



SF Environment

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A Department of the City and County of San Francisco



Solar + Storage for Community Resiliency Project Update and Next Steps

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PROJECT GOALS

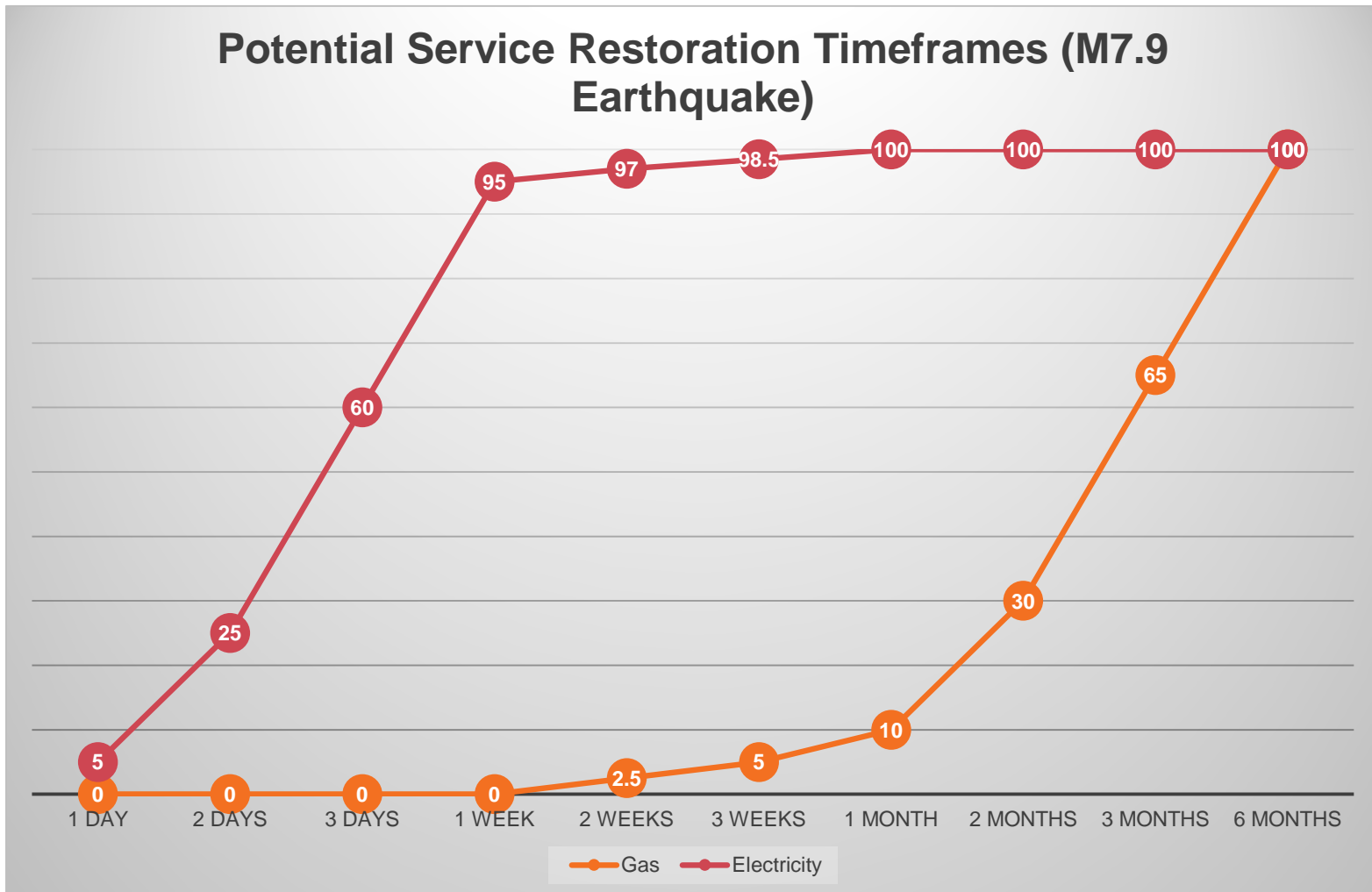
- Expand market for solar + storage
- Increase resiliency in SF's emergency response plans
- Serve as national model

