Technical Steering Committee Report

CTPG Executive Committee Meeting
October 6, 2011

Agenda

- General Update – Mo Beshir
- Technical Study Team – Ben Morris
  - Preliminary Study Results
- 2011 CTPG Work Plan – Mike Deis
  - Activities and Schedule
  - Action Items
- Next Steps – Mo Beshir

General Update

- TSC and Technical Study Team conducted 5 conference calls in September
- Meeting topics included:
  - CTPG Approach For Special Protection Schemes (SPS)
  - Contingency Files
  - Fossil Fuel Generation Decrementing
  - Dynamic Analysis Approach
  - Study Results

TECHNICAL STUDY TEAM PRELIMINARY RESULTS– BEN MORRIS

Scope of Work

- Study Cases
  - WECC's 2020 HS, 2018 HSPR and 2016 Light Fall cases were updated to reflect 2020 summer, spring and fall conditions (pre-renewable)
  - Cases were adjusted to reflect the 9 scenarios (i.e. model renewable generation and associated transmission, and stress key paths as indicated)
- Studies involved
  - Power flow
  - Voltage Stability
  - Transient Stability
- Identified problems and potential mitigation*
- Tabulated results

* Any mitigation, if required, will be determined by the Balancing Authority(ies) and Transmission Owner(s)/Developer(s) following a more detailed evaluation to be conducted by these entities

Planning Standards/Criteria

	Overloads	Transient Voltage Dip	Transient Frequency	Post-Transient Voltage Deviation	Voltage Stability
Cat A (n-0)	I ≤ Normal Rating	n/a	n/a	n/a	n/a
Cat. B (n-1)	I ≤ Emergency Rating	V not > 25% (load bus) not > 30% (non-load bus) V not > 20% for more than 20 cycles	f not < 59.6 Hz for 6 cycles or more at aload bus	V not > 5% (any bus) not > 7% (SCE)	Pre-disturbance Flow = 105% Post-disturbance results Q > 0
Cat. C (n-2)	I ≤ Emergency Rating	V not > 30% (any bus) V not > 20% for more than 40 cycles	f not < 59.0 Hz for 6 cycles or more at a load bus	V not >10%	Pre-disturbance Flow = 102.5% Post-disturbance results Q > 0

Renewable Resources Scenarios 1-4

Renewable Resources	Scenarios 1 and 2: Pacific Northwest Import (Stress and Foundation Path Flows)				Scenarios 3 and 4: Northwest Nevada Import (Stress and Foundation Path Flows)			
	GWH	%	Installed MW	Spring Dispatched MW	GWH	%	Installed MW	Summer Dispatched MW
Discounted Core	23,017	52	8,574		23,017	52	8,574	
Scenario Specific	10,950	24	2,500 (W)	1,588 (W)	6,345	14	1,000 (G/W/S)	750 (G/W/S)
RETI Best CA CREZ	10,885	24	3,797		15,490	34	5,397	
TOTAL	44,852	100	14,871	8,005 (W/S/B/G)	44,852	100	14,971	9,209 (W/S/B/G)

Renewable Resources Scenarios 5-6

Renewable Resources	Scenario 5: South–to–North Flow (Foundation Path Flows)				Scenario 6: CPUC Public Policy (Foundation Path Flows)			
	GWH	%	Installed MW	Fall Dispatched MW	GWH	%	Installed MW	Summer Dispatched MW
Discounted Core	23,017	52	8,574		23,017	52	8,574	
Scenario Specific	-	-	-	-	21,835	48	5,978 (W/S/ B/G)	
RETI Best CA CREZ	21,835	48	7,615		-	-	-	
TOTAL	44,852	100	16,189	9,312 (W/S/B/G)	44,852	100	14,552	7,341 (W/S/B/G)

Renewable Resources Scenarios 7-9

Renewable Resources	Scenario 7: Central California (Foundation Path Flows)				Scenarios 8 and 9: West of River Import (Foundation Path Flows)			
	GWH	%	Installed MW	Summer Dispatched MW	GWH	%	Installed MW	Fall Dispatched MW
Discounted Core	23,017	52	8,574		23,017	52	8,574	
Scenario Specific	11,826	26	5,027 (S/W/B)	2,942 (S/W/B)	18,318	40	7,236 (W/ST/S)	3,406 (W/ST/S)
RETI Best CA CREZ	10,009	22	3,490		3,516	8	2,486	
TOTAL	44,852	100	17,091	10,238 (W/S/B/G)	44,852	100	17,038	9,248 (W/S/B/G)

Spring Scenario Study Cases

Preliminary

Generation	Rating	Spring "0" (Stress)	Pacific NW Import Scenario (Stress)		
			Inc	Dec	Net
Pacific NW/Rocky Mountain			2,233	(1,343)	890
Northern CA			713	(3,206)	(2,493)
Southern CA			5,032	(1,285)	3,747
Desert SW			27	(2,170)	(2,143)
In/Out of CA (%)			72/28	56/44	
Path Flows			**Actual**		**Diff**
COI (N-S)	4,800	4,798	**6,063**		1,265
PDCI (N-S)	3,100	3,095	3,099		4
Path 15 (N-S)	3,265	1,238	(357)		(1,595)
Path 26 (N-S)	4,000	3,409	2,119		(1,290)
WOR (E-W)	10,623	5,662	4,602		(1,060)
EOR (E-W)	9,300	4,771	2,838		(1,933)

Spring Scenario Study Cases

Preliminary

Generation	Rating	Spring "0" (Fndtn)	Pacific NW Import Scenario (Fndtn)		
			Inc	Dec	Net
Pacific NW/Rocky Mountain			2,233	(1,227)	1,006
Northern CA			713	(3,663)	(2,950)
Southern CA			5,032	(1,119)	3,913
Desert SW			27	(1,996)	(1,969)
In/Out of CA (%)			72/28	60/40	
Path Flows			**Actual**		**Diff**
COI (N-S)	4,800	3,751	**5,090**		1,339
PDCI (N-S)	3,100	2,600	2,600		0
Path 15 (N-S)	3,265	1,808	(139)		(1,947)
Path 26 (N-S)	4,000	3,602	1,827		(1,775)
WOR (E-W)	10,623	5,534	4,872		(662)
EOR (E-W)	9,300	4,707	3,123		(1,584)

Summer Scenario Study Cases

Preliminary

	Rating	Summer "0" (Stress)	NW Nevada Import Scenario (Stress)		
Generation			**Inc**	**Dec**	**Net**
Pacific NW/Rocky Mountain			1,296	(2,849)	(1,554)
Northern CA			1,007	(2,182)	(1,175)
Southern CA			6,663	(2,285)	4,379
Desert SW			243	(1,793)	(1,550)
In/Out of CA (%)			83/17	49/51	
Path Flows			**Actual**		**Diff**
COI (N-S)	4,800	4,810	4,810		0
PDCI (N-S)	3,100	3,100	3,083		(17)
Path 15 (S-N)	5,400	953	1,670		717
Path 26 (N-S)	4,000	1,556	1,443		(113)
WOR (E-W)	10,623	2,266	1,290		(976)
EOR (E-W)	9,300	4,010	3,786		(224)

