

**WEST
CONNECT**

Enhancing wholesale
electricity markets
in the southwest

2008 WestConnect Transmission Plan

**2009 Annual Planning Meeting
Nevada Power Company
Pearson Bldg – Room A**

January 14, 2009

2008 WestConnect Ten Year Transmission Plans

- Summary of Plans Chris Fecke-Stoudt
- WestConnect EHV Plans Gary Romero
- Detailed CCPG Plans Tom Green
- Detailed SSPG Plans Joe Tarantino
- Detailed SWAT Plans Rob Kondziolka
- Conclusions & Recommendations Jerry Smith

2009-2018 Plan Organization

- Plan organized by Planned and Conceptual projects as defined by Exhibit 1
 - **Planned:** Project has a sponsor, incorporated in entity's regulatory filing, has participation / construction agreement, or permitting has been obtained or will be sought.
 - **Conceptual:** Project lacks formal sponsor, or requires more study and refinement prior to committing to construct. Such projects may be viewed as viable alternatives still seeking sponsorship.
- Plan sorted by Voltage Class (Exhibit 2)
- Plan sorted by In-Service Date (Exhibit 3)
- Plan sorted by State (Exhibit 4)
- Maps of Plan (Exhibit 5) and WestConnect Website
- Changes between 2007 and 2008 Plan (Exhibit 6)

Exhibit 1

Transmission Plan Guide

- Plan will include ten year transmission projects of:
 - Entities that have signed WestConnect Project Agreement for Subregional Transmission Planning, OR
 - Other entities whose projects meet the following prerequisites
- Prerequisites for inclusion:
 - New transmission projects with nominal system voltage ≤ 100 kV
 - Located within WestConnect Planning Area or interconnecting WestConnect to adjacent Subregional planning areas
 - Studied in accordance with federal and state regulatory requirements
 - Demonstrated performance compliant with NERC and WECC reliability planning criteria
- Provided a peer review of projects occurred during the WestConnect subregional planning process

Process for Plan Development

- 11/14/2008 Planning Workshop - Ten Year Plans presented by Transmission Providers and Merchant Developers
- Project descriptions and plans of service diagrams submitted by project sponsors utilizing the new WestConnect TPM Database
- 12/12/2008 - Draft Plan compiled and posted for review and comment by 12/24/2008
- 1/12/2009 – Comments addressed and Final Plan was posted

What's Not in Plan

- Key projects not submitted by a sponsor
 - LS Power, NTTG, Nevada Ground Water and Vulcan Power projects proposed at 11/4/09 SSPG meeting
 - Transmission Project Descriptions for San Luis Rio Colorado Generation submitted to TPM Database on 1/12/09
- Some transmission sponsors did not submit
 - List of Participants for some projects
 - Cost Estimates for some projects

2008 Plan Summary

Transmission Project Categories

Transmission Projects	Planned	Conceptual	Estimated Cost (2009 \$M)
New Lines	147	42	12,984
Line Upgrades	17	2	3,076
Substations	48	3	332
Transformers	29	3	129
TOTAL	241	50	\$ 16,521

Planned Lines by State

State	No. Line Projects	Total Miles	Estimated Cost (2009 \$M)
Arizona	71	1,647	1,809
California	10	691	1,627
Colorado	17	885	868
Nevada	6	450	1,001
New Mex.	15	230	98
Texas	19	96	37
South Dakota	0	0	0
Wyoming	5	347	36
Multi-State	4	945	1,523
TOTAL	147	5,291	\$ 6,999

Conceptual Lines by State

State	No. Line Projects	Total Miles	Estimated Cost (2009 \$M)
Arizona	27	730	211
California	2	73	66
Colorado	8	798	508
Nevada	1	31	70
New Mex.	1	0	0
Texas	0	0	0
South Dakota	0	0	0
Wyoming	0	0	0
Multi-State	3	3,374	5,130
TOTAL	42	5,006	\$ 5,985

