National Petroleum Council
Emergency Preparedness (EP) Study

December 18, 2014

Secretary's Request

- What vulnerabilities have recent storm activity exposed in U.S. energy infrastructure?
- What legal, procedural, and physical gaps need to be addressed by industry and government to improve response to disruptions?
- What strategies should be pursued to increase energy system resilience to storms and other potential disruptions?
- What actions can be taken to address the interdependencies between oil and natural gas systems and other critical infrastructure?

Overview of Study Scope

Enhance communication / interactions between Government (local, state, federal) and Industry to prepare for, respond to, and recover from emergencies (natural disasters)

DOE topics of interest:

Actions by government and industry to improve their interactions to prepare for and respond to emergencies that can disrupt oil and natural gas supplies, e.g.:

- Institutional frameworks for **improved communication** and collaboration
- **Education and Outreach**.

Data, technologies, or other capabilities that are pivotal to:

- Understand the **nature and severity of emergencies** as these are identified and occur
- **Assess damage** to oil and natural gas infrastructure and system-wide impacts
- Support **informed decision-making** / actions to best manage and more expeditiously recover.

Legal, procedural, or physical challenges that can be addressed, or other strategies to improve emergency preparedness and resiliency, e.g.:

- **Potential regulatory waivers**, process for seeking / obtaining
- Support required for **emergency supplies, resources** (people, equipment) to speed recovery
- Policy changes to enable **expeditious recovery** in the fuel distribution system.

Strategies to **address interdependencies** among oil and natural gas and other critical infrastructure.

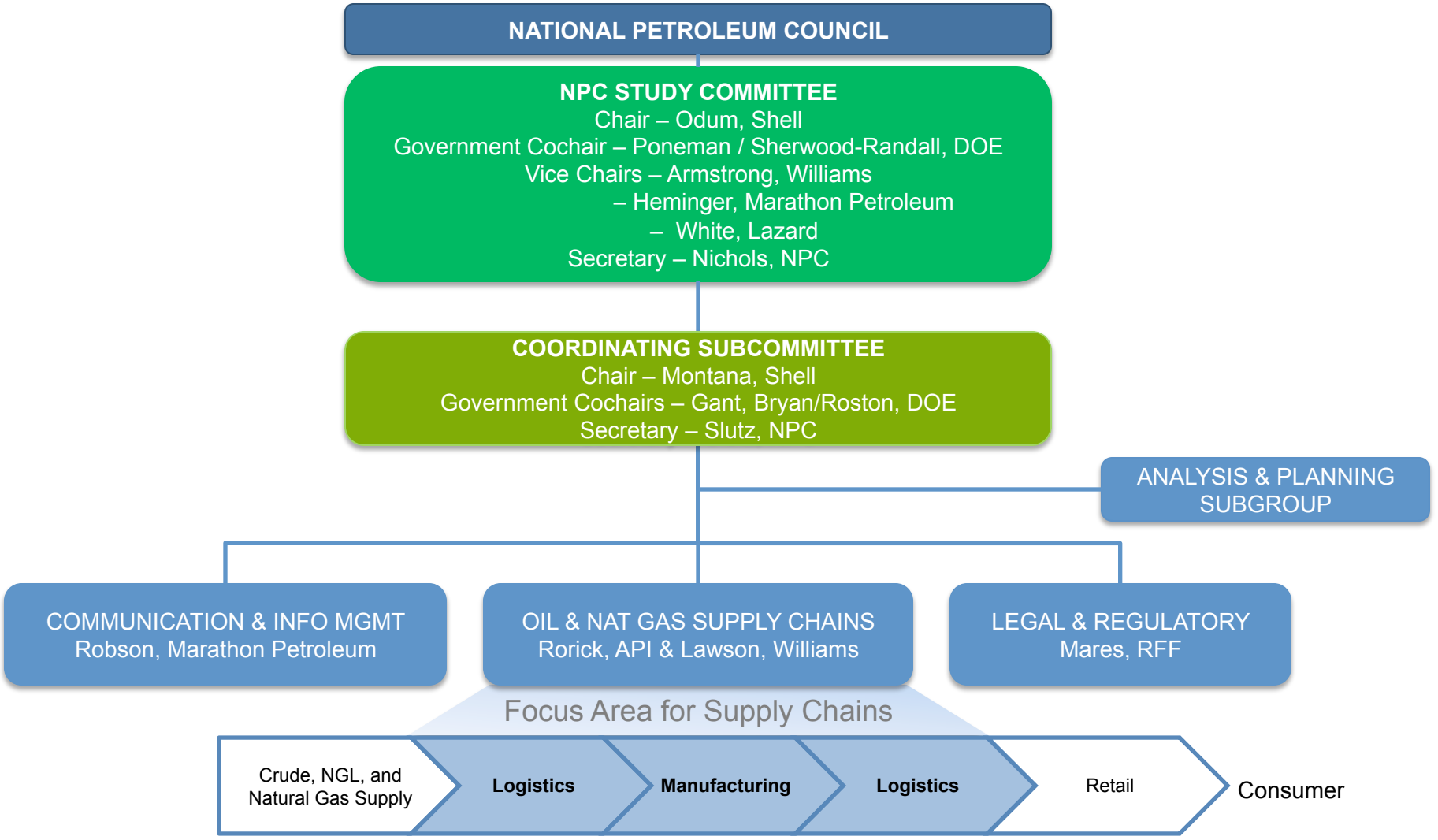
Study areas:

- **Oil, NGL, and Natural Gas Supply Chains**
  - Key insights / lessons from recent storms
  - Educate on supply chains, market dynamics
  - Identify inter-dependencies and strategies to address
    - Across each supply chain, between regions
    - Between O&G and other sectors (electricity, transportation, communications)
  - Delineate roles, capabilities, and needs (industry, government) during emergencies

- **Communications & Coordination** (industry with local/state/federal and, as needed, other industries)
  - Institutional frameworks for improved communication / collaboration
  - Clarify information needed before, during, after an event
  - Mechanisms to transmit information
  - Data, technologies, or other capabilities pivotal to decision-making
  - Outreach and education opportunities

- **Legal / Regulatory**
  - Actions, under existing laws, to facilitate protection and restoration of critical services, e.g.:
    - Antitrust limitations / implications; safe guards
    - Processes for seeking and obtaining regulatory waivers
    - Support required for emergency supplies, resources
  - Identify policy changes to enable expeditious recovery in the fuel distribution system.

EP Study Organization Structure



Study Approach

Two main components:

- After-action reports from previous natural disasters were reviewed, and key findings and lessons from these reports were identified.
- Four engagement sessions were held to solicit thoughts, concerns, and advice on ways to improve preparation, response, and recovery in the event of natural disasters.
  - **Federal Government:** 40 participants from 8 Cabinet Agencies
  - **State Government:** 16 participants from 14 states (New Jersey, North Carolina, Ohio, Kentucky, Washington, Alaska, California, Arizona, Georgia, Louisiana, Virginia, Massachusetts, Texas, and South Carolina)
  - **Local:** 1 participant
  - **NGO:** 1 participant (American Red Cross)
  - **Utilities:** 4 participants (1 electric, 1 gas, 2 both)
  - **Oil and Gas Industry:** 34 participants (not including study team members)

In addition, the Oil and Natural Gas Sector Coordinating Council (24 trade associations) was engaged in the development of recommendations to address study findings.

Findings

- Understanding of Oil & Gas Supply Chains is critical.
- Improved Situational Awareness enables more effective response.
- Effective Communication is a major challenge during emergencies.
- Maintenance of Response Organizations should be a priority.
- Leadership Commitment & Funding for continuous improvement is required to ensure a state of readiness.

Study Recommendations

- **Operational Framework**
  - Harmonize DOE's emergency response team structure with the NIMS Incident Command System (ICS).
  - Leverage EIA's subject matter expertise within DOE's energy response team to improve supply chain situational assessments.
  - Establish company liaisons and direct communication between DOE's energy response team to improve situational assessments.
  - Streamline and enhance processes for obtaining temporary regulatory relief to speed up recovery.

