power & Utilities sector. He has focused on managing teams across multiple engineering disciplines for various capital projects in his previous engagements. He has worked with top tier engineering vendors and helped them with RFP & RFI processes. His expertise lies in technical knowledge of the utility grid system. Syed has extensive design and implementation experience in the electric utility industry including T&D Substations, FLISR, VVO & ADMS-OMS.

Our utility expertise:

Logic20/20 has a history of successful partnerships with utilities

OUR EXPERTISE

- OT Systems for Utility Operations including real-time operations, control center operations, electric power market operations
- Digital Transformation of Emergency Operations Center with multi-cloud applications to increase resiliency & availability
- Systems and data analysis, engineering, analytics, and reporting for wildfire, asset, and vegetation risk mitigation
- Enterprise architecture and cloud strategy, design, and implementation
- Program management, process optimization, regulatory analysis and reporting implementation for WMP filling

OUR WORK

- Developed a design and implementation roadmap for a monitoring, dispatch and control for a very large Green Hydro complex.
- Designed a plan for integration and deployment of Distributed Energy Resources into a wholesale electric power market.
- Improved Office of Energy Infrastructure Safety Wildfire Mitigation Program maturity rating to be a leader in vegetation management in California
- Risk-optimized inspection plan to improve safety with 43% fewer monthly inspections
- Predictive maintenance and computer vision saving over \$5M annually in asset management
- 96% faster Public Safety Power Shutoff risk intelligence (days to hours)
- Fully accessible/responsive website design and implementation providing an enhanced digital experience for 1.9M customers

OUR CUSTOMERS

