



N A R U C  
National Association of Regulatory Utility Commissioners

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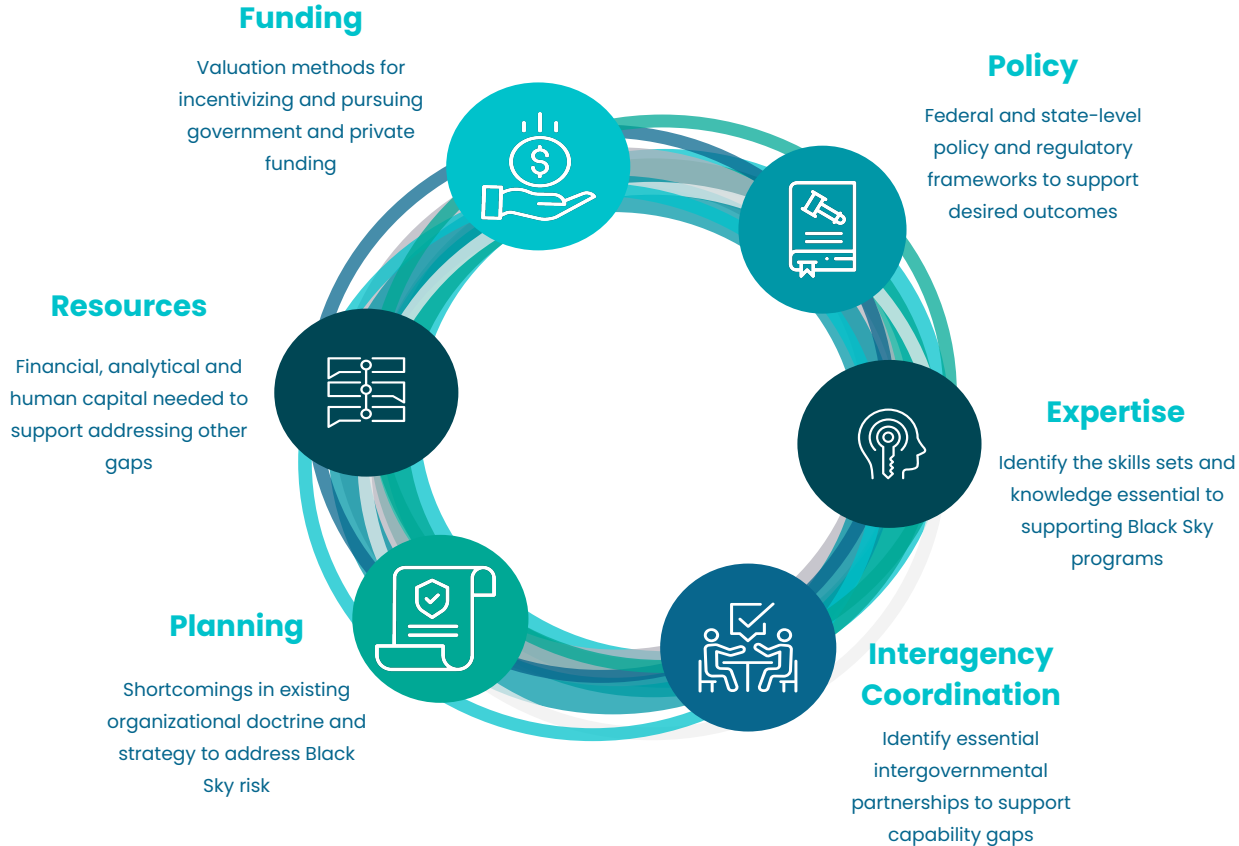
# **EPRR TASK A:** Black Sky Needs Assessment

