Culture of Reliability Excellence:

Surry Nuclear Power Station Tornado Event

Dominion®

Agenda

Dominion Overview

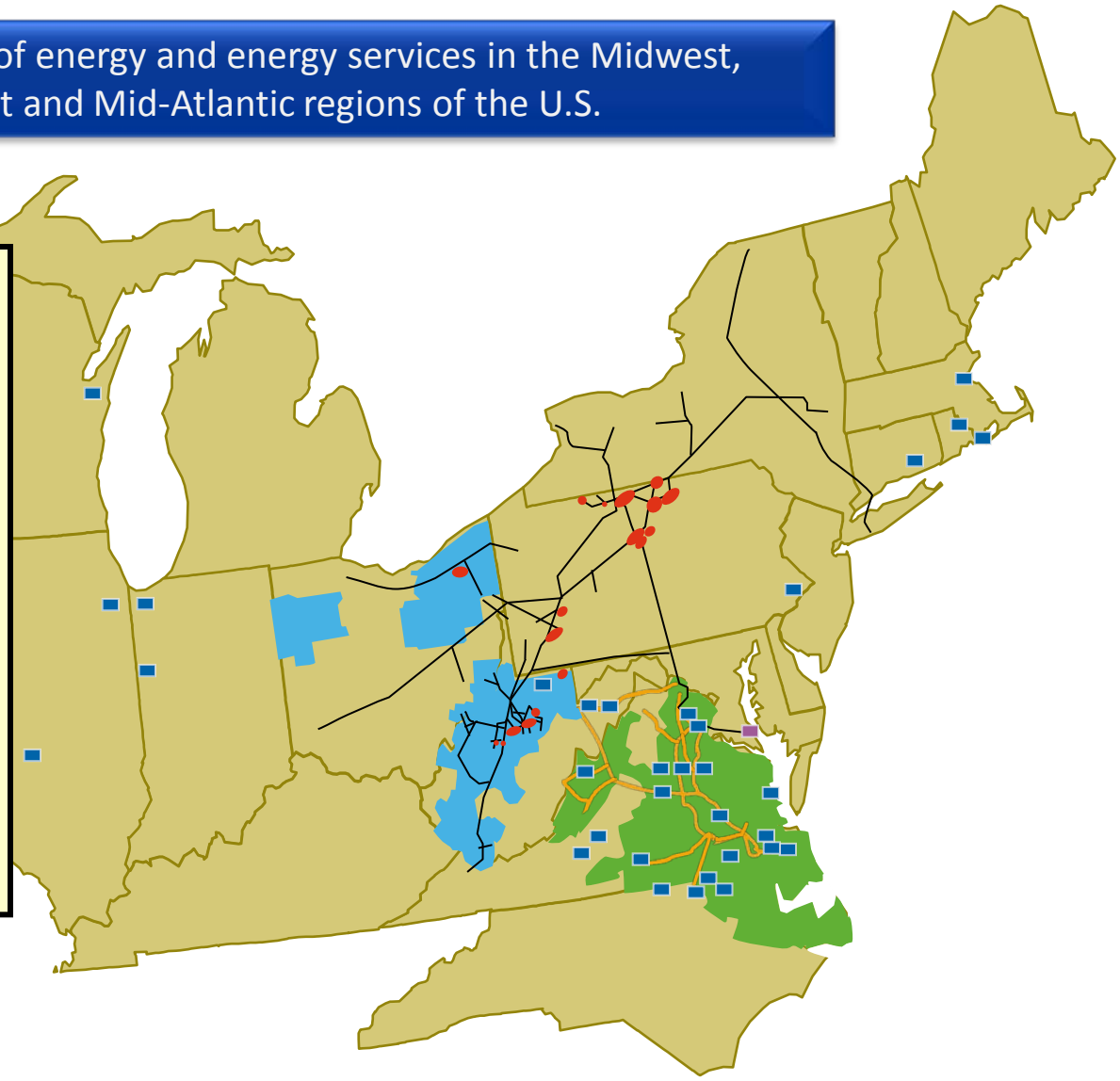
Culture of Reliability Excellence

Case Study

Excellence: Continuous Improvement

Dominion Profile

Leading provider of energy and energy services in the Midwest, Northeast and Mid-Atlantic regions of the U.S.



