



Trans Bay Cable LLC Wildfire Mitigation Plan Update 2022

**2022 WMP Workshop for SMJUs and ITOs
Grid Design and System Hardening**

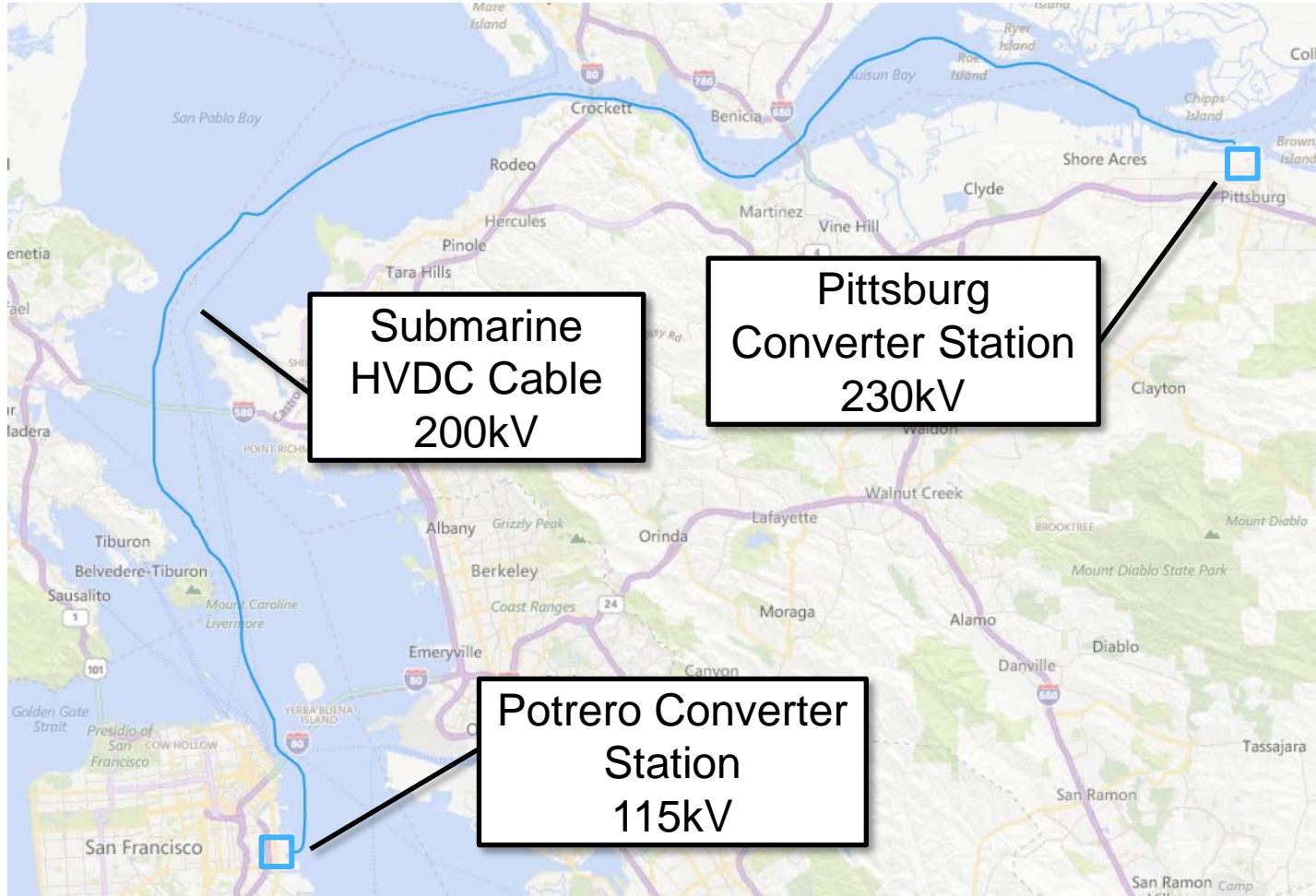
May 18, 2022

Michael Blunt – Operations Manager

Raj Prakash – Environmental Health & Safety Manager

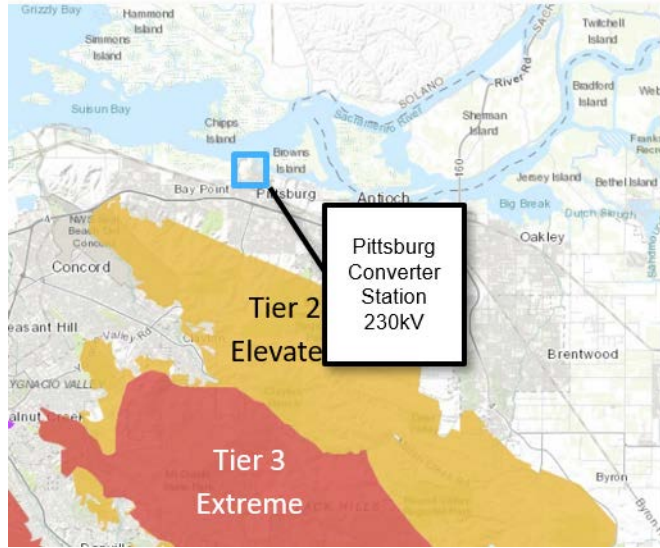
Operating territory is limited to three elements of critical infrastructure supporting the Greater Bay Area grid

Operating Territory



TBC observes fire risks near the Pittsburg Converter Station from active faults and proximate vegetative fuels

Pittsburg Converter Station



Proximate Vegetative Fuels



Proximate Fault Lines



Design of TBC system provides inherent system hardening against wildfire risk

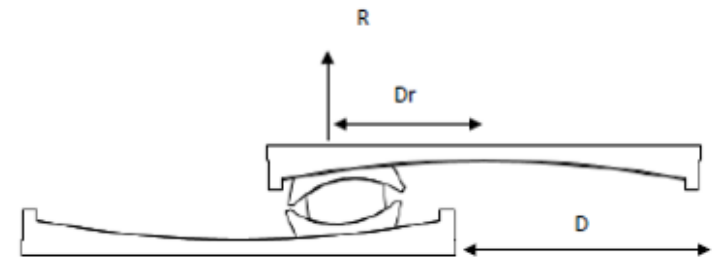
As Constructed Grid Design

- **Facility Design/Construction elements include:**
 - Undergrounding of all transmission cables
 - Placed in concrete vaults with thermolyzed backfill (land segments)
 - Above ground infrastructure fully contained within converter station walls
 - Site is hardscaped within 12-foot concrete wall perimeter with cameras
 - Fire department approved fire lanes and Knox boxes
 - Converter building equipped with monitoring, detection, alarms and fire suppression system
 - Converter building designed to CA Building Code seismic specifications
 - System employs controls which implement protective blocking within microseconds of a fault and will initiate trip offline within milliseconds
 - Manual shutdown buttons in each of the system's three (3) control rooms
 - Transformer blast walls and containment pits with 110% capacity

TBC has continued to enhance system hardening to reduce operational risk, include fire risk

After Construction System Hardening

- **2021 Transformer Seismic Base Isolators**
 - Allows transformers to displace 36" during a seismic event
 - Relative motion – the ground is moving but the transformer doesn't move
 - Calculations included uplift so the transformer will not tip over during a seismic event
 - Increased height of blast walls to accommodate height of base isolators



TBC



Trans Bay Cable