Summer Scenario Study Cases

	Rating	Sum "0" (Fndtn)	Scenarios								
			NW Nevada Import (Fndtn)			CPUC Public Policy (Fndtn)			Central CA (Fndtn)		
Generation			**Inc**	**Dec**	**Net**	**Inc**	**Dec**	**Net**	**Inc**	**Dec**	**Net**
Pacific NW / RMtn			1,296	(2,849)	(1,554)	728	(2,729)	(2,001)	546	(3,160)	(2,614)
Northern CA			1,007	(2,182)	(1,175)	925	(1,816)	(891)	3,867	(2,337)	1,530
Southern CA			6,663	(2,285)	4,379	5,034	(1,885)	3,149	5,798	(2,421)	3,377
Desert SW			243	(1,793)	(1,550)	655	(1,661)	(1,006)	27	(2,069)	(2,042)
In/Out of CA (%)			83/17	49/51		83/17	46/54		94/6	48/52	
Path Flows			**Actual**		**Diff**	**Actual**		**Diff**	**Actual**		**Diff**
COI (N-S)	4,800	3,717	2,629		(1,088)	3,063		(654)	2,712		(1005)
PDCI (N-S)	3,100	2,599	2,599		0	2,599		0	2,599		0
Path 15 (S-N)	5,400	1,801	3,955		2,154	3,853		2,052	4,914		3,113
Path 26 (N-S)	4,000	789	(975)		(1,764)	(757)		(1,546)	791		2
WOR (E-W)	10,623	2,995	1,708		(1,287)	2,664		(331)	1,273		(1,722)
EOR (E-W)	9,300	3,792	3,237		(555)	2,729		(1,063)	3,069		(723)

Fall Scenario Study Cases

	Rating	Fall "0" Fndtn	Scenarios								
			South-to-North (Fndtn)			WOR Import - ED (Fndtn)			WOR Import – PV (Fndtn)		
Generation			**Inc**	**Dec**	**Net**	**Inc**	**Dec**	**Net**	**Inc**	**Dec**	**Net**
Pacific NW/R Mtn			296	(1,022)	(726)	329	(873)	(544)	329	(873)	(544)
Northern CA			1,026	(3,490)	(2,464)	832	(2,858)	(2,026)	832	(2,858)	(2,026)
Southern CA			7,963	(4,156)	3,807	4,110	(4,056)	54	4110	(4,056)	54
Desert SW			27	(644)	(617)	3,722	(644)	3,078	3,725	(644)	3,081
In/Out of CA (%)			97/3	82/18		55/45	82/18		55/45	82/18	
Path Flows			**Actual**		**Diff**	**Actual**		**Diff**	**Actual**		**Diff**
COI (S-N)	3,675	1,740	1,334		(406)	1,345		(395)	1,370		(370)
PDCI (S-N)	3,100	1,855	1,855		0	1,852		(3)	1,852		(3)
Path 15 (S-N)	5,400	3,628	**6,206**		2,578	**5,747**		2,119	**5,742**		2,114
Path 26 (S-N)	3,000	293	2,517		2,224	2,003		1,710	1,979		1,686
WOR (E-W)	10,623	5,098	5,913		815	8,759		3,661	8,734		3,636
EOR (E-W))	9,300	4,214	3,807		(407)	4,423		209	5,162		948