- ~27,600 MW of electric generation
- 6,000+ miles of electric transmission
- 12,000 miles of natural gas transmission, gathering and storage pipeline
- 942 billion cubic feet of natural gas storage operated
- Cove Point LNG Facility
- 2.4 million electric customers in VA and NC
- 1.3 million natural gas customers in OH & WV

2.1 million non-regulated retail customers in 13 states

Our Integrated Business Model

Dominion Virginia Power

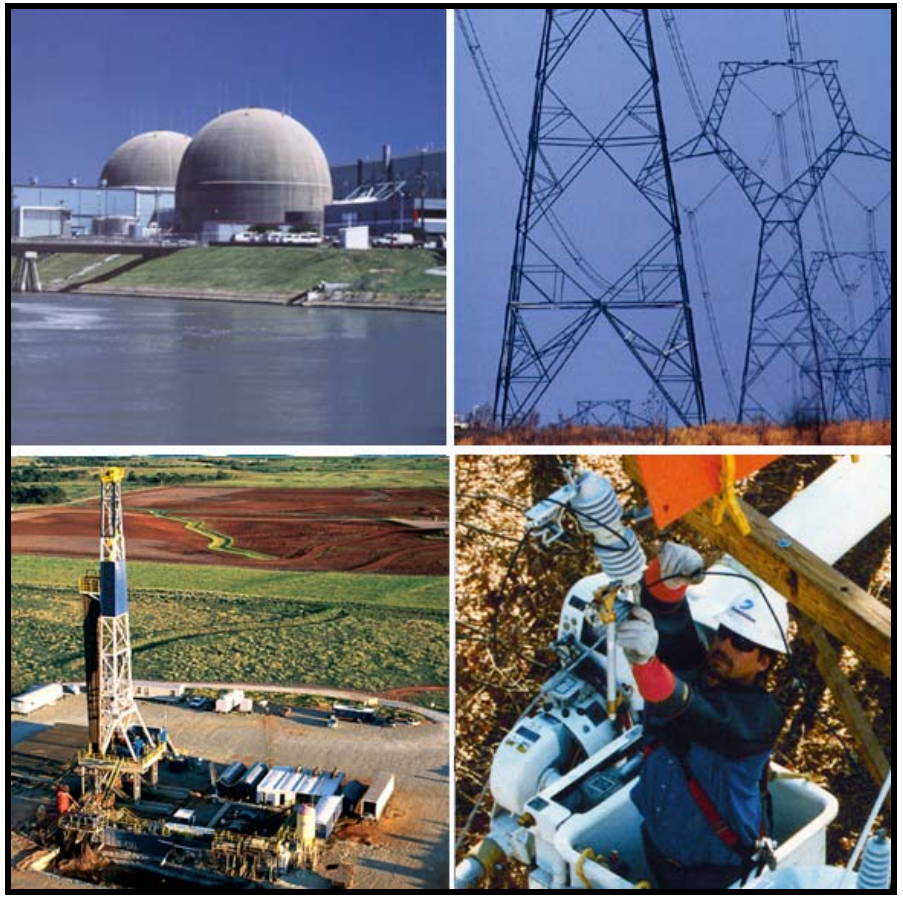
- Electric Distribution
- Electric Transmission
- Unregulated Retail

Dominion Generation

- Regulated Generation
- Merchant Generation

Dominion Energy

- Gas Transmission
- Gas Distribution
- Producer Services



Building a Culture of Reliability Excellence

Core Values:

Safety, Ethics, One Dominion, Excellence

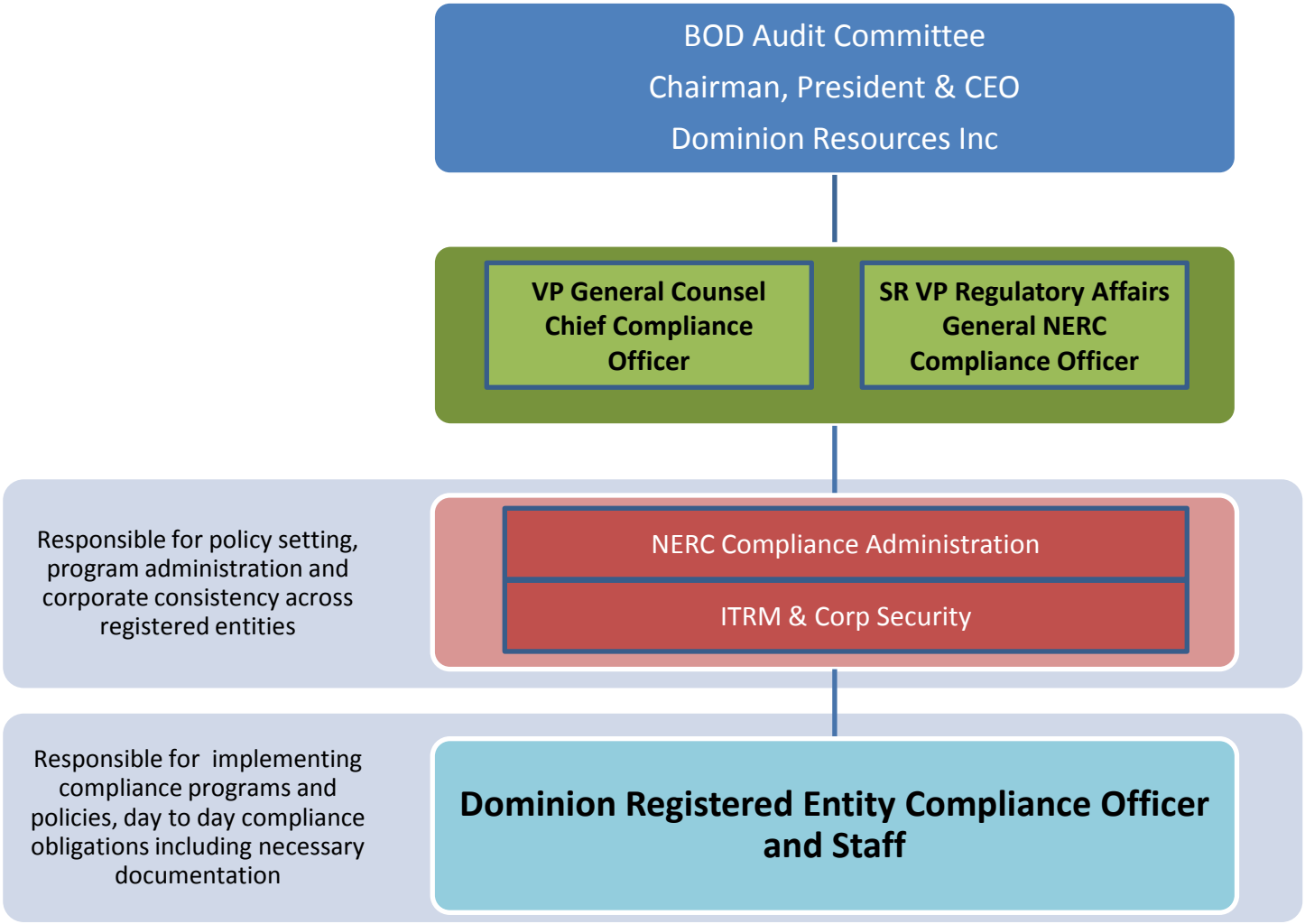
Compliance Organization:

Structured for corporate oversight in each business unit

Goals:

Reinforcing culture through Annual Incentive Program

Building a Culture of Reliability Excellence



Case Study:
Surry Nuclear Power Station

Tornado Damage (EFT-3)

April 16, 2011

Background

April: "Shoulder Season"

- Maintenance outages
- Construction outages
- Typically milder temperatures (lighter loading)

