

Resilience & State Perspectives

Richard S. Mroz

Managing Director, Resolute Strategies, LLC

Former President, NJBPU

Former Chairman, NARUC Critical Infrastructure Committee

Former President, OPSI

Former NARUC Representative, ESCC

Senior Advisor, Protect Our Power

Resilience & State Perspectives

Resiliency at the State Level

- Generation – Fuel Redundancy
- Pipelines – Generation Nexus & Retail
- Transmission – Asset Hardening
- Distribution – System Management & Self Healing
- DER – Integration thereof and Management
- DER - Town Center/Campuses Islanded & Black Start
- DER – Cybersecurity Standards

And...Energy, Water, Telco nexus

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State Level Initiatives for Distribution Systems

Some by Statute; Many by Commission Action

- Enhanced Capital Investments – *Riders or Clauses*
- Grid Modernization
- Distribution Automation
- AMI and DER
- Microgrids
- Cybersecurity

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New Jersey Perspective

- All Hazards Approach
- 2000s Pipeline Replacement
- Superstorm Sandy
 - Infrastructure Investments & Upgrades
 - Rate Structures for Enhanced Investments
 - Microgrid Development
 - Transit Grid
- Pipeline Orders & Redundancy Exercises
- Cybersecurity Orders & Industry Engagement

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NARUC Perspectives

- Best Practices in Generation, T & D, Gas and Water
 - Energy Markets
 - Infrastructure Enhancement Programs
 - Pipelines
- Cybersecurity
 - Resource Repository
 - Cybersecurity Primer, Supplement & Implementation Manual (USDOE Support)
- Rate Structures for Enhanced Investments & “Resilience”



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What is the cost, value and, rate structure?

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Rates and Recovery of Costs

- What are the increments & how accounted for ?
- What is Rate Base ?
- Is it “used and useful” ?
- Is that incremental cost “prudent” ?

Possible Methodologies & Approaches

- NARUC Resolution on Cloud Computing -*Summer 2016*
- National Academy Sciences - *2017*
- NARUC – DER Rate Manual – *2016*
- EPRI
- Possible Collaborative of States and Federal Agencies