Preliminary

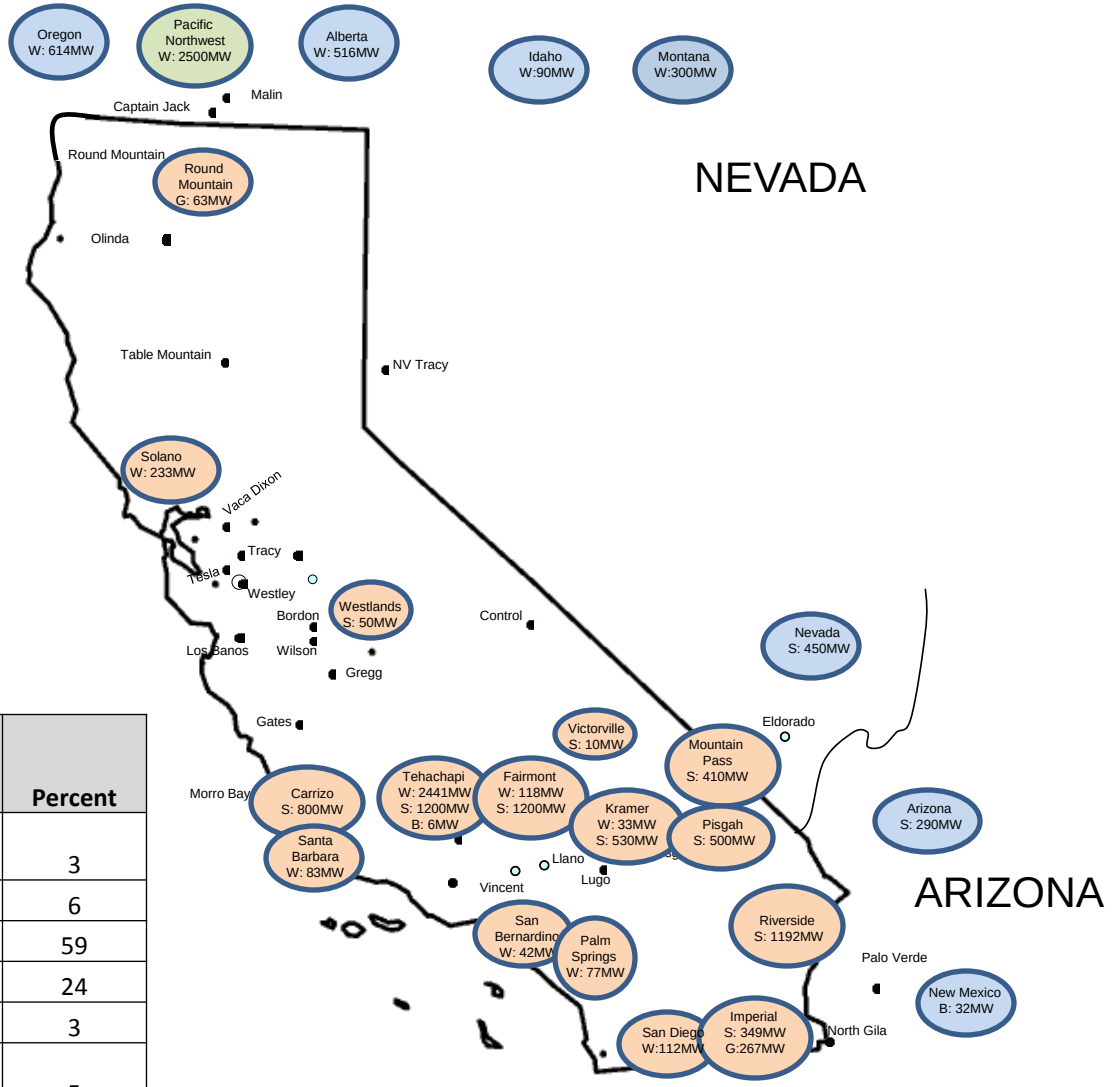
PNW Import Scenario Renewable Resources

Scenario Specific Resources

Resources Located In-State

Resources Located Out of State

Non CREZ Resources not shown include :
Solar: 25MW, Bio:128MW



Region	Definition	Installed Capacity (MW)	Percent
No Cal	Tesla/Tracy - No CA Border	396	3
Cent Cal	Midway - Tesla/Tracy	850	6
So Cal	Midway - So Ca Border	8,834	59
PNW	Oregon/Washington/BC	3,630	24
Rocky Mtn	Montana/Wyoming/Idaho	390	3
Southwest	Southern Nev/Arizona/New Mexico	772	5
TOTAL		14,872	100

PNW Import Scenario Transmission Needs

Stress Path Flows

PNW Import (Stress) Results

Impacts	Potential Mitigation
Pre-Mitigation Numerous diverged cases indicating voltage collapse or transient instability under N-2 conditions	Install 2nd Captain Jack-Olinda-Tracy line in common corridor with existing COTP
Thermal overload (32%) of the Kramer-Lugo 230 kV under Category C (N-1-1) conditions	Coolwater-Lugo 230 kV line plus potentially one of the following: a) Revise existing Kramer RAS to trip more generation, b) Second Kramer-Llano 500 kV line, or c) A second 500 kV line between Kramer & Windhub or Midway or Pisgah.
Diverged case in the Ivanpah - El Dorado area	Add 2nd Ivanpah-Eldorado 230 kV
Thermal overloads on the Haskell Canyon-Rinaldi 230 kV and the Haskell Canyon-Sylmar 230 kV under N-1 conditions	Establish a new Haskell Canyon-Olive- Sylmar 230 kV by relocating transformers from Olive to Haskell Canyon and converting existing 115 kV transmission to 230 kV
Post-Mitigation Thermal overloads (up to 7%) between Malin and Tesla under Category C (N-2) conditions	Increase RAS for double line outages to address overloads between Malin and Round Mountain and between Tesla and Tracy

PNW Import Scenario Transmission Needs

Foundation Path Flows

PNW Import (Foundation) Results

Impacts	Potential Mitigation
Thermal overloads (up to 11%) between Malin and Table Mountain under Category B (N-1) conditions	Reconductor, add SPS, or limit COI transfers
Thermal overloads (15%) between Round Mountain and Cottonwood under Category C (N-2) conditions	Reconductor
Thermal overload (32%) of the Kramer-Lugo 230 kV under Category C (N-1-1) conditions	Coolwater-Lugo 230 kV line plus potentially one of the following: a) Revise existing Kramer RAS to trip more generation, b) Second Kramer-Llano 500 kV line, or c) A second 500 kV line between Kramer & Windhub or Midway or Pisgah.
Diverged case in the Ivanpah - El Dorado area	Add 2nd Ivanpah-Eldorado 230 kV
Thermal overloads on the Haskell Canyon-Rinaldi 230 kV and the Haskell Canyon-Sylmar 230 kV under N-1 conditions	Establish a new Haskell Canyon-Olive- Sylmar 230 kV by relocating transformers from Olive to Haskell Canyon and converting existing 115 kV transmission to 230 kV