Unpredicted Extreme Heat

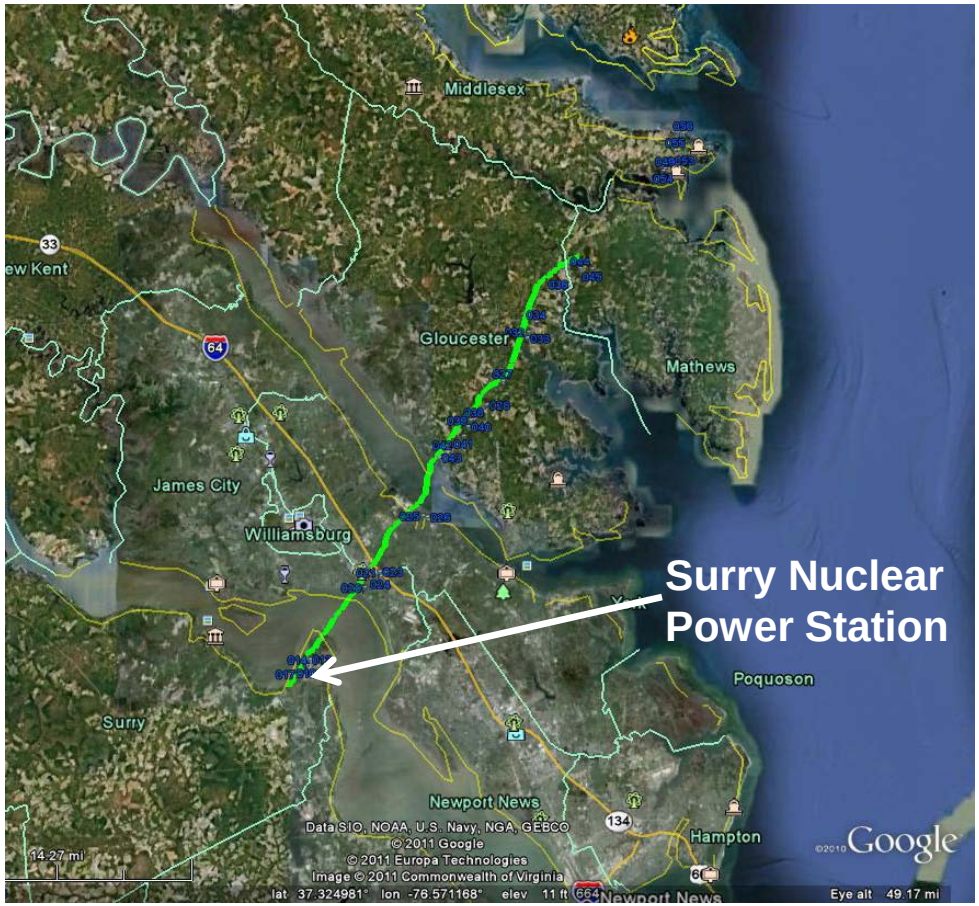
- Several days in 90 degree range
- Heavy loading conditions

Incoming Storm Cell Activity

- Coming in from the south
- More than 90 verified tornados in neighboring North Carolina

Summary of Tornado Event

- EF 3 tornado struck switchyard ~6:45 p.m. Saturday, April 16
- Units 1 and 2 shutdown automatically
- Emergency backup power sources started immediately
- Safety Systems responded as designed
- There were no resulting injuries



Fukushima Daiichi disaster had occurred one month earlier in Japan.