 April 2021



**CONVERGE**  
STRATEGIES

# NEEDS ASSESSMENT: IDENTIFYING GAPS



# REALITY CHECK: SCOPE OF NEEDS ASSESSMENT

1

## WHO ARE WE WRITING THIS FOR?

HOW DO WE TAILOR THE MATERIAL TO MAXIMIZE THE APPROACHABILITY AND USABILITY OF THE CONTENT TO NARUC AND ITS PARTNERS

2

## HOW FAR INTO BLACK SKY DO WE GO?

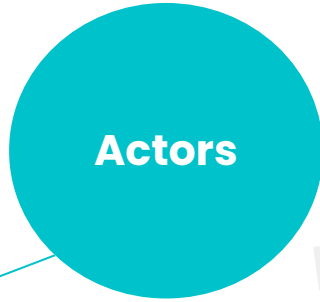
BLACK SKY SCENARIOS ARE A SLIDING SCALE: IN TRUEST FORM, THERE WOULD BE NO COMMUNICATION, NO WATER, NO ACCESS TO IMPORTS

3

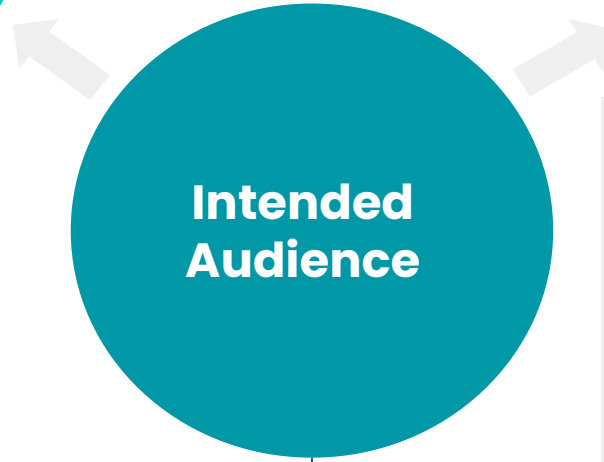
## HOW FAR BEYOND TRADITIONAL DUTIES DO WE PLAN?

BLACK SKY SCENARIOS WILL REQUIRE LEADERS TO TAKE ON RESPONSIBILITIES THAT THEY HAVE LIKELY NEVER DEALT WITH PREVIOUSLY

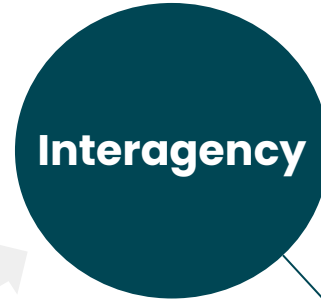
# NEEDS ASSESSMENT AUDIENCE



This encompasses state regulators at a public utility commission, Directors and staff at a state energy office, and governor's staff advising on energy policy issues.



State government officials involved in energy regulation and policy.



The interagency connections between these energy-focused agencies, other relevant state agencies and the required engagement with traditional and non-traditional stakeholders within the State, region, or federal government should be prioritized.

# NEEDS ASSESSMENT SCOPE

## Focus 1

The bulk of the needs assessment will focus on tangible and recoverable events.

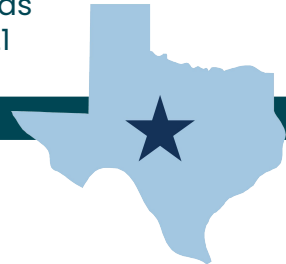
## Focus 2

The needs assessment will aim to highlight what happens when a state or region suffers an extraordinary and uniquely disruptive event

## Focus 3

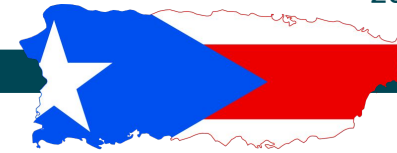
The needs assessment will include an event that goes beyond the state or region's capacity to act independently and/or experiences an exceptional long-lived duration of outages. (i.e. not a standard hurricane response but something worse).

Texas  
2021



**BLACK SKY SEVERITY**

Puerto Rico  
2017



# NEEDS ASSESSMENT IMPLICATIONS FOR AUDIENCE

BLACK SKY SCENARIOS WILL REQUIRE LEADERS TO TAKE ON RESPONSIBILITIES  
THAT THEY HAVE LIKELY NEVER DEALT WITH PREVIOUSLY

Consider how the severity of the event impacts the role and responsibilities of the Commission. A 24-hour outage compared to a two-week outage has significantly different demands on personnel and interagency support.