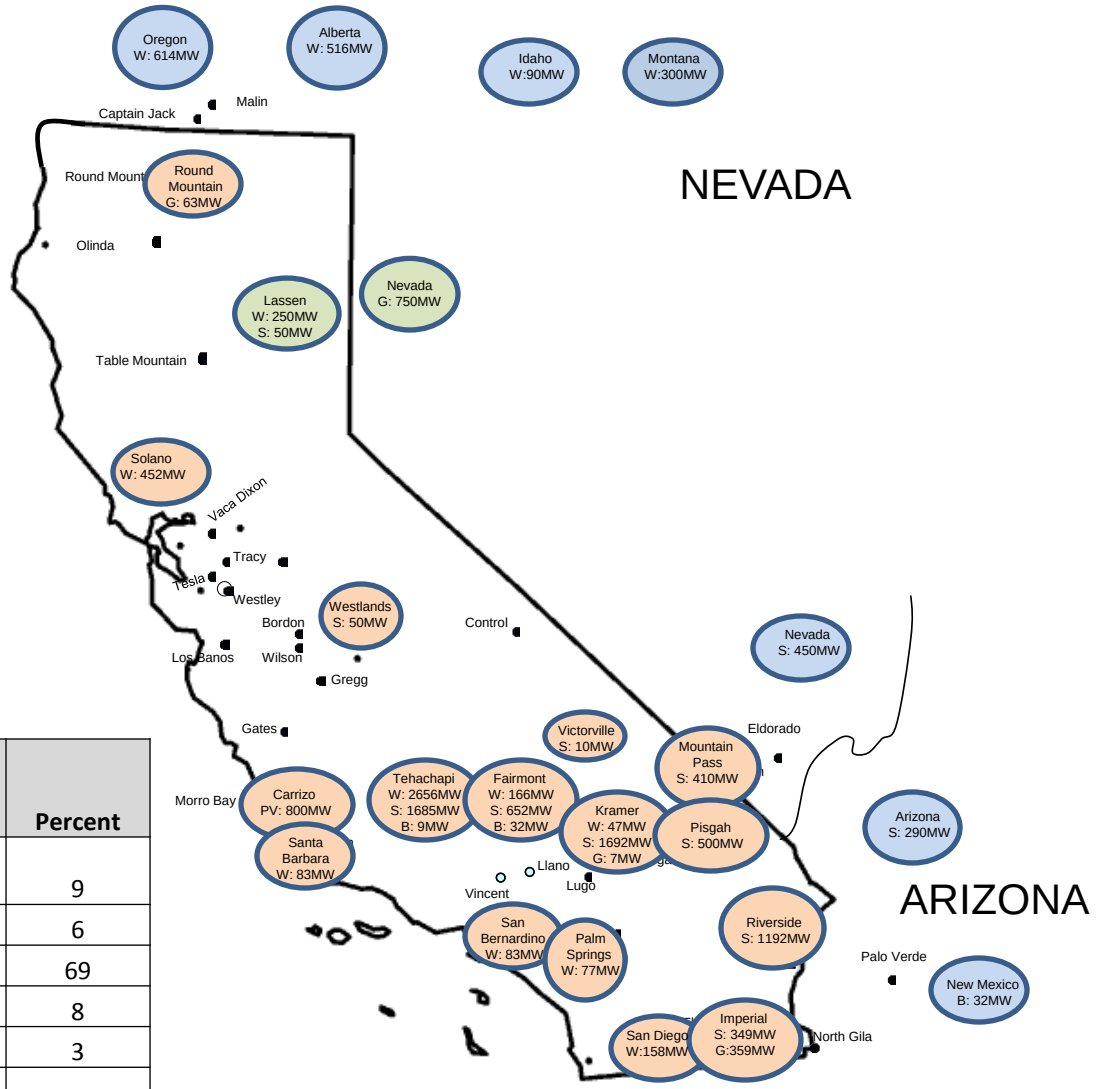
NW Nevada Scenario Renewable Resources

Scenario Specific Resources

Resources Located In-State

Resources Located Out of State

Non CREZ Resources not shown include :
Solar: 25MW, Bio:128MW



Region	Definition	Installed Capacity (MW)	Percent
No Cal	Tesla/Tracy - No CA Border-Northwest Nevada	1,541	9
Cent Cal	Midway - Tesla/Tracy	850	6
So Cal	Midway - So Ca Border	10,288	69
PNW	Oregon/Washington/BC	1,130	8
Rocky Mtn	Montana/Wyoming/Idaho	390	3
Southwest	Southern Nev/Arizona/New Mexico	772	5
TOTAL		14,971	100

NW Nevada Import Scenario Transmission Needs

Stress Path Flows

NW Nevada Import (Stress) Results

Impacts	Potential Mitigation
Thermal overloads (9%) on the Round Mountain-Table Mountain 500 kV and under Category B (N-1) conditions	Modify COI RAS
Thermal overloads (24%) on the Drum-Dutch Flat 115 kV under Category C (N-2) conditions	Reconductor or SPS trip of Westwood generation
Diverged cases indicating voltage collapse or transient instability under Category C conditions (RM-TM N-2 and PV G-2)	Install Olinda-Tracy 500 kV

NW Nevada Import Scenario Transmission Needs

Foundation Path Flows

Preliminary

NW Nevada Import (Foundation) Results

Impacts	Potential Mitigation
Thermal overload (10%) on the Los Banos-Westley 230kV under Category A (N-0) conditions	Reconductor the #1 and #2 circuits
Thermal overload (21%) on the Drum-Dutch Flat 115 kV under Category C (N-2) conditions	Reconductor or SPS trip of Westwood generation

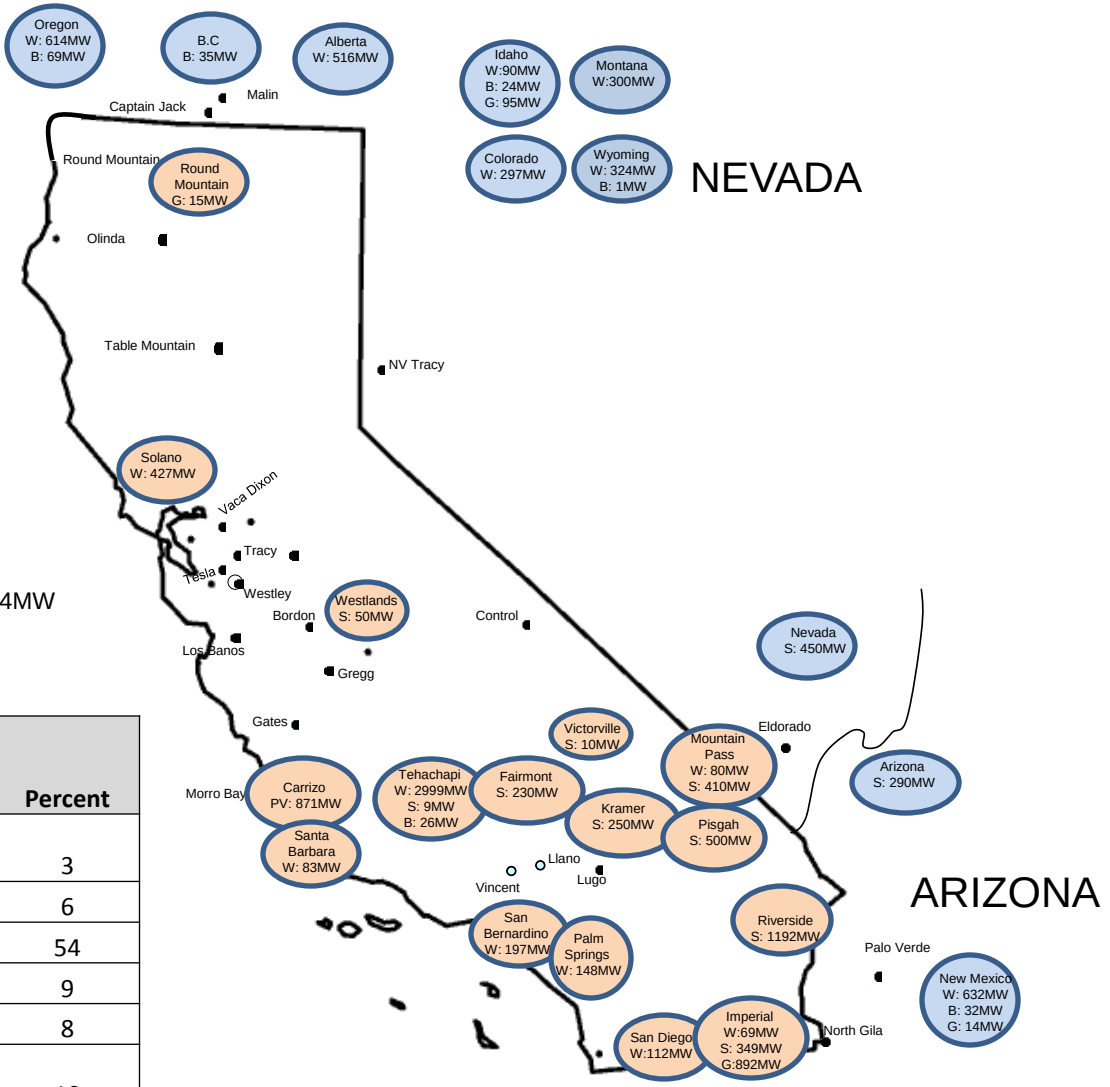
Public Policy Scenario Renewable Resources

