



EARTH Ex 2017

**Emergency All-sector Response to Transnational Hazards
Exercise**

August 23, 2017



EARTH Ex BLUF*



- Critical Life Line Cross Sector Exercise -23 August 2017
- Opportunity to test and refine policies and procedures for responding to a long duration power outage.
- Come as you are exercise for executive and senior operational managers. No ramp up or pre-exercise work required.
- Opportunity to provide critical feedback to federal and state agencies to improve preparedness and operational support.
- No cost to participate.
- Widely distributed exercise using new DHS exercise tools
- Four hour exercise over three advancing phases.



BLUF* - Bottom Line Up Front

EARTH Ex Concept



- EARTH Ex 2017 is a come as you are opportunity for executive and senior operational managers in all critical lifeline sectors to review, develop and extend the policies and procedures for responding to a long duration power outage.
- EARTH Ex 2017 is a widely distributed exercise event, using new electronic exercise tools, advancing over three phases allowing for an examination of the response and restoration decisions and actions lifeline sectors will face during a long duration power outage.
- EARTHEX 2017 supports in-depth discussion on roles, responsibilities, essential decision making, and communications requirements.



EARTH Ex Over Arching Objective



Improve community resilience to long-duration power outage events through cross-sector exercises.



EARTH Ex 2017 Supporting Objectives



- Decision Making and Initial Actions
- Developing and Processing Situational Awareness
- Developing communications concepts and information flow to support a successful response to a long duration power outage



EARTH Ex Organizational Focus Areas



- Existing Plans, Policies, and Playbooks
- Roles and Responsibilities
- Restoration Prioritization
- Conducting Assessments
- Operational Priorities
- Sharing Information



EARTH Ex Operational Lanes

- Electric (Generation, Transmission, Distribution), Black Start Decisions
- Water and Waste Water
- Oil and Natural Gas
- Federal Government – Energy, Critical Infrastructure, Emergency Mgt.
- State Government – Emergency Management, National Guard, Health
- Regulatory
- Non-Governmental Organization – Volunteers Active In Disasters
- Citizen Preparedness – Understanding Individual and Family Preparedness for a long duration power outage
- NISC – Sharing Information and Situational Awareness
- Private Sector - Generic

EARTH Ex 2017 Exercise Phases



- **Phase 1 – Day 3 of a Widespread Power Outage/No Solution**

Electric Subsector has completed an initial assessment and determines that essential components of generation and substation equipment is non-functioning and cannot be restored. Voltage collapse has occurred. All sites that do not have an on-site backup power generation capability with more than 72 hours of on site deisel fuel are off line. Millions are without power.

- **Phase 2 – Day 4-6 Widespread Power Outage/Critical Decisions, Assessments & Actions**

Electric Subsector must begin the detailed assessment of components at generations sites and all substations to determine component impact and status. All elements of generation, transmission and distribution has been impacted. All emergency management elements are on line due to cascading impacts from the extended power outage. No anticipated restoration time estimate is available until after day 6 assessments are concluded. Alternate communications, resource prioritization (spare tire – published in April), manpower, alterative tools for reliability and management must be discussed.

- **Phase 3 – Day 15+, Widespread Power Outage, Black Start, Communications, Cross Sector Coordination**

Electric Subsector has completed the detailed assessment and a Black Start cranking path must be determined and assembled. Public prioritization of critical lifeline sectors, medical, water system, continuity of government functions and communications has been supplied.



EARTH Ex Design Elements



- EARTH Ex is designed to be delivered virtually using an electronic tool.
- The Exercise delivery mechanism – the Battle Rhythm Manager (BRM) will support multiple lanes of play and multiple phases of the exercise.
- The EARTH Ex 2017 (BRM) will be available for play on the morning of August 23rd.

EARTH Ex Sector Components 1



- Each Exercise Lane (Sector) will receive:
 - Framing Inject
 - Exercise Objective
 - Specific Situational Awareness Injects
 - Advancing Injects
- Each Lane will develop specific responses to:
 - Discussion Questions
 - Consideration Items
- Each Phase will end with specific phase response questions



EARTH Ex 2017 Assumptions



- All of the information to drive the exercise discussion will be provided
- Organizations will be encourage to apply their own internal policies and procedures to develop solutions and responses to the exercise problem
- Access to the Internet will be available
- Each organization will have at least 1 person to serve as a facilitator/recorder
- Each organization will be internally assessed



