

# Grid Planning

# Helping utilities transform data into clarity and action

# USHERING A NEW ERA OF EFFECTIVE UTILITY PLANNING, ENGINEERING, AND OPERATIONS

Itron Grid Planning solutions transform questionable data into dependable insights. With the volume of data on the rise from digitalization across the grid, data accuracy has become difficult to maintain. Setting a new foundation with reliable data ensures the right decisions are made at the right time. From today's operations to future planning, our Grid Planning solution aligns features with cross-functional utility needs to maintain reliability and provide users with the actionable intelligence they need.

The utility industry faces various challenges, including significant demand growth, more flexible distributed energy sources integration and an unprecedented increase in data usage from intelligent electronic devices. Unifying SCADA, outage management and distribution management systems are critical, but often result in implementation delays. Itron Grid Planning supports system integrators, leverages reliable data and reduces time to deployment.

Grid Planning User Groups	Utility Planning	Utility Engineering	Utility Operations	System Integrators
<b>Model Validator</b> Validating the digital network model and in-field state	•	•		•
System Planner Planning tasks under one platform	•		•	•
Power Analyzer Analyzing power flow within big data ecosystems	•	•	•	
Customer Interconnect DER Interconnecting DERs made simple, fast and effective	•	•		









Grid Planning Model Validator utilizes machine learning and advanced interpolation to improve data accuracy for fast access to verified, actionable information. The RMV ensures:

- » Medium voltage and secondary network phase relationships
- » Transformer-meter connectivity
- » Conductor size continuity
- » Asset-attributed data verification

#### **Features**

- » Native mapping engine to visualize validation analysis results
- » Customizable user dashboard summarizing key data issues
- » Automation schedule continuously synchronizes data

# **GRID PLANNING SYSTEM PLANNER**

Grid Planning System Planner unifies critical system planning tasks under one platform for heightened situational awareness, delivering an accurate, multi-level view of system status. This includes:

- » 8760 load profile data cleansing and normalization
- » Long-term capacity forecasting
- » DER hosting capacity analysis

#### **Features**

- » Profiles and normalizes interval load data at different feeder aggregation points
- » Export profiles for ADMS state estimation, annual regulatory filing and load forecasting
- » Load forecasts with adjustable input such as weather, DER contacts, economic drivers and more

### **GRID PLANNING POWER ANALYZER**

Grid Planning Power Analyzer simplifies complexity with system-wide analysis using big data ecosystems to enhance future grid reliability. This includes:

- » Time-series based power flow engine
- » High-speed distributed computing architecture
- » Best-case mitigation option identification

### **Features**

- » Time-series power flow analysis based on the forecasted load output
- » Supports balanced and imbalanced radial networks
- » Short circuit and model mitigation analysis











#### **GRID PLANNING SUITE DELIVERS**

#### **Unparalleled Intelligence**

- » Improved data accuracy
- » Heightened situational awareness
- » Enhanced reliability
- » Unmatched customer satisfaction
- » Increased efficiency

# **Equipped Next Generation, Data-Driven Applications**

- » Library of pre-configured data and system adapters
- » Default and customizable data mappings
- » Business logic for data handling
- » Data governance rules
- » Continuous monitoring and reporting of system health
- » Standard cyber security best practices







#### **GRID PLANNING CUSTOMER INTERCONNECT DER**

Grid Planning Customer InterconnectDER streamlines the DER interconnection process to support growing customer requests, enabling increased customer satisfaction for fast-tracking safe DER approvals. This includes:

- » DER application and work order management
- » Automates data error checking and calculations
- » Workflow customization business logic

# **Features**

- » Automated data error checking and calculations
- » Simplified electronic signatures
- » Integrate with Grid Planning System Planner to automate hosting capacity analysis