TODAY'S GOALS

- Inform committee on project status and upcoming milestones
- Set stage for future engagement (e.g., project site commitments)



Plan: 3-7 Day Electricity Outage



Data: SF Lifelines Council, April 2014

Severe Weather Blackouts



Partners



Site Selection



ARUP

Solar+Energy Storage for Resiliency
spatial data viewer

Help

Legend

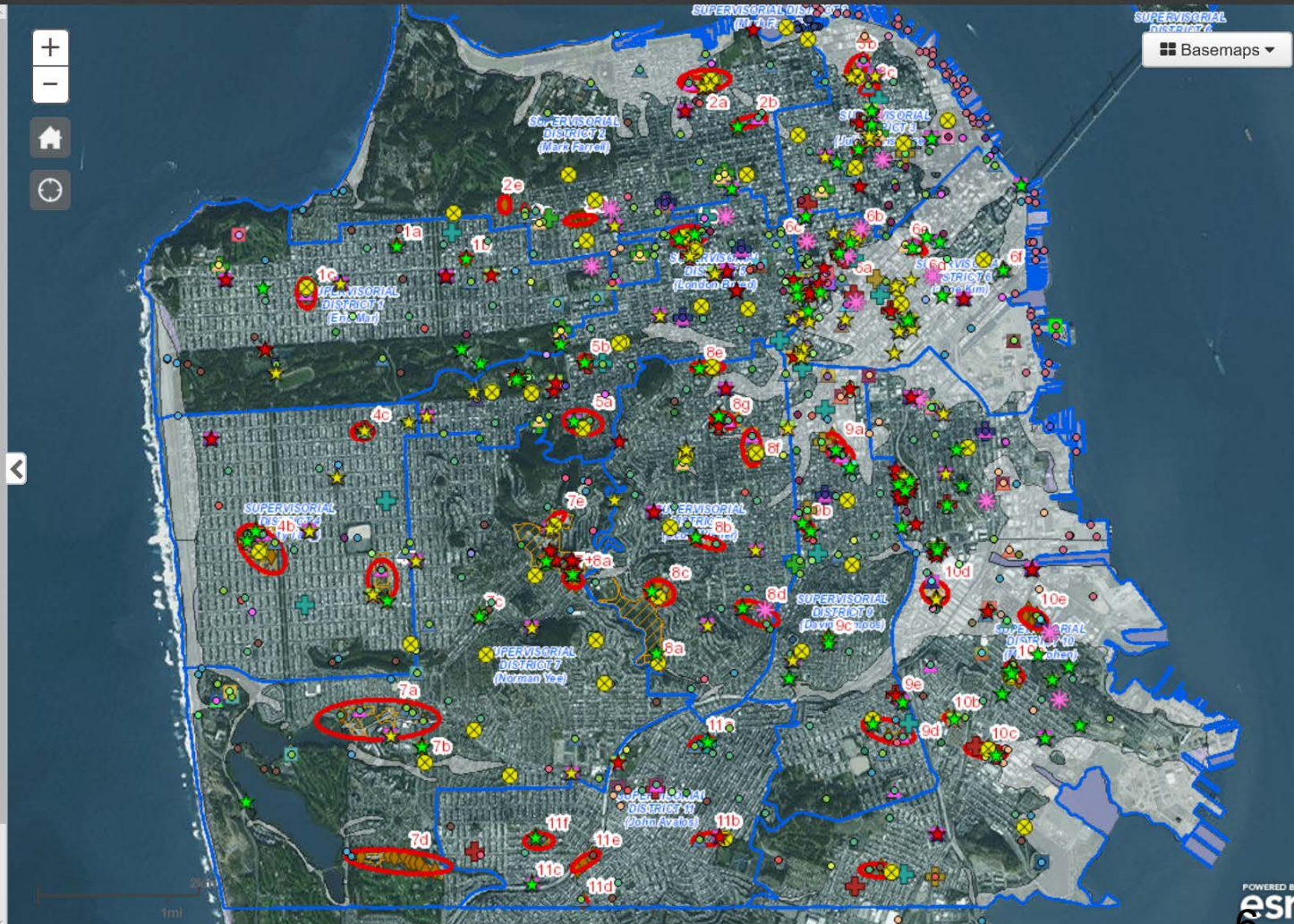
Layers

- ☒ Hazus Results
- ☒ Critical Infrastructure
 - ☒ Primary NGO Kitchens - 2015
 - ☒ NERT Staging Location
 - ☒ All Facilities
 - ☒ Facilities with Critical Power Need
 - ☒ Facilities with Generators
 - ☒ Medical Assets
- ☒ Microgrids
 - ☒ Selected Sites
 - ☒ Original Sites Under Consideration
- ☒ City Data
- ☒ Hazards
 - ☐ C05 - San Andreas
 - ☐ C06 - Hayward
 - ☒ C07 - Soil Liquefaction
 - ☐ C08 - Landslide
 - ☒ C09 - Tsunami
 - ☐ C13 - Wildfire
 - ☐ C14 - Reservoir Inundation
 - ☐ C18 - Heat Vulnerability

