



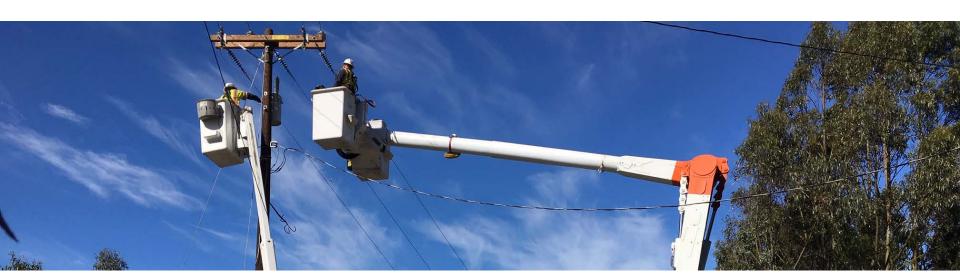
Presentation Overview

I. Background: Treasure Island's Electrical System

SFPUC's Role

II. Recently Completed Improvements

III. Next Steps





Treasure Island's Electricity System

- The U.S. Navy transferred the electric system to TIDA in 1997.
- Existing electrical infrastructure is old and has exceeded normal life expectancy.
- Age of the system and condition of the equipment make the island more vulnerable to power outages.





SFPUC's Role on Treasure Island

- TIDA owns the electrical system on Treasure Island and Yerba Buena Island.
- TIDA contracted with SFPUC to operate and maintain the electric system. SFPUC:
 - Oversees operations of the electricity system
 - Performs ongoing maintenance, including repairs
 - Responds to and tracks power outages
 - Recommends system improvements subject to TIDA authorization and funding
- SFPUC supplies the electricity used by residents and businesses on both islands.



Recent Electric System Improvements

TIDA authorized a series of improvements to the Treasure Island electricity system.

Goal(s) of improvements:

- Increase system reliability
- Reduce the frequency and duration of outages
- Isolate outages to only part of the island to reduce the extent of impact.
- Reduce the number of outages caused by temporary events like bird strikes or fallen tree limbs.
- Reduce time it takes to find the source of an outage, improving response time for power restoration.



New Switchyard and Switchgear

Constructed a new switchyard and installed a new switchgear to isolate certain fault events and prevent an island wide outage.





New Fault Indicators and Reclosers

Installed numerous fault indicators and reclosers throughout the island, which assist crews in determining the location of a fault and limiting outages to just a portion of the system.

New Overhead Line

Installed and constructed a new overhead line from the switchyard, increasing the reliability of the main line serving both islands.

New Transformers

Replaced five old distribution transformers with new ones equipped with bird guards to prevent avian-related outages. Bird guards will be a standard component on all new transformers.

Residential Reliability

Connected the residential neighborhood to its own circuit to mitigate the impact of faults from other parts of the island.

Bird Guards

Installed bird guards along Avenue I to prevent faults from birds.

Relay Settings Updated

Adjusted the relays at the Port of Oakland Substation to allow the circuits and reclosers to isolate a fault before it results in a system-wide outage.

Vegetation Management

Removed palm trees to prevent palm fonds from falling on overhead lines.

System-Wide Inspection

Completed inspection of the entire distribution system and identified components to be replaced.



Next Steps (Near-term)

Replacement of Damaged Crossarms and Transformers

A contract has been signed with an electrical contractor to replace the damaged crossarms and transformers identified during the system-wide inspection.

Security Fencing

Install security fencing to protect the underground cables from Treasure Island to Yerba Buena Island from vandalism.



Ongoing SFPUC Actions

Monitoring Protective Devices

Monitor the protective device response and performance to further mitigate system-wide outages.

Continuous Inspections

Perform continuous inspections to mitigate potential system failures, including regular tree trimming or removal.

Review and Recommend

Identify additional system improvements and make recommendations to TIDA.



Questions?

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