



Grid Assurance

25th Annual Rapid Conference

May, 2016

The Need for Resiliency



- **Recent events demonstrate that new threats to US bulk electric system could result in widespread and prolonged customer impacts**
 - Physical attacks and severe weather events
 - Significant loss of long lead-time equipment may cause significant impacts to the bulk electric system

- **Significant recent industry and political attention on system resiliency**
 - Physical security standards - CIP-014-1
 - U.S. DOE April 2014 study
 - Quadrennial Energy Review
 - December 4, 2015 Fixing America's Surface Transportation (FAST) Act

An Industry Coalition



- **An industry coalition with significant geographic and technical diversity have signed a Memorandum of Understanding to pursue the development of Grid Assurance to:**
 - Significant national coverage including large metropolitan areas
 - Wide range of transmission voltages and equipment types

Services provided



- **Procure, store and maintain long lead time equipment critical to the bulk electric system**
 - **Initially large power transmission level transformers and circuit breakers**
- **Sell equipment (at cost) to Subscribers upon a Qualifying Event**
- **Provide logistics support**
- **Provide secure location(s)**

Qualifying Event

A “Qualifying Event” is any damage, destruction or material impairment of the safe operation of a Subscriber’s protected equipment, which is caused by, or the result of, any of the following events or circumstances:

- An act of war, terrorism, rebellion, sabotage or a public enemy, or any other physical attack, whether or not in connection with an act of war, terrorism or a public enemy
- A cyber-attack, whether or not in connection with an act of war, terrorism or a public enemy
- An electromagnetic pulse or intentional electromagnetic interference
- An act of God, a natural catastrophe or a severe weather condition, including a solar storm, earthquake, flood, fire, hurricane, tornado, volcanic eruption, derecho, wind storm or ice storm

Sparing Service Fee



- **A cost-effective solution for customers**
 - Pooling of asset needs drives economies of scale
 - Warehouses offer security and equipment protection in tailored locations
 - Focused team on providing targeted quick responses for Qualifying Events
 - Administrative costs are shared by several companies

- **Fee consists of costs to operate Grid Assurance including,**
 - Cost to purchase, store and maintain the equipment
 - General and administrative costs
 - Financing costs
 - A return on invested equity similar to regulated transmission returns

Regulatory Steps - Federal



Federal

- **Initial Petition for Declaratory Order approved by Federal Energy Regulatory Commission (FERC) on August 7th**
 - Contracting with Grid Assurance for access to spare equipment is a permissible element of a physical security plan to satisfy Requirement R5 of mandatory reliability standard CIP-014-1; and
 - No prior authorization under FPA Section 203 is required for sales of spare equipment by, or purchases of spare equipment from, Grid Assurance.
- **Second Petition for Declaratory Order approved by FERC on March 25th**
 - It is prudent for a transmission owner to participate as a Grid Assurance subscriber, and purchase spare equipment at Grid Assurance's original cost in case of a qualifying event
 - Transmission Owner must make a filing to recover these costs in transmission rates
 - Transmission owners may seek to recover subscription and purchase costs through single-issue ratemaking, i.e., there is no need to file an entirely new transmission rate case
 - Waiver of rules concerning affiliate – subscriber potential relationships subject to certain reporting requirements

Next Steps



- Initiate outreach to potential subscribers and receive approvals over 18 month period
- Grid Assurance defines subscription levels and provides cost estimates