Scenario Specific Resources

Resources Located In-State

Resources Located Out of State

Non CREZ Resources not shown include :
Wind: 297MW, Distribution PV: 1,483MW Bio:184MW



Region	Definition	Installed Capacity (MW)	Percent
No Cal	Tesla/Tracy - No CA Border	442	3
Cent Cal	Midway - Tesla/Tracy	921	6
So Cal	Midway - So Ca Border	7,923	54
PNW	Oregon/Washington/BC	1,234	9
Rocky Mtn	Montana/Wyoming/Idaho	1,131	8
Southwest	Southern Nev/Arizona/New Mexico	1,418	10
Various	Distribution PV	1,483	10
TOTAL		14,552	100

Public Policy Scenario Transmission Needs

Foundation Path Flows

Preliminary

Public Policy (Foundation) Results

Impacts	Potential Mitigation
Thermal overload (10%) on the Los Banos Westley 230kV under Category A (N-0) conditions	Reconductor the #1 and #2 circuits
Thermal overload (1%) on the Newark-Las Positas 230 kV under Category A (N-0) conditions	Adjust local generation or reconductor
Thermal overload (16%) on the Highline-Midway X (IID) 230 kV line	SPS trip of Midway X generation

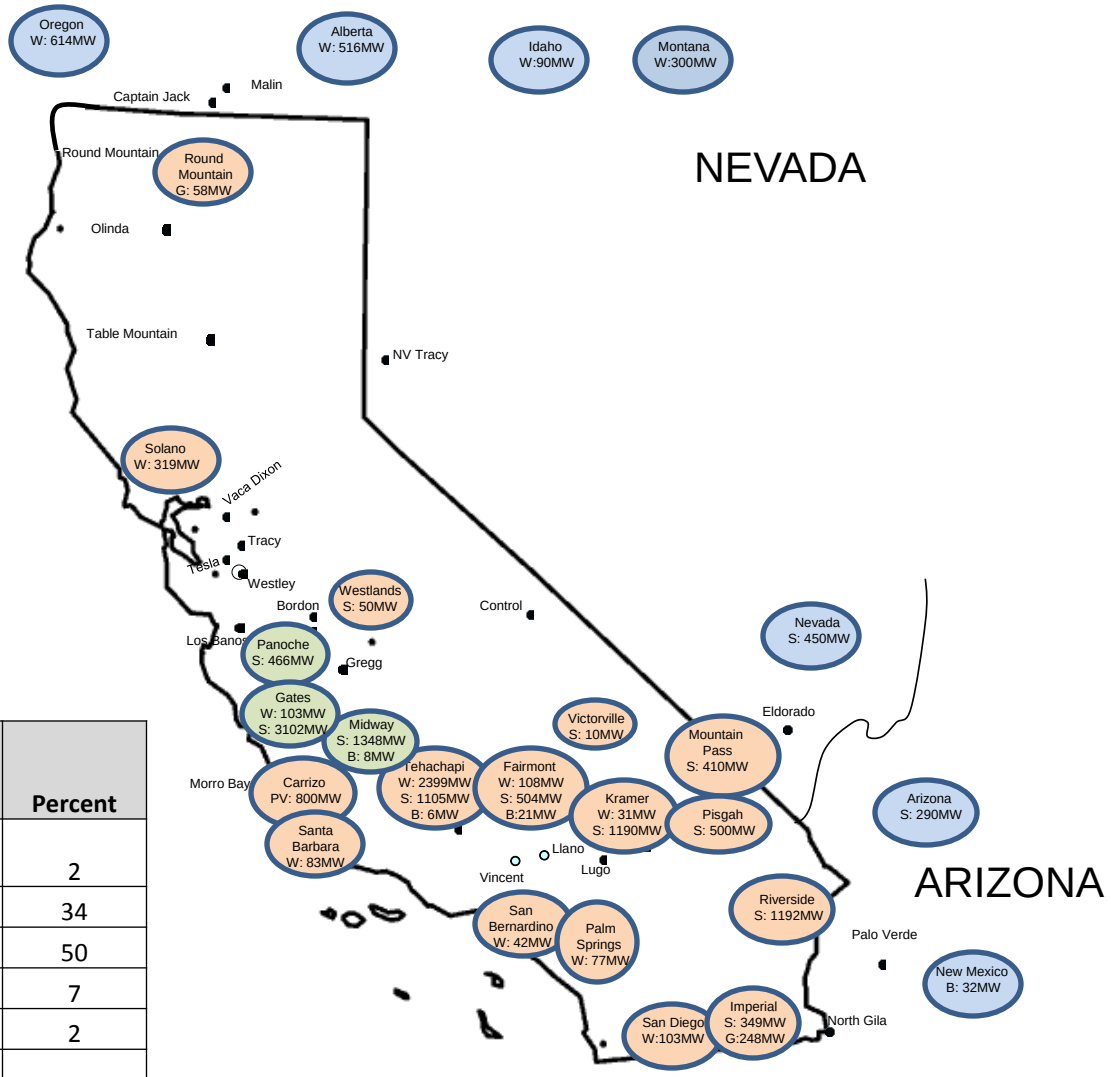
Central California Scenario Renewable Resources

Scenario Specific Resources

Resources Located In-State

Resources Located Out of State

Non CREZ Resources not shown include :
Solar: 25MW, Bio:128MW



Region	Definition	Installed Capacity (MW)	Percent
No Cal	Tesla/Tracy - No CA Border	377	2
Cent Cal	Midway - Tesla/Tracy	5,877	34
So Cal	Midway - So Ca Border	8,545	50
PNW	Oregon/Washington/BC	1,130	7
Rocky Mtn	Montana/Wyoming/Idaho	390	2
Southwest	Southern Nev/Arizona/New Mexico	772	5
TOTAL		17,091	100