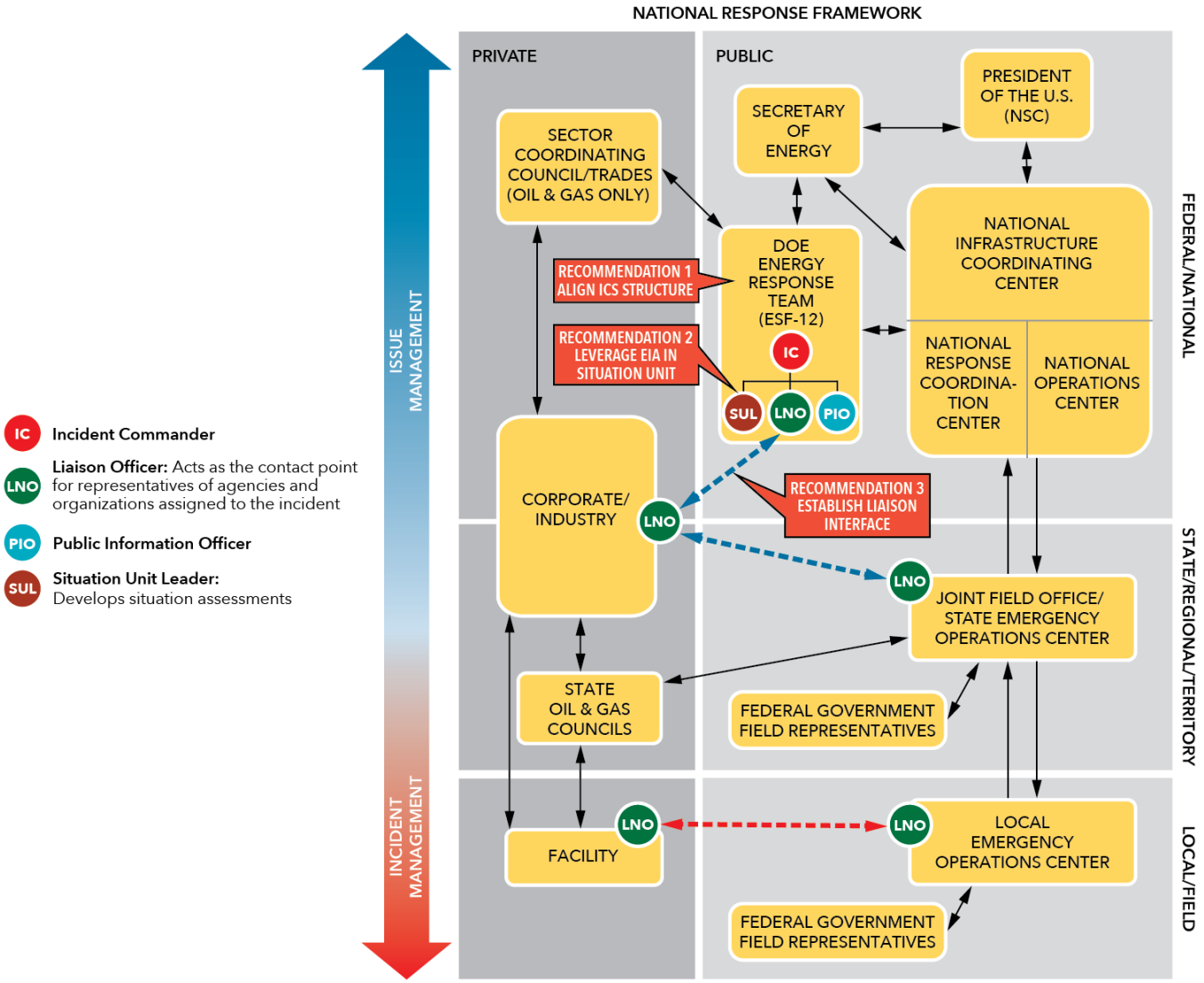
- **Sustaining the Process**
  - States should increase engagement with oil and gas industry in their energy assurance plans, and industry members should assist states in such efforts.
  - Both DOE and states should establish routine education and training programs for key government emergency response positions.
  - Both DOE and states should improve their comprehensive drill and exercise program and include industry participation.

Operational Framework

- **Harmonize DOE's emergency response team structure with the NIMS Incident Command System (ICS).**
  - Adopt scalable model from Local / Regional / National – Stafford Act enacted or not
  - Develop DOE culture and knowledge of ICS

- **Leverage EIA's subject matter expertise within DOE's energy response team to improve supply chain situational assessments.**
  - Staff situation unit from EIA (most knowledgeable on industry supplies)
  - Develop situation assessment via two communication paths
    - Bottom up through government ICS structure (ESF-12 contact, PSAs, JFO, etc.)
    - Direct one-on-one communications and coordination with Industry Supply Chain Liaison / experts
  - Summarize overall fuel supply situation and cascading events and timelines
  - Aggregate industry support requirements
  - Support DOE continuing to assess and implement social media information gathering

- **Establish company liaisons and direct communication between DOE's energy response team to improve situational assessments.**
  - For DOE ICS Liaison to gather one-on-one information prior to or during supply chain disruptions
  - Oil and Natural Gas Sector Coordinating Council (ONG SCC) to support DOE in maintaining two-way contact roster (regional / national)
  - Establish contacts in advance of emergency event


