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Are We Ready?
Are We Ready?

- Increased Demand
- Increased Generation
- Business Impact?
- Energy Security

- Increased Storm Activity
- Power Distribution and Reliability
- Business Impact?
Supply Side Factors

• What Are The Drivers? Cheaper, Cleaner, and More Reliable Energy

• Two Challenges Facing Us Today;
  – Need additional generation
  – Must address our aging infrastructure

• US Average Outage Duration Is 120 Minutes And Getting Worse;
  – Projected to be > 140 minutes by 2020,
  – Rest of industrialized world is < 10 minutes and getting better

• Infrastructure Is Designed For Peak Conditions Which Occurs ≤ 1% of the Time

• New Challenges That We Must Address
  – Increase Diversity of Power Sources
    • Renewable portfolio standards
  – Increasing Environmental Requirements
  – Escalating Security Concerns
    • On-shore resources
    • Use “non-traditional” resources
Load Side - Factors

• Changing Demands On The Grid
  – Integration of electric vehicles
  – By 2020, entertainment, computers and gadgets will account for 45% of electricity used in the home and need the equivalent of 14 average-sized power stations to power them, increasing demand for near-perfect power.

• Increased Demand

• Energy Efficiency
  – Buildings
  – Public facilities

• Demand Limiting
  – Frequency regulation
  – Demand response
  – Demand limiting

• Economic growth
Damaging Storms Seem To Be More Frequent

• Power Outages
  – More frequent and longer in duration
  – One area of Maryland – 6 weeks of outages in the last 18 months

• Aging infrastructure more susceptible to damage

• Costly to upgrade infrastructure on a large scale
  – How do we pay for it?
  – What is the cost of “do nothing” to the economy?

• Grid Stability
  – Increased use of renewable energy
  – Distributed generation and the associated interconnections
  – Renewable and distributed generation – does the grid provide back-up?
We Can Prepare

• **Traditional Efficiency Improvements**
  – Building management system
  – Lighting retrofits
  – HVAC upgrades
  – Building envelope improvements
  – Usage transparency through advanced metering

• **On-site Generation and Storage Capacity**
  – Gas turbines
  – Diesel generators
  – Power storage (thermal, electric)
  – Renewable energy (PV, wind turbines)
  – Electric vehicle infrastructure

• **Implement Advanced Controls**
  – Demand response programs
  – Balance system supply and demand
  – Optimization of power system based on performance metrics

• **Operate with Utility Grid or in Island Mode**
  – Automatic connect and disconnect from main grid to meet specific performance outcomes
What are the Ripple effects of Preparing?

- **Renewable Energy**
  - Who provides back-up? At what cost?
  - Grid stability when renewable energy drops off

- **Distributed Generation**
  - Who provides back-up and at what cost?
  - Fuel supplies during emergencies? In general?
  - Approvals – local and state
  - “Mini-utilities” and Micro-grids– can they exist? Who regulates?

- **Businesses**
  - Energy Efficiency – good business – can they obtain needed ROI?
  - Energy Security – at what price?
  - Availability of low priced fuel for micro-grids and distributed generation
Thank you!
Connecticut Power And Energy Society
How Do We Get Prepared?

Emergency Management and Continuity Planning – The Developing Legal Issues

March 2013
Preface

• This presentation is intended to facilitate a discussion of the issues presented and does not constitute legal advice. Any questions regarding specific legal issues should be reviewed with a lawyer engaged by you for that purpose.

• Copies of the presentation outline are available in the meeting materials. Please excuse the level of detail of some slides in the presentation; additional detail is provided to make the copies more useful for future reference.

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Discussion Topics

- Risks and Consequences
- Government “Guidance”
- Liability Standards Cases
- Minimizing Liability
- Planning Considerations
Potential Risks – Paint the Picture of Risk

• **Public Health Emergencies** (perceived or real, reactions of government and individuals)
• **Accidents** (spills, fires, explosions, etc.)
• **Intentional Harm** (terrorism, vandalism, etc.)
• **Natural Events** (hurricanes, floods, ice storms, etc.)
• **Technology Events** (Equipment failures)
What Do We Mean by “Consequences”

– Think: “Exposures”

• Personal Injury / Property Damage Liability
• Regulatory Liability
• Corporate Asset Injury
  – Physical Asset Injury
  – Financial Injury
  – Reputation Injury
  – Investor Confidence Injury

– Question:
  • What Standards Must be Met to Minimize these Exposures?
Potential Sources of Standards for Emergency and Continuity Planning and Response

- Common Law Standards
- Standards Of Care for E&C Planning & Response
- Industry Standards
- Government Recommendations And Guidance
- Other Relevant Legal Requirements

These sources interconnect, highlighting the interdependencies and cross-references in emergency and continuity planning and response standards.
Post 9/11: A Decade of Changing Expectations

– Consider: Popular expectation changes lead to legal expectation changes
  – Common Law (court decision) changes to tort standards
    • In Re: September 11 Litigation
  – Legislative/Regulatory Changes
    • Targeted new standards for some risks (e.g. Chemical Facility Anti-terrorism Standards)
    • Congressional statements on the appropriate private party standard of care
    • Wealth of government “guidance” information
Government Action Affecting General Emergency Management/Continuity Planning Standards

- **NFPA 1600 – Voluntary “National Preparedness Std.”**
  - *9/11 Commission Recommendation:* We endorse the American National Standards Institute’s recommended standard for private preparedness. . . . We believe that compliance with the standard should define the **standard of care** owed by a company to its employees and the public for legal purposes.
  - 2004 “Sense of Congress” – DHS should promote adoption of voluntary national preparedness standards such as NFPA 1600 (See, Intelligence Reform and Terrorism Prevention Act 2004)