Central California Scenario Transmission Needs

Foundation Path Flows

Preliminary

Central CA (Foundation)Results

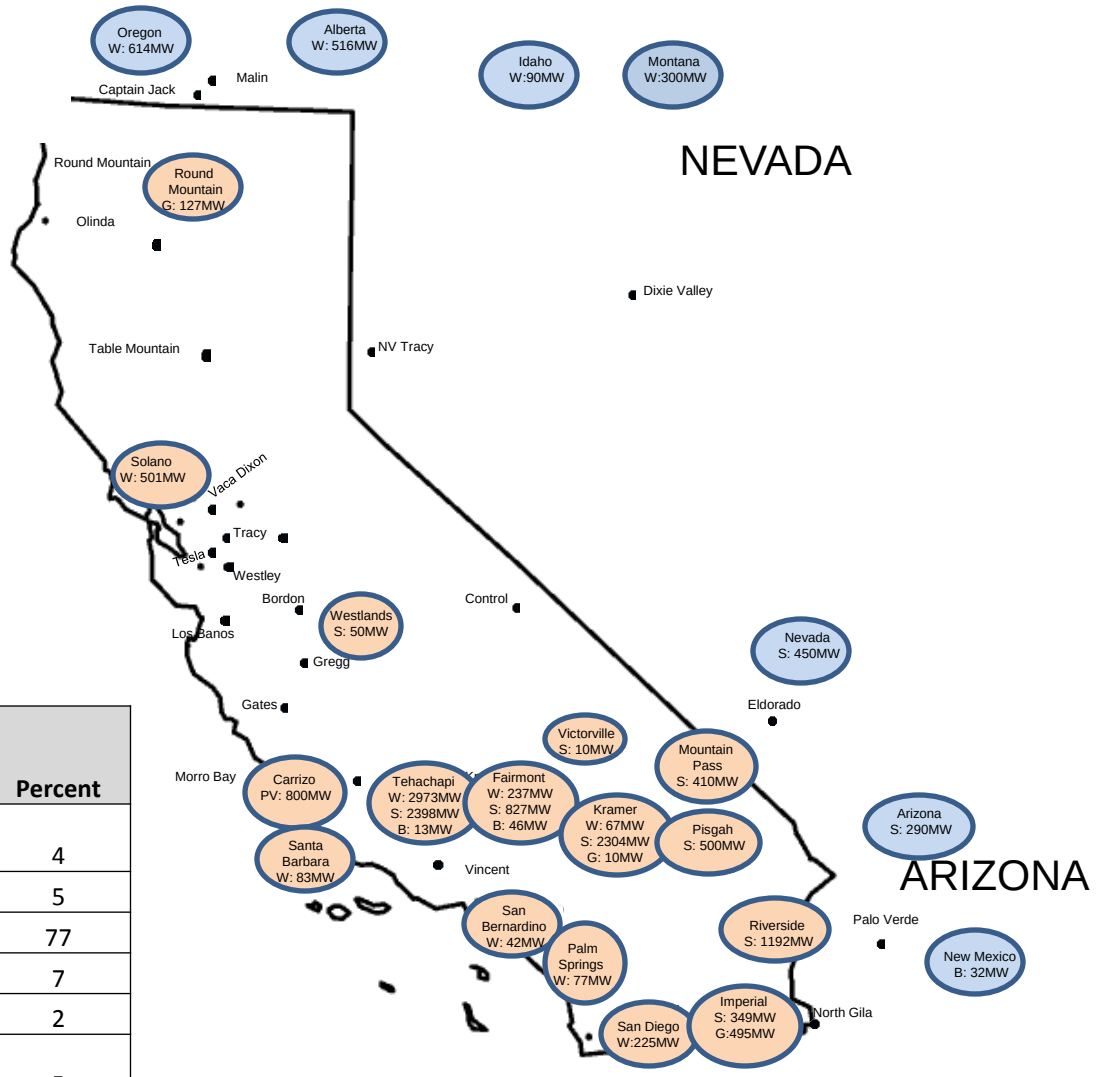
Impacts	Potential Mitigation
Thermal overload (up to 50%) of the Los Banos Westley 230kV under N-0, N-1, and N-2 conditions	Reconductor the #1 and #2 circuits
Thermal overload (22%) of the Kramer-Lugo 230 kV under N-1 conditions	Coolwater-Lugo 230 kV line plus potentially one of the following: a) Revise existing Kramer RAS to trip more generation, b) Second Kramer-Llano 500 kV line, or c) A second 500 kV line between Kramer & Windhub or Midway or Pisgah
Thermal overloads (16%/7%) of Morro Bay – Q166 230 kV under N-1/G-1 conditions and the Monta Vista-Hicks/Saratoga 230 kV under n-2 conditions	Reconductor
Thermal overload (5%) of the Gates-Henrietta 230 kV under n-2 conditions	Rebuild and establish 2-conductor bundle circuits
Diverged case due to voltage collapse under N-2 condition (Tracy-Hurly 230 kV)	Install voltage support in the Gold Hill and SMUD areas

South to North Scenario Renewable Resources

Resources Located In-State

Resources Located Out of State

Non CREZ Resources not shown include :
Solar: 25MW, Bio:128MW



Region	Definition	Installed Capacity (MW)	Percent
No Cal	Tesla/Tracy - No CA Border	628	4
Cent Cal	Midway - Tesla/Tracy	850	5
So Cal	Midway - So Ca Border	12,420	77
PNW	Oregon/Washington/BC	1,130	7
Rocky Mtn	Montana/Wyoming/Idaho	390	2
Southwest	Southern Nev/Arizona/New Mexico	772	5
TOTAL		16,190	100

South-to-North Scenario Transmission Needs

Foundation Path Flows

South-to-North (Foundation) Results

Impacts	Potential Mitigation
Thermal overloads (up to 51%) on the Los Banos Gates-Midway 500 kV, Los Banos-Westley 230kV, the Gates-Henrietta 230 kV and the Gates-Midway 230 kV under N-0, N-1, and N-2 conditions	Install Midway-Gates-Gregg-Bellota-Tesla 500 kV or Midway-Gates-Los Banos-Tesla kV plus Gates-Gregg 500 kV
Multiple diverged cases in the Kramer area due to post-transient voltage collapse and transient criteria violations under N-1 and N-2 conditions	Coolwater-Lugo 230 kV line plus potentially one of the following: a) Revise existing Kramer RAS to trip more generation, b) Second Kramer-Llano 500 kV line, or c) A second 500 kV line between Kramer & Windhub or Midway or Pisgah
Diverged case in the Ivanpah - El Dorado area	Add 2nd Ivanpah-Eldorado 230 kV
Thermal overloads (up to 26%) on the Haskell Canyon-Rinaldi 230 kV and the Haskell Canyon-Sylmar 230 kV under N-1 conditions	Establish a new Haskell Canyon-Olive- Sylmar 230 kV by relocating transformers from Olive to Haskell Canyon and converting existing 115 kV transmission to 230 kV