The needs assessment will take note of opportunities to exercise the Black Sky Technical Playbook during 'blue sky' days and actions that could be taken to mitigate against anticipated stressors during a black sky response.

# PHASES OF NEEDS ASSESSMENT

1

## PRE-EVENT PLANNING

During this phase the focus is on building and identifying the elements required to form a cohesive, collaborative and comprehensive planning environment.

2

## EVENT RESPONSE

During this phase we expect to describe the elements that could and should be part of a response that meets all energy emergency issues, addresses information requirements and response metrics, and provides a means to gauge the level of impact, the direction of the event and provide clear guidance and opportunities for the Public Service Commissions in support of the state and Senior Elected Officials as well as the impacted population.

3

## POST-EVENT RESTORATION

Items in this phase will seek to ensure that all energy emergencies are clearly and efficiently addressed, systems and infrastructure brought back online and new opportunities to improve overall resilience and energy security become part of the future state solution.

## Overview of Where Gaps Potentially Exist

### Funding

This gap area will address new opportunities for project funding and training to ensure that all communities can benefit from investments in their energy infrastructure to avoid Black Sky disasters or energy emergencies. At a minimum this element should identify priorities to identify and address shortfalls.

### Policy

Rules, regulations, statues and governance efforts should be aligned to address Black Sky and other energy emergency situations. This can include policy incentives to support resilience efforts.

### Planning

This area includes existing planning efforts, like the state Emergency Operations Plan or the State Energy Assurance Plan as well as other local and regional planning efforts that must evolve to include new requirements and opportunities mitigating or building resilience in-stride.

### Interagency Coordination

This element of the gap assessment will seek to identify various opportunities to build cohesion and inclusion across the planning element that should be aligned to meet planning, response and restoration activities. The element will build on successful lessons observed and present techniques and tools to improve synergy.

### Resources

The resource gap will be an ongoing effort that will address new opportunities and new shared approaches for expanding the resource pool using a mix of federal, state and private sector funding opportunities. There is no magic in this area, but a number of new grant opportunities, combined with public and private partnerships may provide potential solutions for future resilience and mitigation efforts.

### Expertise

This gap area will identify critical capabilities that should be part of the planning, response and restoration phases to successfully address a Black Sky event or energy emergency. This area will focus on breaking the expertise requirements down by the local, regional, and state elements and private sector partners to ensure maximum impact for the development of solutions.



## Pre-Event Planning

### Funding

- Expanded opportunities to integrate state hazard mitigation and resilience funding plans
- Identified priorities and opportunities conducted out of the state executive branch to support local and regional initiatives
- Periodic updates and presentation by the electric sub-sector private sector organizations on new initiatives with a focus on resilience and reliability enhancements

### Policy

- Support cross-sector coordination and collaboration
- Support innovative means for funding projects (resilience and mitigation)
- Requires primary organizations to share information and approaches for addressing a local or state energy emergency (sliding scale)

### Planning

- Mission essential cross-organizational planning within the executive and senior leadership elements
- Core plan integration and alignment to improve response and restoration
- Detailed processes and procedures for linking grant and mitigation energy projects for visibility and coordination

### Interagency Coordination

- Periodic exercises and training opportunities between response and policy/regulatory agencies to build common understanding on threats and response procedures

### Resources

- Digital library of existing state and local plans for energy emergencies
- Shared planning resources to ensure a coordinated and continual update of information
- Additional ties to funding

### Expertise

- Identification of key leadership positions for planning, response and restoration
- Identification of key skills and experience for each leadership position
- Expanded team collaboration opportunities for academic and private sector subject matter experts into the planning process

## Response

### Funding

- Clear identification of funding requirements by executive agency and federal and private sector partners for each element of the response that requires deconfliction/collaboration/coordination
- Identify and clarify the reporting for all elements of energy emergency regarding on-going response, logistics and projected expenditures - especially concerning response/repair projects where there is a potential cost share

### Policy

- Identify existing and potential policy considerations for support of the identified response requirements (Best Practices)
- A structured approach, by agency, to identify the escalation of policy requirements in direct support of the local and state response requirements (escalation and de-escalation)