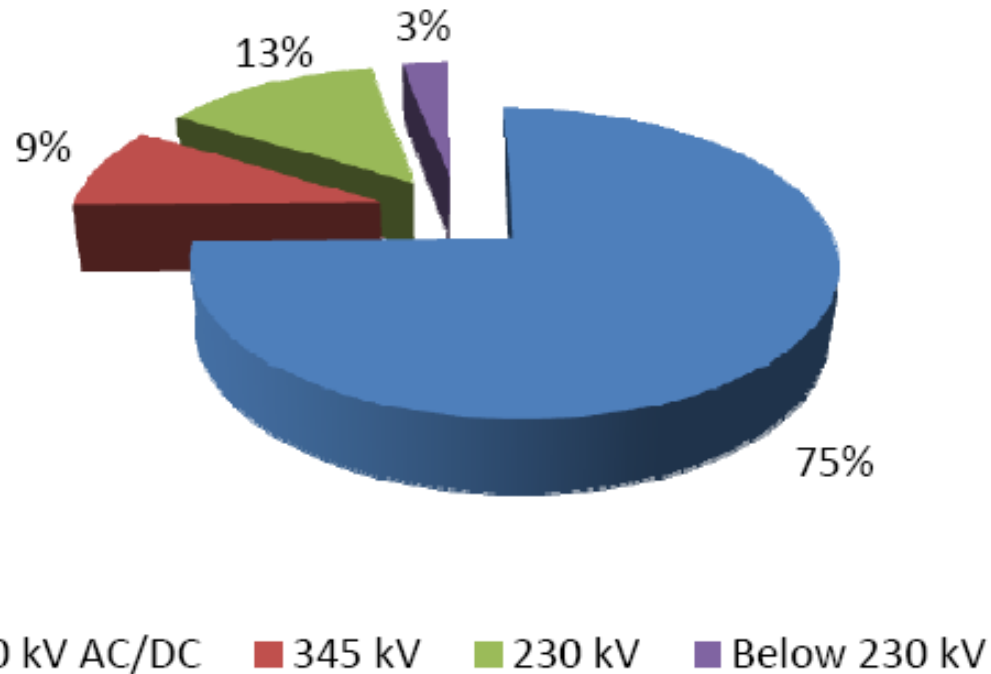
Transmission Line Comparison 2007 Plan vs. 2008 Plan

	2007	2008	Change
Planned	106	147	+41
Conceptual	22	42	+20
Total No. Projects	128	189	+61
Planned	4,636	5,291	+655
Conceptual	4,256	5,009	+753
Total Miles	8,892	10,300	1,408
Planned	6,969	6,999	+30
Conceptual	6,204	5,985	-215
Total Estimated \$M	\$ 13,173	\$ 12,984	- \$ 185

