



ERCOT Cyber Security

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ERCOT Overview

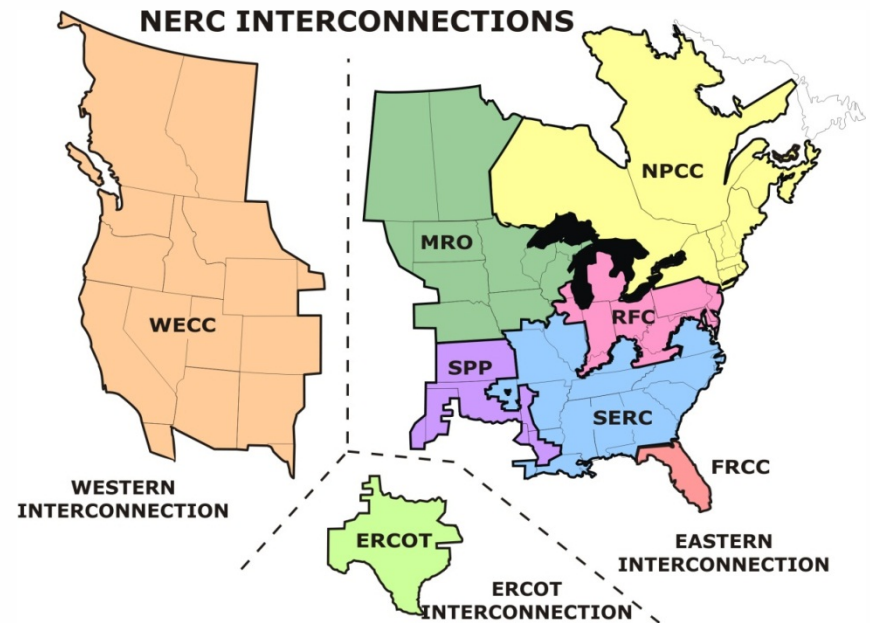
RESPONSIBILITIES

The Texas Legislature restructured the Texas electric market in 1999 by unbundling the investor-owned utilities and creating retail customer choice in those areas, and assigned ERCOT four primary responsibilities:

- **System Reliability** - Ensure reliability and adequacy of regional electric network
- **Open Access to Transmission** - Ensure nondiscriminatory access to transmission/distribution systems for all buyers and sellers
- **Competitive Retail Market** - Facilitate retail registration and switching
- **Competitive Wholesale Market** - Ensure accurate accounting for electricity production and delivery among the generators and wholesale buyers and sellers in the region

QUICK FACTS

- 75% of Texas land
- 85% of Texas load
- More than 41,500 miles of transmission lines
- 550+ generation units
- 68,305 MW peak demand (set August 3, 2011)



ERCOT connections to other grids are limited to direct current (DC) ties, which allow control over flow of electricity

Cyber Security Threat Landscape



Technology

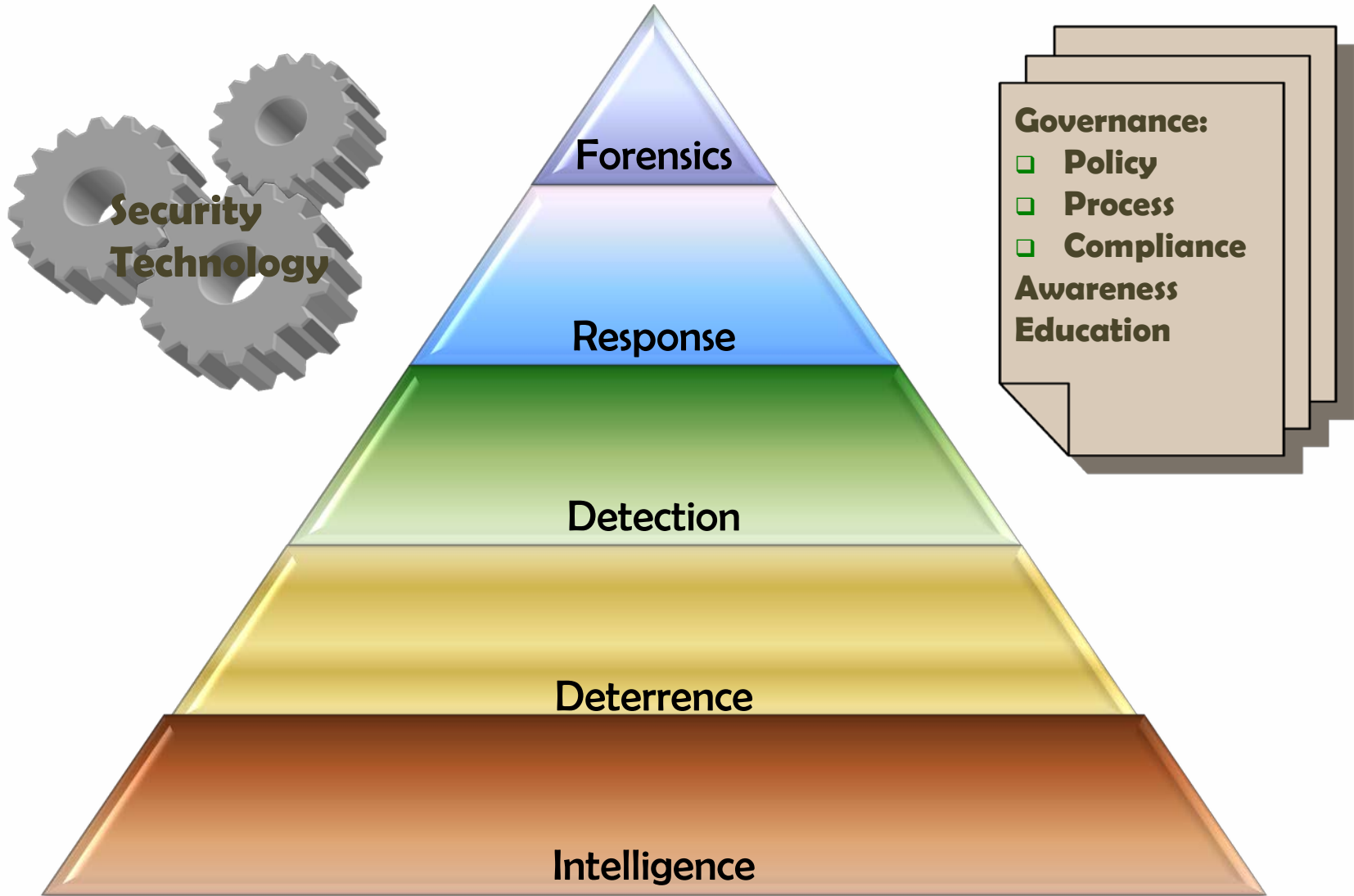
People



Security Framework



ERCOT Security Protection Strategy



External Collaboration



Summary

- ERCOT has strong executive management support for security
- ERCOT has a dedicated security organization and established strategy
- ERCOT is committed to external collaboration with relevant government agencies, law enforcement, industry and national labs to enhance its and the industry's security posture