EARTH Ex 2017 Opportunities

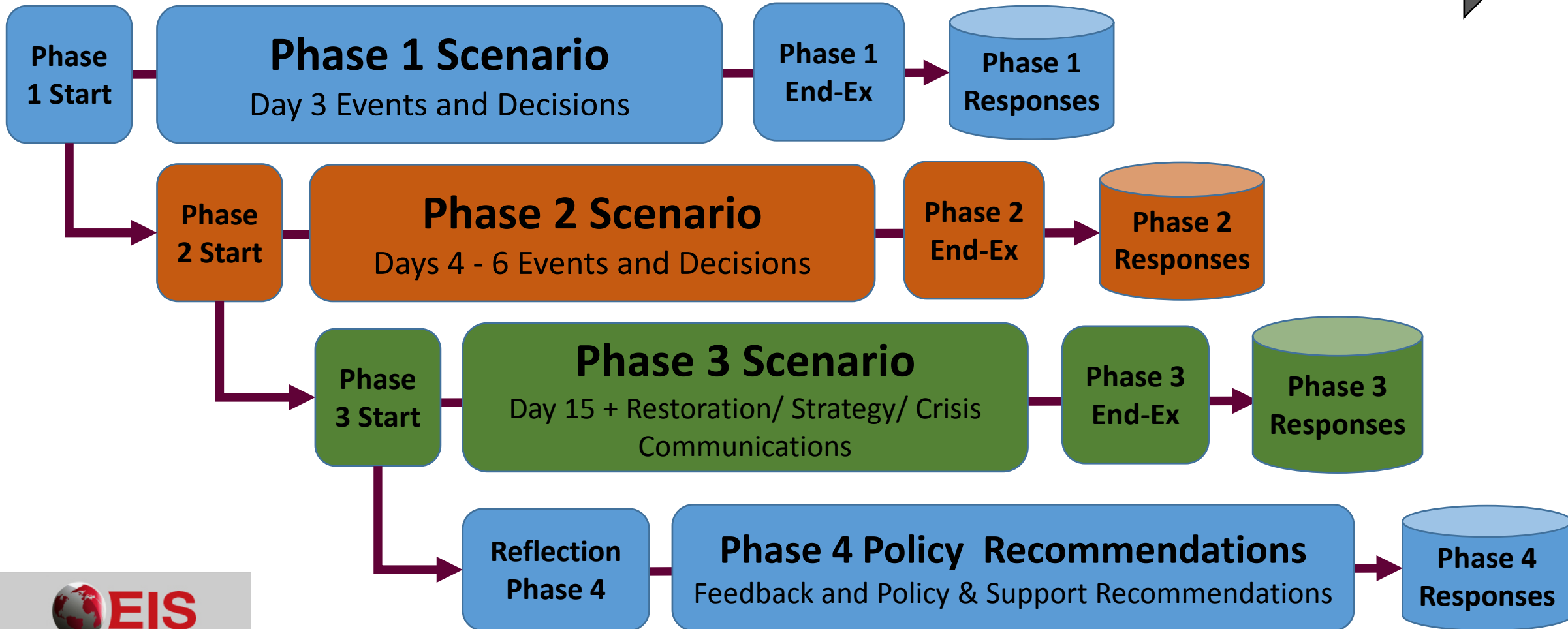
- Assessment (Manpower/System Impact)
- Back Up Power Requirements
- Setting and Communicating Priorities
- Resource Mobilization – Standing Orders
- Resource Prioritization
- Initial Action Planning
- Key Decisions
- Developing Situational Awareness



Phase Breakdown

- Each Phase (1-3) is a distinct action phase for a long duration power outage
- Each Phase (1-3) begins and ends with a Framing Inject to Set Status
- Each Phase will follow a similar estimated timeline
 - Framing Inject & Advancing Inject - 15 Minutes
 - Active Discussion and Planning – 30 Minutes
 - Phase Response Period – 15 Minutes
 - Phase End Inject – Closing Inject
- Phase 4 - Open Reflection to develop and record recommendations on direction, support and resilience requirements

EARTH Ex Delivery – 4 Hour Exercise



Electric Sub-Sector Objectives

Phase 1 (Internal Assessment)

- Impact Analysis
- Internal Coordination Activities
- Operational Challenges (Internal)

Phase 2 (External Coordination & Assessment)

- Critical Skills Identification
- Essential Task Execution
- Multi-directional Coordination (External)

Phase 3 (Solution and Execution Coordination)

- Modified Restoration Strategy
- Crisis Communications
- Coordination and Alignment



EARTH Ex Schedule



24 Feb	Friday	EEX	EARTH Ex IPC Teleconference	Initial Planning Conference
16 Mar	Thursday	EEX	Inject Formats Released	All Sector Coordinators
20 Apr	Thursday	EEX	EARTHEX Middle Planning Conference	Teleconference
15 May	Thursday	EEX	EEX- Final Planning Conference	Webinar
26 Jul	Wednesday	EEX	EEX Final Alignment and Coordination	All Sector Coordinators
17 Aug	Thursday	EEX	EEX Rehearsal	All Sector Coordinators
23 Aug	Wednesday	EEX	EEX Target Date 1	All Staff and Sectors
24 Aug	Thursday	EEX	EEX Target Date 2	All Staff and Sectors

Registration for EARTH Ex 2017 will open 1 May, 2017.



