

# **Grid Assurance**

### **Critical Spare Equipment Services to Improve** U.S. Transmission Grid Resiliency

April 20, 2016

### A Proactive Industry Solution





# Recent events demonstrate a clear need to improve the resiliency of U.S. transmission system

- U.S. high voltage transmission system is vital to the economic and social fabric of the country
- Documented and emerging threats facing the system
- □ Legislators & regulators pursuing solutions and looking for action
  - Federal Energy Regulatory Commission (FERC) directs development of physical security standards - CIP-014-1
  - U.S. DOE April 2014 study outlines system issues and vulnerabilities
  - Presidential Quadrennial Energy Review calls for strategic large power transformer reserve
  - FAST Act directs DOE to submit a plan to Congress evaluating the feasibility of strategic transformer reserve

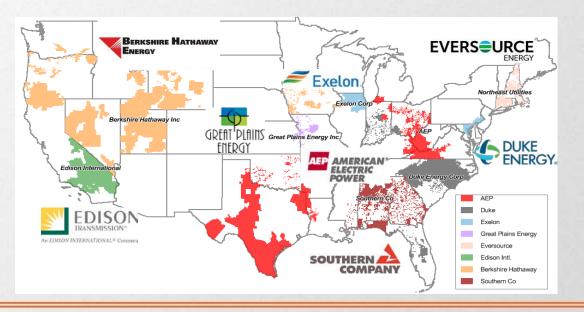
Growing national awareness - Wall Street Journal, NPR, books, national newspapers

### Grid Assurance Overview



#### Goal & Objectives

- Provide all U.S. transmission owners a cost-effective solution
- Pool needs across the industry to provide economies of scale
- Store equipment away from potential targets
- Structure costs similar to existing FERC-regulated transmission rates



### Services provided



- Procure, store and maintain long lead time equipment vital to the electric transmission system
- Provide secure location away from protected assets





- Sell equipment at cost to Subscribers upon a Qualifying Event
- Provide logistics support

# **Qualifying Events**



### **Qualifying Event**

A "Qualifying Event" is any damage, destruction or material impairment of the safe operation of a subscriber's equipment caused by:

- Act of war, terrorism, rebellion, sabotage or a public enemy, or any other physical attack,
- A cyber-attack
- An electromagnetic pulse or intentional electromagnetic interference
- An act of God, a natural catastrophe or a severe weather condition

## **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 Approvals**



While Grid Assurance is not regulated, it is important for its target audience to have regulatory clarity to confidently subscribe for this service

#### FERC Approvals

- Initial Petition for Declaratory Order approved on August 7, 2015
  - 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 Federal Power Act Section 203 is required for sales of spare equipment by, or purchases of spare equipment from, Grid Assurance.

#### Second Petition for Declaratory Order approved on March 25, 2016

- Prudent to join Grid Assurance and purchase of spare equipment in case of a qualifying event
- Single issue ratemaking
- Affiliate pricing rules waiver with certain conditions

### **Projected Operational Timeline**



Acquiring subscribers, obtaining the necessary approvals and acquiring the equipment & buildings will take significant effort over 3 years