### Planning

- Full integration of the various planning elements that exist in both local and state level emergency operations elements
- Full integration of the private sector response elements into the planning effort for the response
- A method for deconfliction of planning priorities

### Interagency Coordination

- Identification of mission critical information that is required by vertical and horizontal organizational elements, including source, location, access parameters, and update procedures
- Identify private sector business operating center opportunities and procedures (Best Case)
- Clearly identify communications strategies and information strategies across the spectrum of Black Sky impacts (no comm/no data - enduring mission)

### Resources

- Identify mission essential resources for each major operational element that supports the regulatory and senior elected official organization to ensure mission capability
- Generally identify mission essential resource requirements to support private sector and local government requirements (backup power, private sector transmission/generation requirements (level of impact) and technical expertise

### Expertise

- Private sector expertise during an enduring mission
- Senior level and operational level private sector and agency response elements for critical Emergency Support Functions (to be identified - ESF 1, 5, 12 +/-)

## Restoration

### Funding

- Clear identification of funding opportunities for mitigation and resilience projects
- Training opportunities to build local and state level capabilities and concepts
- Identification of restoration, resilience and mitigation opportunities within the private sector and public sector programs

### Policy

- Clear policy for establishing the scope of the restoration mission and opportunities to build back better
- Clear policy for establishing priorities and resource support
- Senior executive leader direction to set the policy limits for the restoration period (return to sustaining base, expand the capabilities, other)

### Planning

- Restoration priorities
- Collaborative planning team integrating public and private sector agencies as well as local and state agencies

### Interagency Coordination

- Develop and document opportunities (Best Practices) to provide on-going integration opportunity for improves interagency coordination include both public and private sector agencies

### Resources

- Clear policy for establishing priorities and resource support
- Develop the process for determining and vetting energy emergency resource requirements including prioritization and reporting across agencies

### Expertise

- Clear integration of both private sector and federal subject matter experts to the state and local planning elements

# TOP NEEDS ACROSS CATEGORIES

	Pre-Event Planning	Response	Restoration
Funding	<ul style="list-style-type: none"> <li>Targeted grant funding</li> <li>Rate Design</li> </ul>	<ul style="list-style-type: none"> <li>Fall-back markets/rates</li> <li>Emergency protective</li> </ul>	<ul style="list-style-type: none"> <li>Resilient rate design</li> <li>New PA Standards</li> </ul>
Policy	<ul style="list-style-type: none"> <li>Cross-sector MOUs</li> <li>Information sharing</li> </ul>	<ul style="list-style-type: none"> <li>Escalation/De-escalation</li> <li>Define roles/responsibility</li> </ul>	<ul style="list-style-type: none"> <li>Scope of mission</li> <li>Regulatory support</li> </ul>
Planning	<ul style="list-style-type: none"> <li>Process and procedure</li> <li>Plan cross-walks</li> </ul>	<ul style="list-style-type: none"> <li>Public/private integration</li> <li>Clearing house</li> </ul>	<ul style="list-style-type: none"> <li>Codify prioritization</li> <li>Rate Design</li> </ul>
Interagency Coordination	<ul style="list-style-type: none"> <li>Exercises</li> <li>Staff cross-training</li> </ul>	<ul style="list-style-type: none"> <li>Mission-critical info</li> <li>Comms strategy</li> </ul>	<ul style="list-style-type: none"> <li>Playbook sharing</li> <li>Executive engagement</li> </ul>
Resources	<ul style="list-style-type: none"> <li>Digital library</li> <li>Funding crosswalk</li> </ul>	<ul style="list-style-type: none"> <li>ID mission-driven resource</li> <li>Public + Private</li> </ul>	<ul style="list-style-type: none"> <li>Support functions</li> <li>Allocation</li> </ul>
Expertise	<ul style="list-style-type: none"> <li>Skill Identifiers</li> <li>SME sharing</li> </ul>	<ul style="list-style-type: none"> <li>ESF Training</li> <li>Short-term transition</li> </ul>	<ul style="list-style-type: none"> <li>SME Integration</li> </ul>