Bookmarks

Identify

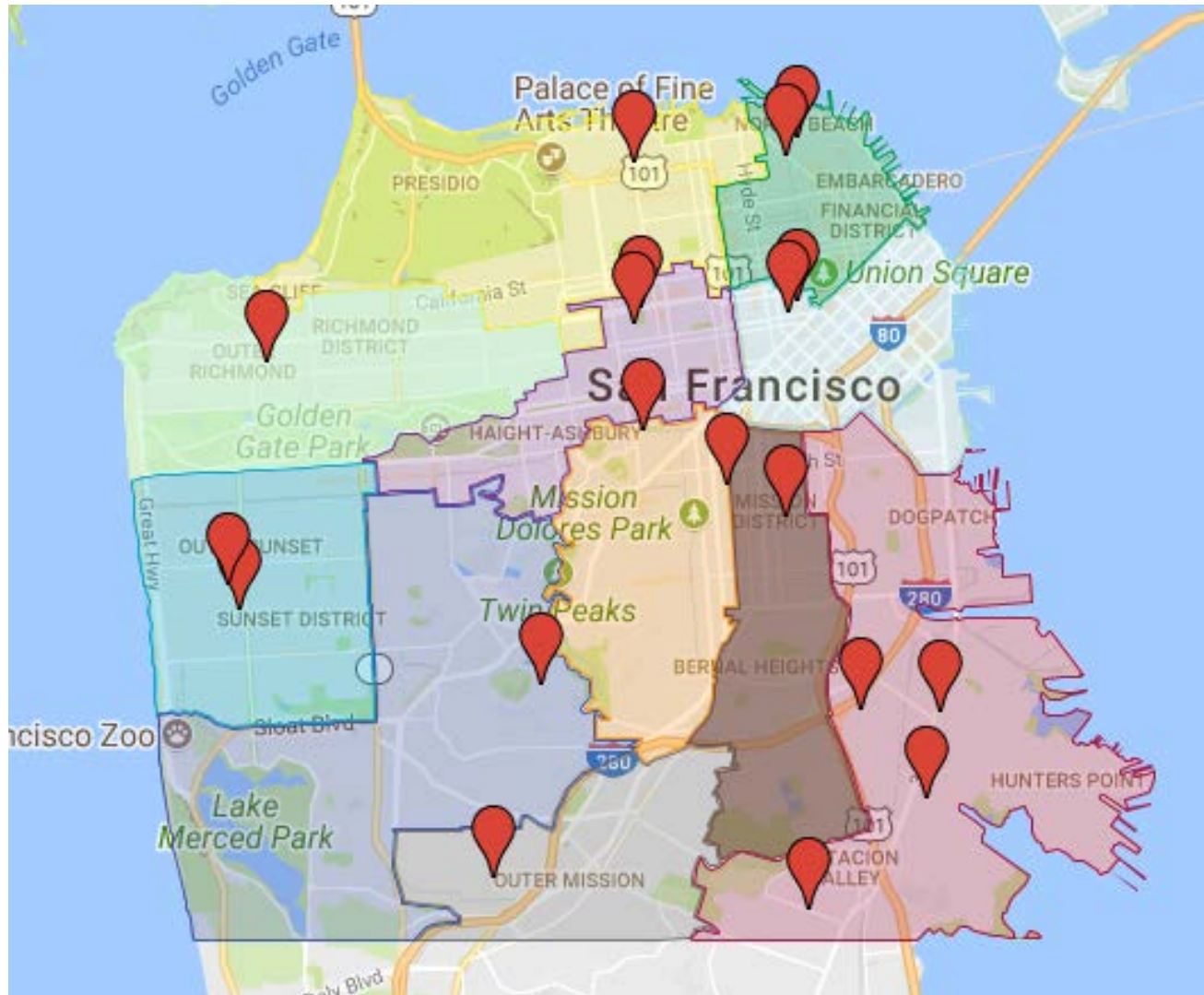
Find



Microgrids → Individual Systems



Case Studies





DELIVERABLES

- Case Studies- **Complete.**
- Roadmap and Best Practice Guide - **Complete.**
- Planning tools - **Complete.**

BUDGET

- Total Grant Amount: **\$1.3M**

QUESTIONS TO ANSWER

- Are solar + storage systems technically feasible? **Yes!**
