

Activity: Identify Resilience Solutions

Goal of this Activity

In this activity, you will identify potential solutions to enhance power sector resilience based on your knowledge of the threats, vulnerabilities, and risks developed in previous activities.

Introduction

The output of this activity is a preliminary set of solutions that support power sector resilience in the face of vulnerabilities that have the highest risks. Resilience solutions often include some combination of resource and technology diversity, redundancy, decentralization, transparency, collaboration, flexibility, and foresight considerations¹. Many different solutions should be considered because no single intervention will address all potential vulnerabilities. Additionally, every power system is unique, and solutions must be tailored to specific circumstances and contexts.

These solutions will be prioritized in the next activity by their impact and effectiveness.

Solutions may fall into different categories of power sector interventions:

- **Long-term planning** in the form of comprehensive community plans, threat mitigation plans, watershed plans, and others.
- **Regulations and policies**, such as zoning, subdivision codes, floodplain regulations, and building codes.
- **Programs** like capacity building, land acquisition, and low-income housing.
- **Capital projects**, such as capital improvement, decentralized backup energy generation for critical facilities, passive stormwater management system designs, etc.

To guide the discussion, consider the following questions and complete the exercise on identifying resilience solutions. These can be completed in a group workshop or by individual organizations.

Discussion Questions

- Which solutions or interventions may address the top five risks to your power system?

- Which solutions might support a greater ability to maintain the operability of shared power system-wide infrastructure (or operations) during system stress or shock?
- Which solutions could provide a cobenefit across the power system and/or provide a downstream benefit for other infrastructure users or operations?
- Which solutions support a site-specific, critical operation, or load solution versus a broader system or regional resilience?
- Are there any site-specific, critical operation, or load solutions that could be scaled throughout the system for broader power system resilience?
- Have you considered solutions that support not only operability of the power system but also economic resilience, readiness for climatic changes, operational flexibility, and other resilience considerations?
- Have all the strategy categories listed above been considered?

**Exercise: Which solutions for power sector resilience can help address your top five vulnerabilities?
Which power sector systems do these solutions support?**

	Generation	Transmission	Distribution	Customer	Operations	Workforce	Financial	Other
Risk Pair 1: V: T:								
Risk Pair 2: V: T:								
Risk Pair 3: V: T:								
Risk Pair 4: V: T:								
Risk Pair 5: V: T:								