NATIONAL RESPONSE FRAMEWORK
PRIVATE
PUBLIC
PRESIDENT OF THE U.S. (NSC)
SECRETARY OF ENERGY
SECTOR COORDINATING COUNCIL/TRADES (OIL & GAS ONLY)
NATIONAL INFRASTRUCTURE COORDINATING CENTER
DOE ENERGY RESPONSE TEAM (ESF-12)
RECOMMENDATION 1 ALIGN ICS STRUCTURE
RECOMMENDATION 2 LEVERAGE EIA IN SITUATION UNIT
IC
SUL
LNO
PIO
NATIONAL RESPONSE COORDINA-TION CENTER
NATIONAL OPERATIONS CENTER
CORPORATE/ INDUSTRY
RECOMMENDATION 3 ESTABLISH LIAISON INTERFACE
JOINT FIELD OFFICE/ STATE EMERGENCY OPERATIONS CENTER
STATE OIL & GAS COUNCILS
FEDERAL GOVERNMENT FIELD REPRESENTATIVES
FACILITY
LOCAL EMERGENCY OPERATIONS CENTER
FEDERAL GOVERNMENT FIELD REPRESENTATIVES
ISSUE MANAGEMENT
INCIDENT MANAGEMENT
FEDERAL/NATIONAL
STATE/REGIONAL/TERRITORY
LOCAL/FIELD
IC Incident Commander
LNO Liaison Officer: Acts as the contact point for representatives of agencies and organizations assigned to the incident
PIO Public Information Officer
SUL Situation Unit Leader: Develops situation assessments

Operational Framework/Sustaining the Process

- **Streamline and enhance processes for obtaining temporary regulatory relief to speed up recovery.**
  - Develop best practice language and standardized templates for key temporary regulatory relief
  - Key improvements:
    - Improve existing EPA process for federal fuel waivers to reduce delays and decrease uncertainty
    - Identify CAA provisions/restrictions on EPA waiver authority that may create uncertainties that hinder response activities
    - Improve state fuel waiver processes
    - Improve Jones Act waiver process

- **States should increase engagement with oil and gas industry in their energy assurance plans, and industry members should assist states in such efforts.**
  - DOE / states to assess comprehensiveness of state energy assurance plans
    - States to increase industry involvement with plan development (Role for ONG SCC, trades)
    - Includes assessment of vulnerabilities and risk assessments of supply chains
    - Ensure resiliency considered in permitting process (i.e., gas vs. electric for natural gas compression)
    - Address interdependencies (cross-regional and cross-industry)
    - Verify plans for ensured fuel supply and distribution points for first responders
  - Industry to ensure interdependencies are addressed in Business Continuity Plans

Sustaining the Process

- **Both DOE and states should establish routine education and training programs for key government emergency response positions.**
  - Use / maintain Oil and Natural Gas Industry Preparedness Handbook as a key reference
  - DOE and states to hold regular education sessions
    - Conduct annual refresher education on supply chains in advance of hurricane season
    - Leverage existing federal, state, local, and industry forums for education
    - Engage the correct level of decision-makers and stakeholders (e.g., local decision-makers)
  - DOE and states to establish Management of Change processes for key positions

- **Both DOE and states should improve their comprehensive drill and exercise program and include industry participation.**
  - DOE emergency preparedness program needs an assigned process owner
  - DOE with states to establish frequency and scope (local, state, and federal)
  - DOE to develop and implement a comprehensive drill and exercise program that fully tests their response plan to supply chain disruptions
    - Engage with other federal agencies and interdependent private sectors
    - Ensure right level participation (senior decision-makers, first responders, etc.)
    - Test understanding of roles, communications, priorities, interdependent infrastructure.
  - Industry to invite DOE participation in their drills and exercises
  - Adjust plans based on lessons learned from past drills/exercises and incidents

Implementation

Communications	Timing	Who
Communicate Study Findings, Recommendations and Implementation to Targeted Audiences	1Q'2015	NPC & DOE
Operational Framework		
Harmonize DOE's Energy Response Team (ERT) Structure with the National Incident Management System	2Q'2015	DOE
Define EIA's role in DOE ERT and Identify Resources to Fill Supply Chain Expertise	2Q'2015	DOE
Establish Direct Communication Between DOE ERT and Company Liaison Officers to Improve Situational Assessments – Establish Senior Industry Contact List with DOE	2Q'2015	DOE & Industry
Support interagency processes for streamlining regulatory relief	Ongoing	States, DOE, Industry
Sustaining the Process		
Increase engagement in state energy assurance plans	Ongoing	DOE, States, Industry
Establish Routine Education and Training Programs for Key Government Emergency Response Positions including a Management of Change process	4Q'2015	DOE/States
Conduct a Joint Exercise Before the End of 2015 that Tests Key Recommendations	4Q'2015	DOE & Industry

For study information
and a copy of this presentation,
please visit the NPC website
http://www.npc.org