

Intermountain Power Project Southern Transmission System Upgrade from 1920 MW to 2400 MW

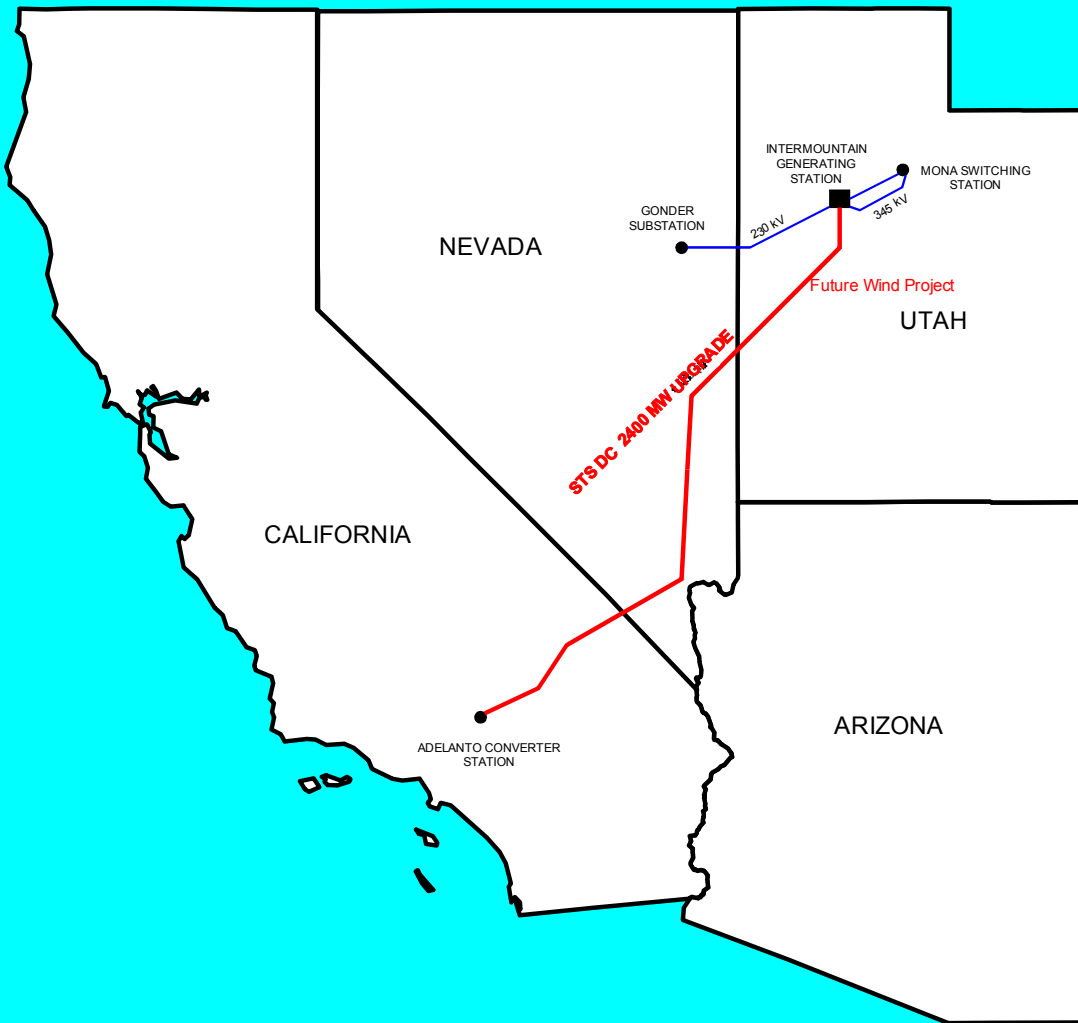
Presentation to
Southwest Transmission Expansion Planning

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by
Tim Wu
Los Angeles Department of Water & Power

Background

- **500 kV HVDC bipole from Delta, Utah to Adelanto, California**
- **490 Miles**
- **1920 MW**
- **In service since 1986**



— Southern Transmission System
— Northern Transmission System

Why Upgrade?

- Units 1 and 2 was upgraded
- More demand for transmission capacity from renewables from Utah to LA
- Original Equipment was designed for 2400 MW
- Timing is right!!

How?

- Major terminal components of the original installation are rated for 2400 MW, e.g., transformers, thyristor valves, reactive supports, electrodes, etc.
- Transmission lines and towers are rated for 2400 MW
- No ROW or clearance issue

What?

- Replace the original control system
 - 1986 vintage in needs of replacement even without upgrade
- Upgrade the Valve Cooling/Heat Exchange System to handle the in-crease heat loads
- Add ac filters and reactive supports to maintain redundancy
- Update and revise the SPS
- Do WECC Path Rating Studies

Milestones

- Complete WECC Path Rating Studies 12/2006
- Start Construction 12/2007
- Complete Construction 03/2008
- Commission & Operation 04/2008