

SOUTHWEST POWER POOL

MOPC Concerns

"Some upgrades can not be implemented in time. Will the T.O. be at risk of "non-compliance" with the RE?"

- "NO" - STEP tariff requirements (FERC OATT) & "RE Compliance" (NERC stds) are not the same.
- Where necessary, mitigations will always be identified first.
- STEP is only used to supplement some RE data requirements
 - 1.Prevents duplication of effort
 - 2.Supplements NERC stds "long term, category B"
 - 3.Supplements NERC stds "Category C & D"

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MOPC Concerns *cont.*

"Many projects had the need date advanced. How did this happen?"

- 11 reasons were identified as listed in the report on page 14.
- These include:
 - 1.96 models
 - 2.New "scenario 5" model
 - 3.Forecast load changes
 - 4.Generation dispatch changes
 - 5.Etc.

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Executive Summary 'Appendix A' All Upgrades, 2008-2017

2008 - 2017 Cost by Network Upgrade Type Appendix A
\$2.2 Billion

Upgrade Type	Percentage
New Lines	55%
Line Rebuild/Upgrades	20%
Transformers	14%
Voltage Conversion	6%
Caps/Reactive Device	3%
Substation Upgrade	2%

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Executive Summary 2007 STEP vs. 2006 STEP

Executive Summary of All Transmission Upgrades	2007 STEP	2006 STEP
APPENDIX B:		
Zonal Upgrades	\$29 M	\$0
Base Plan Fundable, Reliability Upgrades	\$718 M	\$147 M
"Existing Facilities", pre January 1, 2006	\$14 M	\$55 M
Proposed Economic Upgrades	\$465 M	\$1.4 M
Outside Appendix B financial commitment window		
Regional Reliability upgrades	\$296 M	\$790 M
Zonal Criteria reliability upgrades	\$4 M	\$0
Reliability upgrades not under the OATT	\$65 M	\$15 M
Facility owner "planned projects"	\$320 M	\$378 M
Upgrades from Transmission Service Agreements	\$201 M	\$52 M
Upgrades from Generation Interconnection Agreements	\$88 M	\$0
Total	\$2.2 B	\$1.4 B

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Recommendation

- The SPP RTO staff recommends that the SPP BOD approve this report, "SPP Transmission Expansion Plan 2008 -2017"
- The MOPC recommends that the SPP BOD approve the "SPP Transmission Expansion Plan 2008-2017"

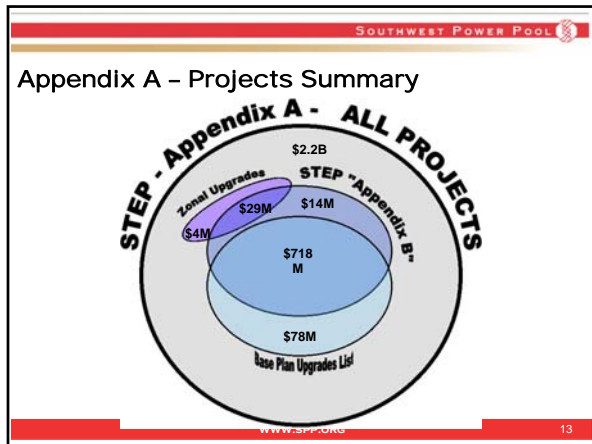
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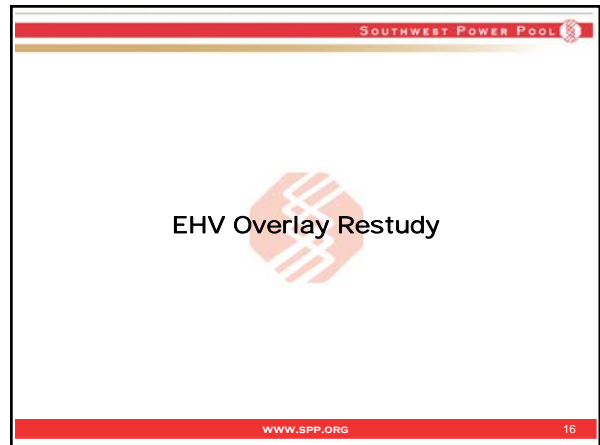
Appendix B Financial Commitment Window

- 2 year window for 2006 STEP
- MOPC said, "too short"
 - TWG recommended 4 year window
- Appendix B
 - SPP reliability upgrades in financial commitment window years 1- 4, (2008-2011) recommended to receive a "Notification to Construct" (2006 "Letters of Authorization")

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- SOUTHWEST POWER POOL
- ### Oklahoma Electric Power Transmission Task Force (OEPTTF)
- Scope approved in December
 - January 24th, 2008, Oklahoma City – *Transmission Expansion in Oklahoma and Beyond Summit*
 - Optimal grid expansion in OK, TX, and beyond based on latest STEP and up to 6,000 MW new OK wind development, primarily in panhandle
 - Finalize study in 1st quarter 2008
- www.spp.org 15



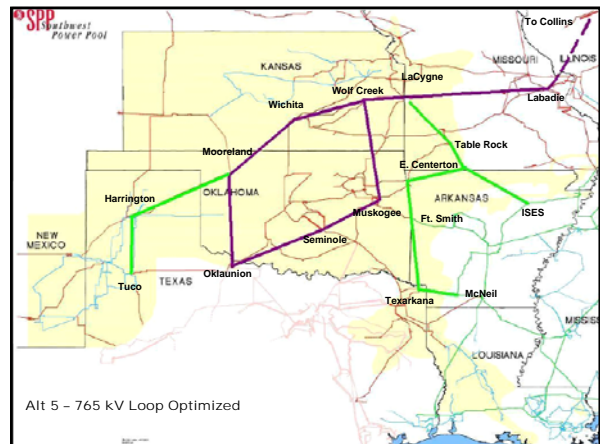
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InfraSource
Technology

