Executive Summary



HANDLING INSTRUCTIONS

- 1. The title of this document is *Clear Path VI* Executive Summary.
- 2. This document is approved for public release.
- 3. For more information on this exercise, please consult the following point of contact:

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EXECUTIVE SUMMARY

Clear Path is the U.S. Department of Energy's cornerstone exercise series designed to enhance the Department's ability to successfully meet its responsibilities as the Emergency Support Function (ESF) 12 Coordinator and Sector Specific Agency (SSA) lead for Energy as required by Presidential Policy Directives (PPD)-8: National Preparedness and PPD-21: Critical Infrastructure Security and Resilience, and codified in the Fixing America's Surface Transportation (FAST) Act (Public Law 114-94).

Clear Path VI occurred on May 3, 2018 in Herndon, Virginia. A strategic follow-up session with core planning members was held the morning of May 4, 2018 to discuss key recommendations resulting from Clear Path VI and next steps for implementation. The exercise built upon the successes of previous Clear Path exercises including Clear Path V which also integrated the communications sector. Clear Path VI was developed as a supplement to the Federal Emergency Management Agency's (FEMA) National Level Exercise 2018 (NLE 2018). The exercise brought together representatives from over 50 organizations representing Federal and state governments, as well as the electricity subsector, oil and natural gas subsectors, and the communications sector. Participants reviewed lessons learned from the 2017 Hurricane Season and discussed areas for improvement for upcoming responses.

Clear Path VI leveraged the NLE scenario of a major hurricane, Hurricane Cora, impacting the Mid-Atlantic coast. Within the scenario, Hurricane Cora made landfall in Hampton-Roads, Virginia as a Category 4 storm. Hurricane Cora downgraded to a Category 2 storm before impacting the National Capital Region (NCR). The hurricane caused significant damage to electric critical infrastructure, resulting in widespread, long-term power outages. Though impacts to communications, transportation, oil, and natural gas critical infrastructure were not as notable, the operational dependence on electric infrastructure elements threatened extensive cascading impacts. An important element of the NLE at large, Cora's effects on the NCR rendered primary Federal facilities inoperable, necessitating departments and agencies to activate their Continuity of Operations (COOP) plans. The exercise challenged participants to demonstrate how their organization would perform essential emergency functions in a degraded environment.

Clear Path VI was a discussion-based exercise which facilitated conversation between government, energy sector, and communications sector participants to explore their ability to prepare for and respond to severe disruptions to Mid-Atlantic energy delivery. There were several strengths demonstrated by participants during the exercise which are listed in **Figure 1**.

FIGURE 1: DEMONSTRATED STRENGTHS

Participants demonstrated subject matter expertise in their respective fields, and expressed confidence that emergency response capabilities within and between organizations continues to progress.

Participants were active in identifying practices and procedures developed during the 2017 Hurricane Season which were helpful in coordinated responses.

Participants were vocal in identifying specific action items necessary to help them prepare for future responses.

Participants noted the progress and growing usage of innovative data collection, display, and analysis tools

The exercise highlighted common themes among critical infrastructure partners and identified where and with whom they can work in order to resolve perennial issues. Observations made over the two days will strengthen all-hazards preparedness and response operations. Throughout the exercise, participants demonstrated knowledge of their organizations' roles and responsibilities and their ability to gather, analyze, and act upon critical information from a variety of sources in a timely manner. These functions are crucial to ensure a reliable flow of energy to the people of the United States.

Clear Path VI identified multiple areas for improvement (see **Figure 2**). Collaborating to address these areas will demonstrate the value of the Department's exercise series, and will improve the energy sector's emergency response capabilities.

FIGURE 2: AREAS FOR IMPROVEMENT

Preemptive Actions and Planning – A number of recurring gaps can be addressed prior to an incident. Improving access to and delivery of emergency resources, improving the qualifications and mobility of responders, and emergency public-private resource-sharing would greatly empower response efforts.

Comprehensive Evacuation Planning – State and local evacuation plans and directives should be better integrated with fuel supply contingencies. Evacuation vs. Shelter-in-Place determinations need further examination for energy reliability and unity of effort planning.

Data Collection and Modelling – Means of collecting, predicting, and displaying information on fuel availability, damage to infrastructure, and other critical information in disaster areas have become more innovative, but need further refining to better and more quickly reflect ground truth and comply with rising legal questions.

Information Sharing – Improved methods of information collection, aggregation, and distribution can expedite and better inform government and industry decision makers.

Clear Path VI underscored the significant progress which has been made across the energy sector in improving its emergency response capabilities and strengthening collaboration within the energy sector and between the energy sector and government. The exercise also highlighted the importance of collaboration across critical infrastructure sectors, namely the energy and communications sectors, for effective response and recovery. Clear Path VI concluded in early May, enabling enough time for participants to translate lessons learned into action items to be addressed prior to the start of the 2018 Atlantic hurricane season. The areas for improvement highlighted through exercise play and after-action reflection represent an opportunity to further strengthen the ability of energy, government, and communications partners to plan for and respond to future energy emergencies and disasters.