EARTH Ex IPC Sector Objectives



- By Sector
 - Prioritize Objectives (2/3 max) (time limited)
 - Objectives should be stated in bullet format
 - Objectives should address over arching goals
 - Objectives should support EIS Council Sector Playbook elements
 - Final Objectives will serve as the guide for advancing injects (MPC)
 - Each Phase will last approximately an hour
- Note: Senior Executive and Senior Operational Decision Makers



EARTH Ex Due Outs – 17 March 2017



- Each Sector will provide the objectives and initial responses to the Battle Rhythm Manager Spreadsheet template.
- Inject Formats Released – 16 March
- Sector Template V1 Due – 10 April
- Final BRM Workbooks - Due 1 May



EARTH Ex 2017



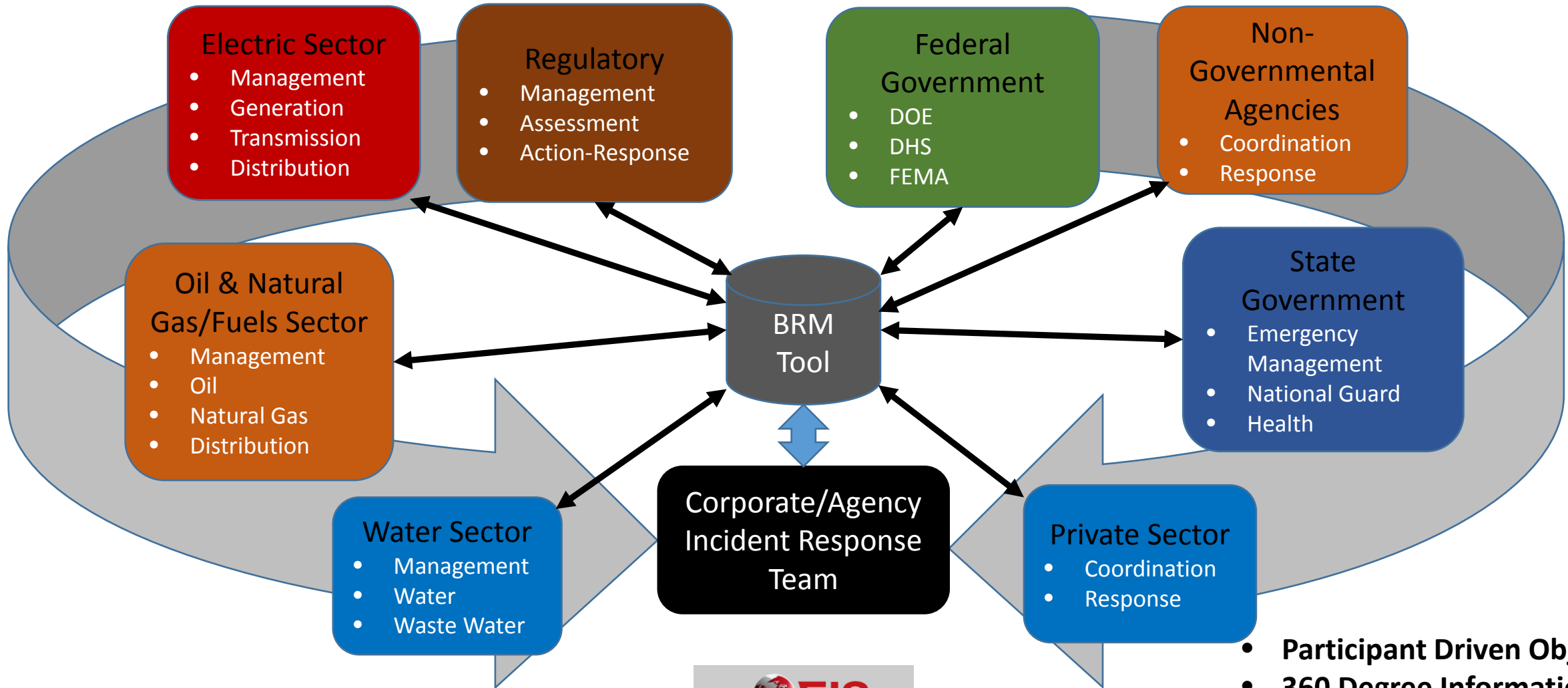
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Discussion



EARTH Ex Information Sharing and Lane Play



- Participant Driven Objectives
- 360 Degree Information
- Structured Phase Targets



Exercise Control - Battle Rhythm Manager (BRM)