2008 Plan

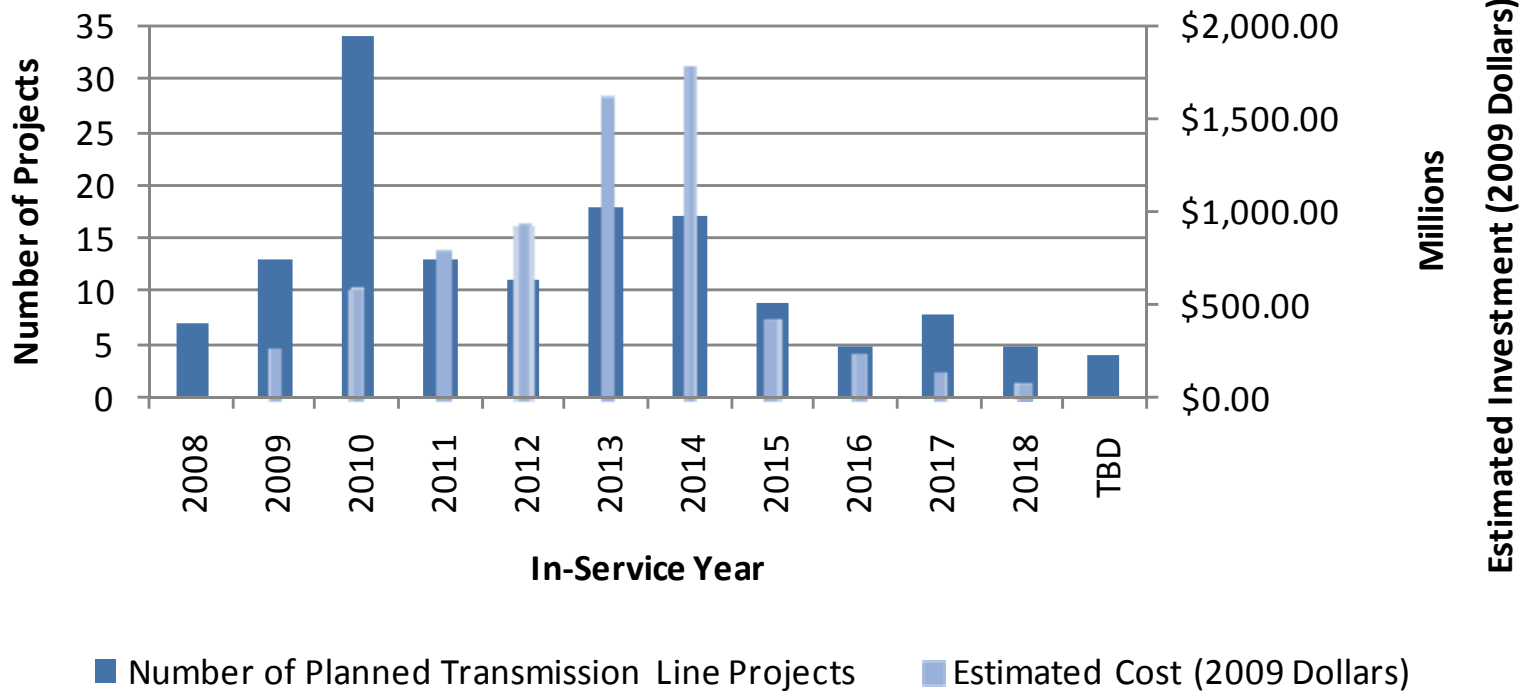
Transmission Line Cost

Estimated Capital Investment
in Transmission Lines by Voltage Class



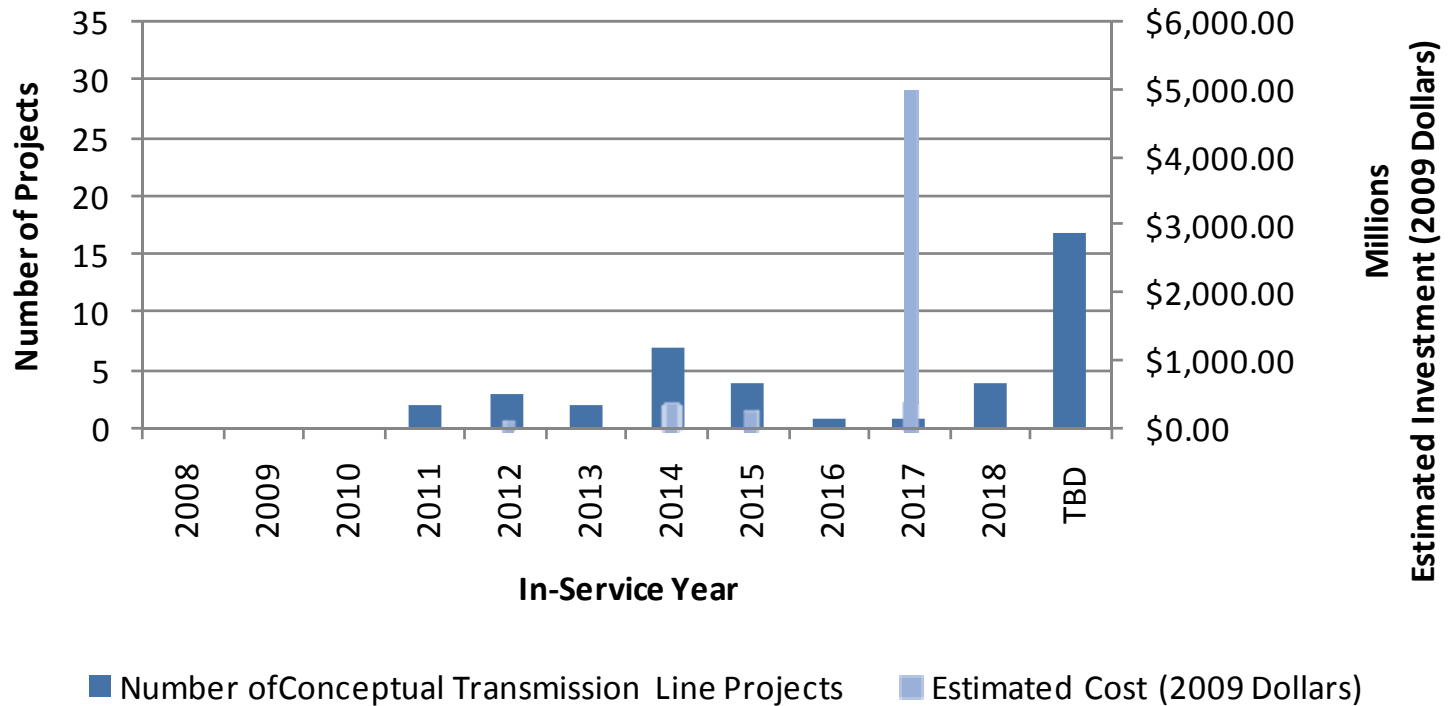
2008 Planned Transmission Line Projects

WestConnect Planned Transmission Line Projects and Transmission Investment by Year



2008 Conceptual Transmission Line Projects

WestConnect Conceptual Transmission Line Projects and Transmission Investment by Year



Conclusions

- 2008 Plan includes transmission plans for:
 - BEPC and Black Hills Power / Energy
 - Platte River Power Authority
 - Dine Navajo Transmission Project, Palo Verde to Devers 2, Harcuvar Transmission Project, and Southwest Public Power Resources
- Scope and scale of interstate projects continue to dominate the WestConnect Plan statistics
- Use of TPM Database has improved the quality of data reported
- The number of projects without in-service dates reduced significantly from 2007

Top 3 Suggested Improvements

1. The WestConnect Plan detail and accuracy corresponds directly to the quality of data entered through the TPM. Continuing to improve the detail and accuracy should remain a goal.
2. Annual revisions to the WestConnect Plan should remain a minimum requirement but consideration should be given to more frequent updates thru the TPM to keep stakeholders abreast of changes in the Plan as they occur.
3. Addition of new fields in the TPM data base could allow project status reporting on an ongoing basis. This could improve project status updates at meetings and possibly be accessible via the website map.

Recommendations

It is recommended that the WestConnect Planning Management Committee (PMC) take the following action:

- Refine, support and adopt the 2008 Plan suggested improvements for 2009
- Approve the 2008 Plan Report