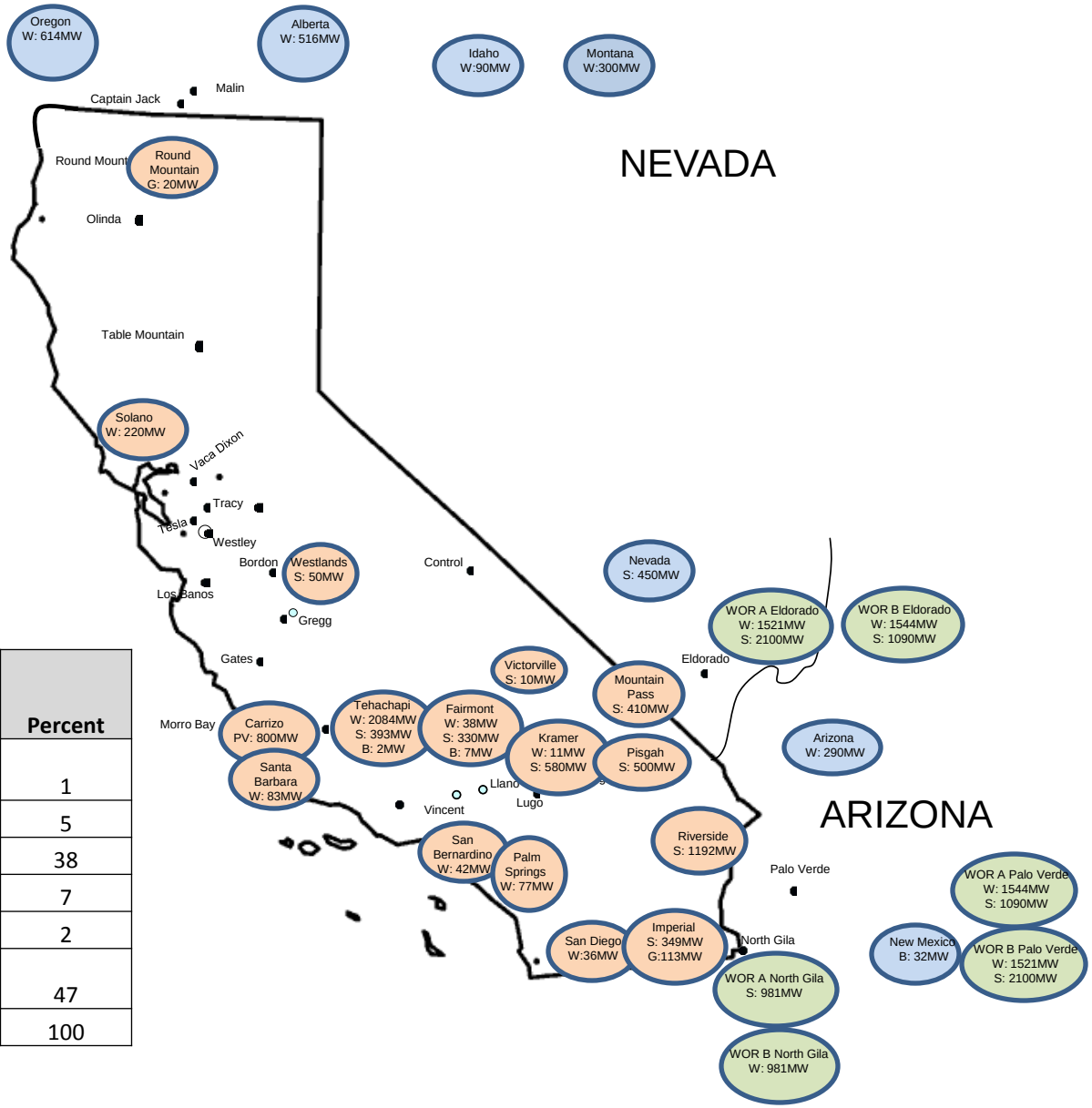
WOR Import Scenario Renewable Resources

Scenario Specific Resources

Resources Located In-State

Resources Located Out of State

Non CREZ Resources not shown include :
Solar: 25MW, Bio:128MW



Region	Definition	Installed Capacity (MW)	Percent
No Cal	Tesla/Tracy - No CA Border	240	1
Cent Cal	Midway - Tesla/Tracy	850	5
So Cal	Midway - So Ca Border	6,420	38
PNW	Oregon/Washington/BC	1,130	7
Rocky Mtn	Montana/Wyoming/Idaho	390	2
Southwest	Southern Nev/Arizona/New Mexico/Wyoming/Idaho	8,008	47
TOTAL		17,038	100

WOR Import Scenario Transmission Needs

Foundation Path Flows

WOR Import (Foundation) Results

Impacts	Potential Mitigation
Thermal overloads on the Los Banos Gates-Midway 500 kV, Los Banos-Westley 230kV, the Gates-Henrietta 230 kV and the Gates-Midway 230 kV under N-0, N-1, and N-2 conditions	Install Midway-Gates-Gregg-Bellota-Tesla 500 kV or Midway-Gates-Los Banos-Tesla kV plus Gates-Gregg 500 kV
Diverged case in the Kramer area due to post-transient voltage collapse and transient criteria violations under N-2 conditions	Coolwater-Lugo 230 kV line plus potentially one of the following: a) Revise existing Kramer RAS to trip more generation, b) Second Kramer-Llano 500 kV line, or c) A second 500 kV line between Kramer & Windhub or Midway or Pisgah.
Thermal overloads on the Haskell Canyon-Rinaldi 230 kV and the Haskell Canyon-Sylmar 230 kV under N-1 conditions	Establish a new Haskell Canyon-Olive- Sylmar 230 kV by relocating transformers from Olive to Haskell Canyon and converting existing 115 kV transmission to 230 kV

Potential Mitigation by Scenario *

Potential Transmission	Scenario								
	NW Import (Spring)		NW Nevada Import (Summer)		Public Pol (Summer)	Cent CA (Summer)	S-to-N (Fall)	WOR Import (Fall)	
	Stress	Fndtn	Stress	Fndtn	Fndtn	Fndtn	Fndtn	North Fndtn	South Fndtn
Captain Jack – Olinda #2	x								
Olinda – Tracy #2	x		x						
Malin-Tesla Mitigation	x(M-RM)	x(M-RM-TM)	x (RM-TM)						
RM-Cottonwd Mitigation		x							
Drum-Rio Oso Mitigation			x	x					
LB-Westley Mitigation				x	x	x			
Midway-Tesla Mitigation							x	x	x
Monta Vista-Saratoga Mit.						x			
Morro Bay Mitigation						x			
Gates-Henrietta Mitigation						x			
Haskell Canyon Mitigation	x	x					x	x	x
Ivanpah Mitigation	x	x					x	x	x
Kramer Mitigation	x	x				x	x	x	x
Highline-Mid X Mitigation					x				