Tornado Path Heading into Surry Facilities

Tornado Path Through Switchyard

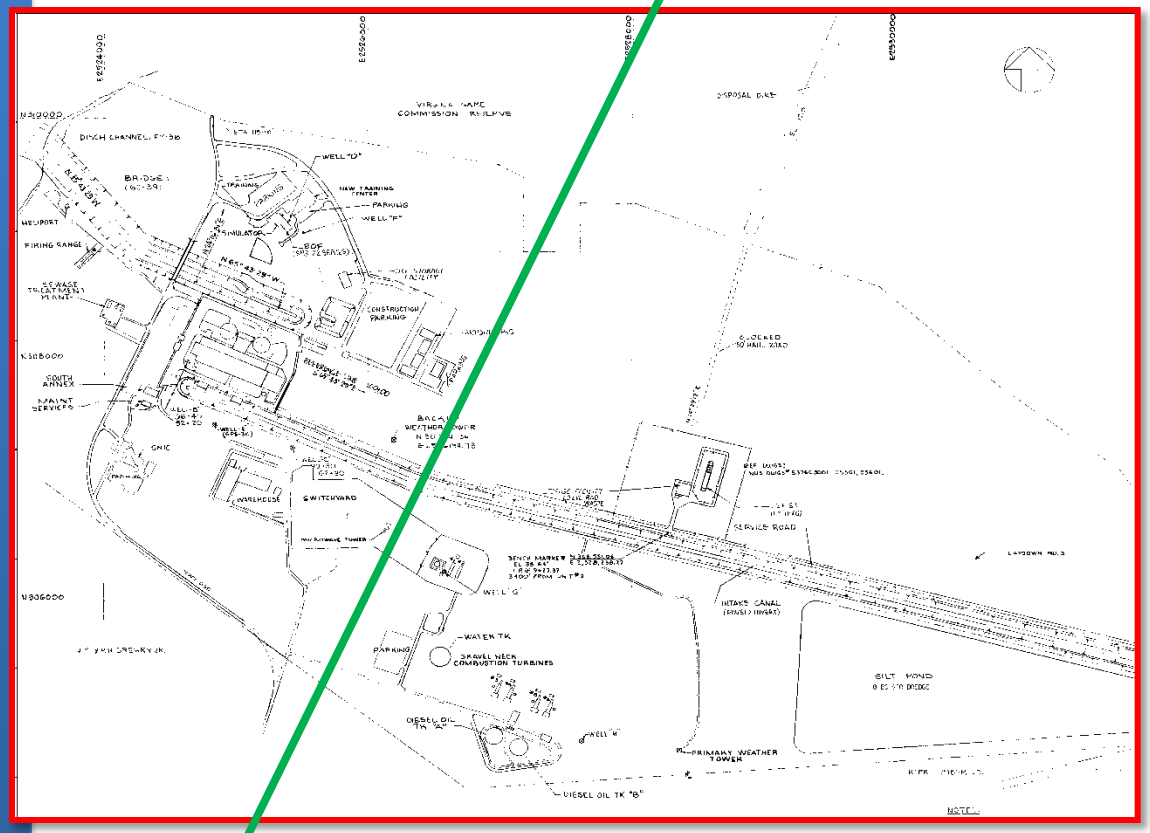
21 Seconds:

- 500kV line lockout
- 230kV line lockout
- Second 500kV line lockout
- Surry Unit 2 trips offline
- Third 500kV line lockout
- Second 230kV line lockout
- Surry 34.5KV bus lockout
- Surry transformer 2 lockout
- Surry unit 1 trips offline

1800 MW of generation

500kV network serving Williamsburg-Virginia Beach

LOST

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The Damage

Container travelled approximately 100 yards to land against transformer

Electrical Switchyard: Splintered Bus Work

Transmission Line Damage

Electrical Switchyard: Bus Damage

Electrical Switchyard: Flying Debris

Vehicle Maintenance and Carpenter Shop

The Impact

Photo of tornado taken from station security camera

The Keys to Restoration Success

- Personnel response was exceptional from all segments of the company supporting restoration activities in a safe manner
- Excellent contractor support and response for both Transmission Lines and Substations
- Relaying systems at Surry operated as designed and isolated the plant
- Use of 34.5kV “swing bus” with three sources of 34.5kV to serve critical loads at Surry Power Station
  - Allowed flexibility to restore service on day 1
  - Allowed for the repair of 230kV bus without interrupting service to critical plant loads

Switchyard Restoration

Crews worked 24/7 to restore switchyard in 3 days, enabling Surry 1 to return to service

Excellence: Continuous Improvement

- The loss of digital relays due to water was not a significant issue in this event but if more damage had occurred it could have created a different restoration time line.
- New air conditioned facilities did not allow for an equilibrium of pressure and rubberized roof membrane was breached. Review design of existing control houses to improve their ability to handle high winds.
- Work trailers although tied down with concrete blocks could not be restrained. Use of vehicles in critical locations will need to be considered.

Questions?