- Have we considered / started to address policy considerations such as safety and permitting? **Yes!**
- ☐ **How do we pay for the systems?**



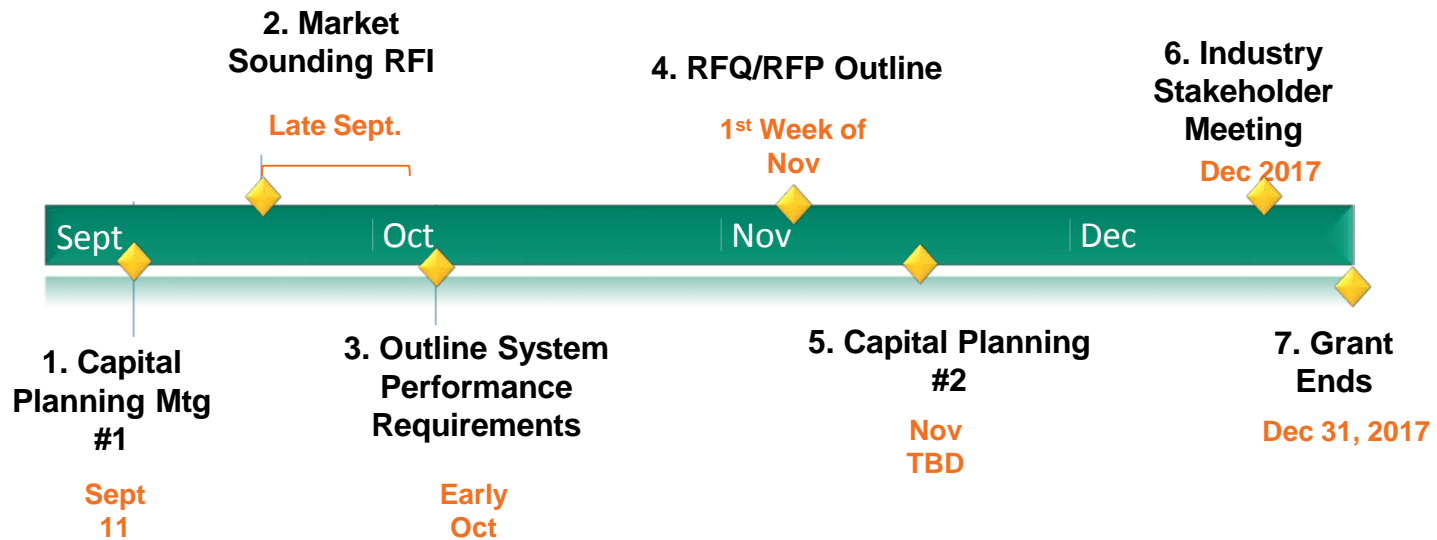
19 buildings

6MW (24MWh) energy storage

4MW of solar generation (20 years)

- Design Bid Build: ~\$40M
- Public Private Partnership (P3): ~\$26M
 - Yields lower payments from City; federal tax credits

Finance Plan Milestones





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