- **DHS – June 2010**
  - Adopts Standards for Voluntary Private Sector Preparedness Accreditation and Certification Program
    - NFPA 1600
    - ASIS SPC.1-2009 - Organizational Resilience Standard
    - British Standard BS 25999 - Business Continuity Management

- **See also, ISO – 2012 :** ISO 22301- Societal Security – Business Continuity Management System Requirements
Common Law Theories of Liability – Negligence

• **Negligence Elements: Injury to Persons or Property**
  – Defendant owed a duty of care to injured party (legal question)
    • **In Re September 11 Litigation:**
      – Finds: A duty to protect against terrorist acts *exists*
    – Failure to take reasonable steps to carry out duty (negligence)
      • What is reasonableness standard today?
  – Negligence was actual cause of injury
  – Negligence was proximate cause of injury (sig. relationship)
    • Unforeseeable third party criminal acts may break causal connection
    • What is foreseeable today?
      – Health Emergencies, Accidents, Intentional Acts, Natural Disasters, Technology Failures
    • WTC 1998 litigation – foreseeability not even in contention (1998)
Special Liability Considerations for Certain Plaintiff Groups

• Employees
  – Workers Compensation Limitations
  – But Recall: 9/11 Commission: “We believe that compliance with the [NFPA] standard should define the standard of care owed by a company to its employees and the public for legal purposes.”

• Customers
  – Is this a non-compensable “general duty”?
  – Plaintiffs with significant claims may argue outside general duty
  – Addressed by PURA in rate and shareholder allocations?

• Shareholders (economic injury)
  – Loss of revenue – regulatory action/inability to continue operations
  – Loss of stock value/reputation – if unaddressed foreseeable risk
Interplay of Regulatory & Industry Standards

• **NFPA 1600 & Other Continuity Planning Standards**
  – (NFPA 1600 § 4.5.1 (2010)– comply with law, policies and industry codes of practice)
    • Consider:
      – RCRA contingency plans
      – EPCRA documentation
      – OSHA general duty standard/emergency action plan std.
      – CAA § 112(r) measures
      – TSCA – PCB management
    • Will you have complied with NFPA if you don’t comply with other laws?

• **Consider how standards may be interrelated**

“Guidance”: Risk Management Principles, Training and Exercises

- Critical Infrastructure Partnership Advisory Council Annual Report (DHS 2011) - Goals include:
  - Use sound risk management principles to implement physical and cyber measures that enhance preparedness, security and resilience
  - Partner to conduct comprehensive emergency, disaster, and business continuity training and exercises to enhance reliability and emergency response
A “New” Liability Theory?
- Negligent Failure to Plan

– Is there a duty to plan for protection of employees, business visitors, shareholders, and customers?
– Supporting arguments:
  • Based on new foreseeability of risks - terror attacks or other events at your operations or elsewhere that may cause interruption of business or injury to persons or property
  • Vulnerabilities of modern interconnectedness and reliance upon others to conduct your operations
  • You may be best positioned to evaluate the risks, prevent or mitigate the potential damage and bear the costs of prevention
    – Best positioned party is assigned the duty to mitigate
Exposures = Planning and Implementation

• **Katrina - Hospital Case**
  – Plaintiff patients and visitors trapped for days without power and supplies
  – Claims of failure to prepare and respond to foreseeable disaster
  – Inadequate auxiliary power
  – Maintenance staff prior warnings
  – $25 MM settlement

• **So. Cal. Edison – Review**
  – 2011 windstorm outages
  – Panel found company misclassified event class
  – No “incident commander”
  – Didn’t follow plan procedures
  – Inadequate supplies
  – No recent test of plans
  – Previous after action reviews failed to implement “lessons learned” (“training failure?
    • How is your follow-through record?
Minimizing Failure to Plan Liability
- Managing Your Emergency & Continuity Plan

- Perform periodic reviews of risk assessment, business impact analysis, and mitigation measures
- Amend the plans appropriately to address:
  - facility-specific changes in personnel, operations, and equipment
  - changing regulations and other standards
  - drill experiences and real world events (yours or others)
- Audit and document efforts – remember, the individuals who have done the planning, conducted drills, researched adopted improvements, etc. over the years may retire, leave, etc. (Knowledge transfer can be critical)
Minimizing Failure to Plan Liability
- Other Considerations to Address the Standard of Care

- **The Plan Development Process**
  - Board Involvement (document it)
    - Board protection
    - Board confirms the corporate priority and supports needed resources

- **The Plan Implementation Process**
  - Follow the Plan as Best you Can
    - Don’t blindly follow (e.g. a situation not covered by plan)
    - Don’t fail to follow plan due to ignorance or complacency
  - Think of your plan as a future trial exhibit
    - Will it have a positive or negative impact on jurors?
Issues to Consider:

- Numerous legal/financial/public policy/corporate citizenship reasons for emergency planning
- Questions to ask yourself:
  - Have we taken appropriate steps to address risks?
  - Do we have appropriate plans?
  - Are we confident personnel are effectively trained and would implement the plan as needed?
  - Have we involved all the right internal and external parties in planning?
  - Have we documented our planning and implementation efforts?
Connecticut Energy, Environment and Economic Development Conference:

Keeping the Lights On

[Logos of various companies and organizations]