Preliminary

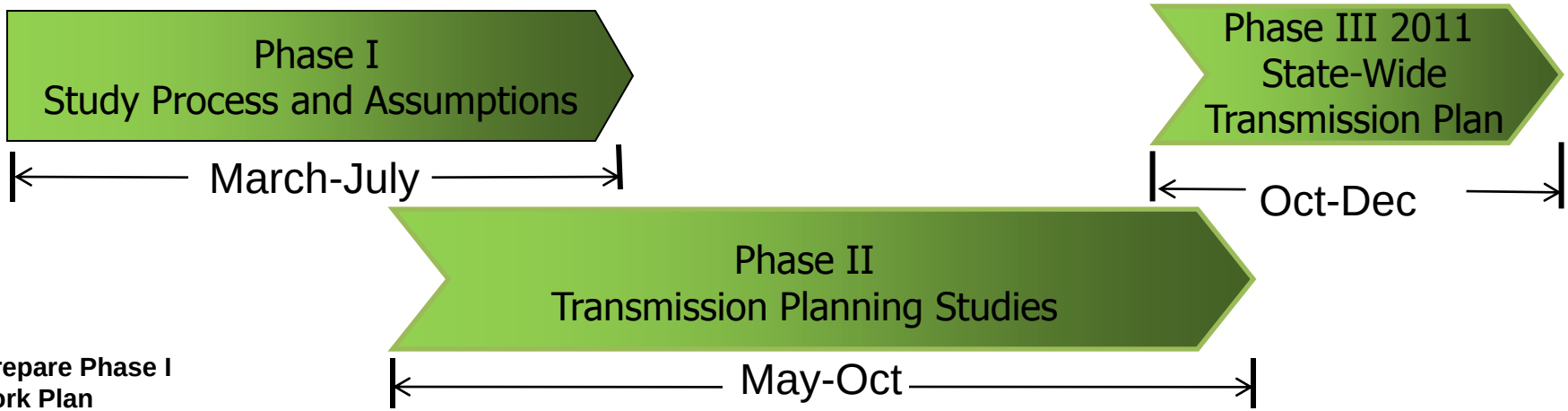
* The mitigation to be implemented will be determined by the Balancing Authority(ies) and Transmission Owner(s)/Developer(s) following a more detailed evaluation to be conducted by these entities

Status

- Studies are nearing completion
- Results being reviewed and incorporated into a Transmission Study Report
- Information contained in this presentation may change as the Study Team finalizes its work

2011 CTPG WORK PLAN – MIKE DEIS

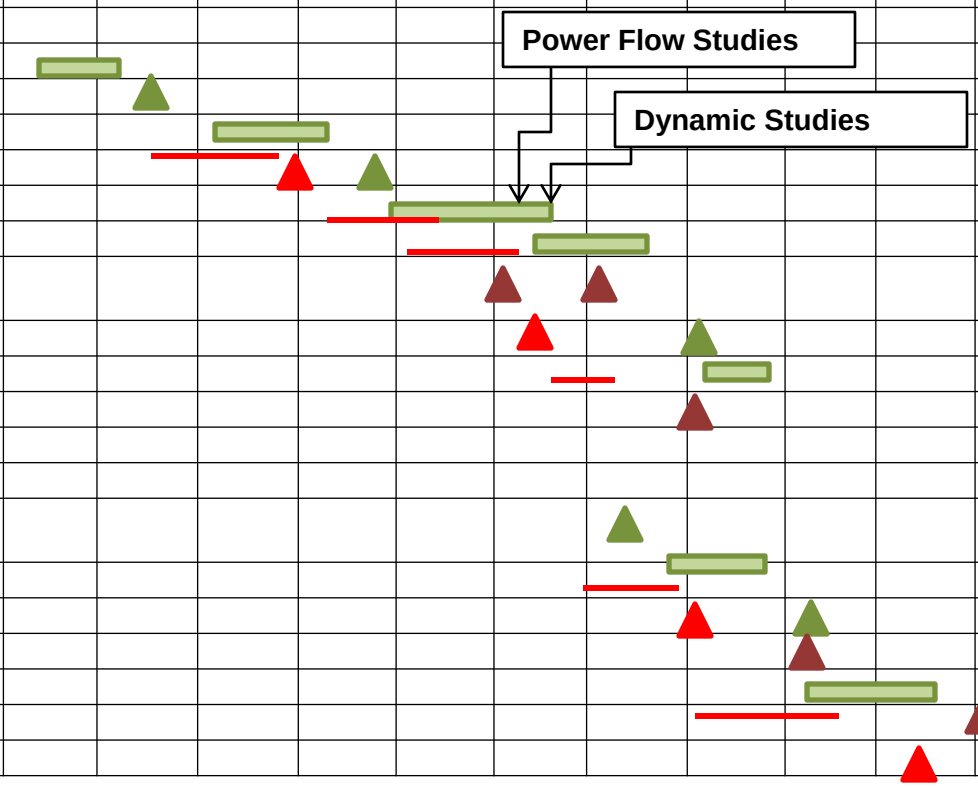
CTPG 2011 Work Plan



- **Prepare Phase I Work Plan**
- **Determine Base Case Approach**
- **Verify Existing Renewables**
- **Incorporate OTC Assumptions**
- **Review Path Flow Assumptions Prior To Dispatch of Renewables**
- **Update Net Short**
- **Review Re-dispatch Methodology**
- **Review Dynamic Stability Study Approach**
- **Coordinate with TEPPC**
- **Prepare Phase II Work Plan**
- **Develop Renewable Portfolios/Scenarios**
- **Prepare Study Plan(s)**
- **Update Renewable Development Information**
- **Perform Studies**
- **Refine the Determination of the High and Medium Potential Transmission Needs and Corridors**
- **Identify 2011 State-Wide Transmission Plan Elements**
- **Identify 2011 Lessons Learned**
- **Begin Preparation of 2012 Work Plan**

2011 Work Plan Schedule

Milestone	2011									2012			
	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April
Phase I Study Processes & Assumptions													
Executive Committee Meeting (May 5th)													
Phase I Work Plan													
Stakeholder Meeting (May 19th)													
Prepare Report													
Stakeholder Meeting (June 14th)													
Executive Committee Meeting (July 7th)													
Phase II Transmission Studies													
Phase I/Phase II Work Plan													
Stakeholder Meeting (May 19th)													
Prepare Study Plan													
Stakeholder Meeting (July 1st) (July 22)													
Perform Studies													
Prepare Study Report													
Executive Committee Meeting (Sept. 1st/October 6th)													
Stakeholder Meeting (Sept. 14th) (Nov. 4th)													
Final Report													
Executive Committee Meeting (Nov 3rd)													
Phase III Statewide Transmission Plan													
TSC Meeting to Discuss Methodology (Oct TBD)													
Prepare Report													
Stakeholder Meeting (Nov. 3rd) (Nov. 30th)													
Executive Committee Meeting (Dec. 1st)													
Final Report													
Executive Committee Meeting (Jan. 5th)													
Post Final Statewide Transmission Plan													



NEXT STEPS – MO BESHIR

Next Steps

- Post CTPG 2011 Draft Study Report
- Conduct November 4th Stakeholder Meeting
- Obtain Stakeholder Input November 4th to November 14th
- Respond to Stakeholder Comments
- Post CTPG 2011 Final Study Report
- TSC To Discuss 2011 Statewide Transmission Plan Outline and Methodology
- Begin Preparing CTPG 2011 Statewide Transmission Plan

Thank you!