



A  Sempra Energy utility



SDG&E Transmission Comparison Study

Status Report

Robert Jackson

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STEP Meeting

Since Last STEP Meeting



- Technical Working Group has grown
 - 22 Members, 13 different entities
 - 8 to 14 Active members, 9 entities
- Continued Thermal Studies
- Pursued Economic software/consultants

List of Assumptions

- Base Cases: Heavy Summer 2010
 - Starting Case: WECC 08HS2s-SA (Feb 2004)
- 4000 MW Import
- Miguel-Mission 230 kV #2 – In
- Palomar and Otay Mesa Generation – In
- Palo Verde-Devers 500 kV #2 – Not In
- Path 49, EOR 8055 Upgrades

List of 10 Alternatives

- Imperial Valley–Miguel # 2 (500 kV)
- Imperial Valley–Miguel 230 (CFE)
- Serrano/Valley–Northern
- Imperial Valley–Central
- Imperial Valley–Northern
- Imperial Valley–Northern–Serrano/Valley
- North Gila–Central
- North Gila–Northern
- North Gila–Northern–Serrano/Valley
- Serrano–Talega

Preliminary Thermal Results



Category	N-1	N-2	Bus	Corr	Pre-N-1	Pre-Mult	Total	Cases
Central	8	7	3	2	4	0	24	3
Northern	11	4	4	5	7	2	33	3
Full Loop	13	3	3	5	5	1	30	10
Serrano-Talega	9	5	2	5	13	10	44	2
Imperial-Miguel	17	6	6	8	2	1	40	2
Ser/Val-Northern	18	6	3	4	9	3	43	4

Not yet looked at:

- Project Cost, Voltage violations, Import level
- Stability, Short-Circuit, Post-transient
- Economic Analysis

Next Steps



- Phase 2 of Thermal Work
 - Key voltage violations
 - Determine necessary system upgrades
 - Cost Estimates
 - Sensitivities
 - Determine Import levels (preliminary)
- Economic Analysis
- Transient
- Post-transient (Var Margin)
- Short Circuit

Revised Schedule



- Phase 2 of Thermal Work
 - Voltage violations & System upgrades (thru Mar 1)
 - Sensitivities & Import levels (thru Mar 15)
- Economic Analysis (Mar 1–Apr 15)
- Transient (Mar 1–Apr 1)
- Post-transient (Mar 1–Apr 1)
- Short Circuit (Mar 1–Apr 1)
- Results Presented Next STEP Meeting –April 13
- Draft Report –Apr 20
- Final Report –May 1