PowerWorld
Corporation
The Visual Approach to Analyzing Power Systems

EHV Overlay Study
completed in early 2007

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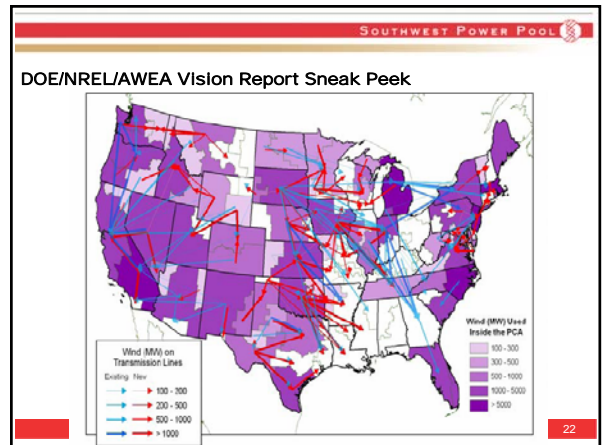
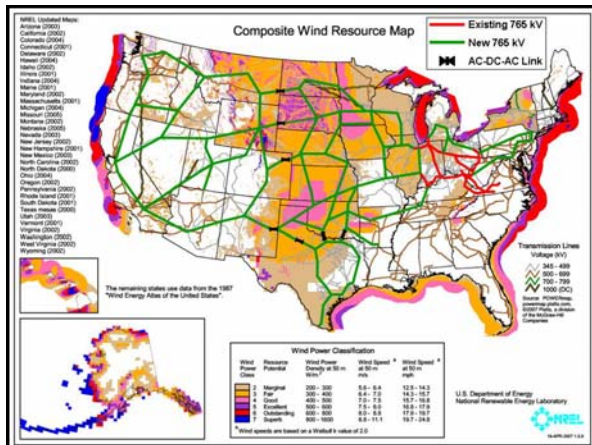
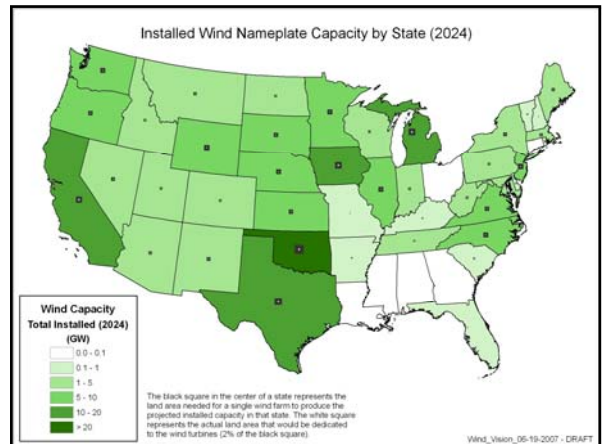


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Wind Assumptions are Key

- CREZ 1500/600 transmission expansion and 13,000 MW of new wind in base for EHV Overlay Study
 - Majority of new wind in Texas Panhandle
 - Sensitivity evaluated 20,000 MW of new wind
- DRAFT NREL/AWEA/DOE report for Wind Vision shows significant shift in expected wind development compared to wind potential maps
 - 2030 developments projected to exceed 35,000+ MW in SPP, without counting any development in Texas

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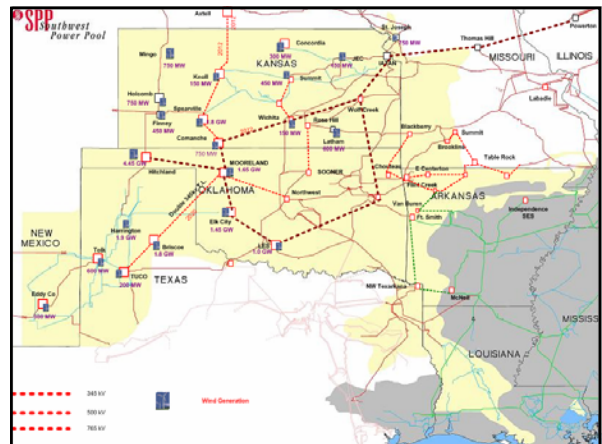


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EHV Overlay Restudy

- Working with Quanta/Infrasource on restudy
- Approved scope
- Completed stakeholder survey
- Finalizing modeling
- Developing scenarios
- Evaluating 345 kV build-out options
- Comparing economic alternatives
- Results expected first quarter 2008

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Joint Coordinated System Plan

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Joint Coordinated System Plan

- Working on Joint Coordinated System Plan (JCSP) with MISO, PJM, TVA and others:
 - Joint Operating Agreements require development of joint plans every few years
 - Interregional collaborative planning is needed today
 - 2018 reliability and 2024 economic analysis will compliment DOE/NREL Eastern Interconnection wind integration study
 - Focus on expansion planning and operational impacts of significant wind development
 - November 1, 2007 kickoff meeting in Pittsburgh
 - Economic planning workshops:
 1. Nashville - Dec 11-12, 2007
 2. New Orleans - Jan 9-10, 2008
 3. Preliminary resource forecasts shared at Feb 5 meeting - webinar available

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SPP *Southwest Power Pool*

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