

***Public Service Company of New Mexico***

***WestConnect TTC/ATC Workshop***

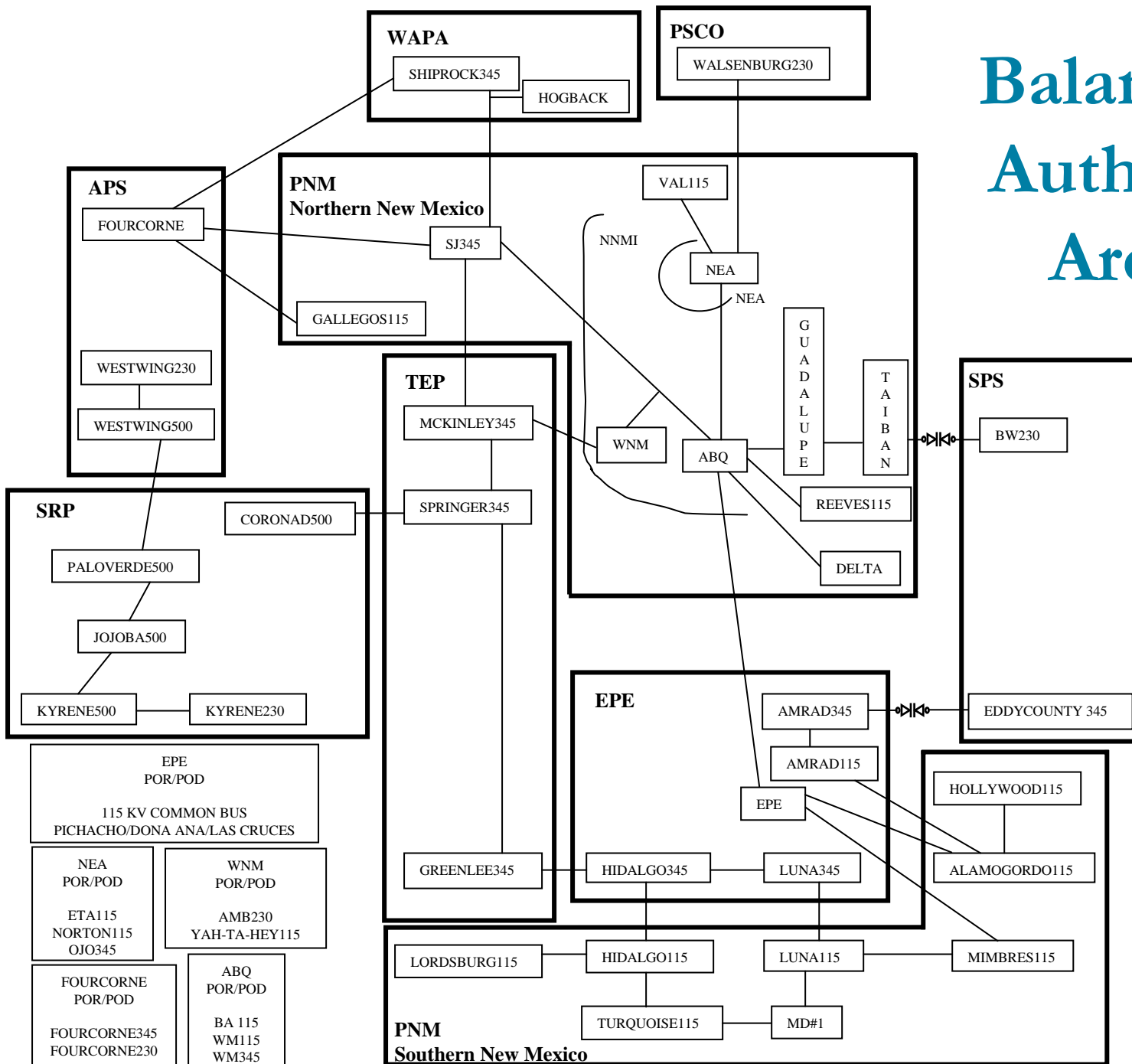
*Phoenix, AZ*

*Tom Duane*

*May 21, 2008*



# Balancing Authority Areas

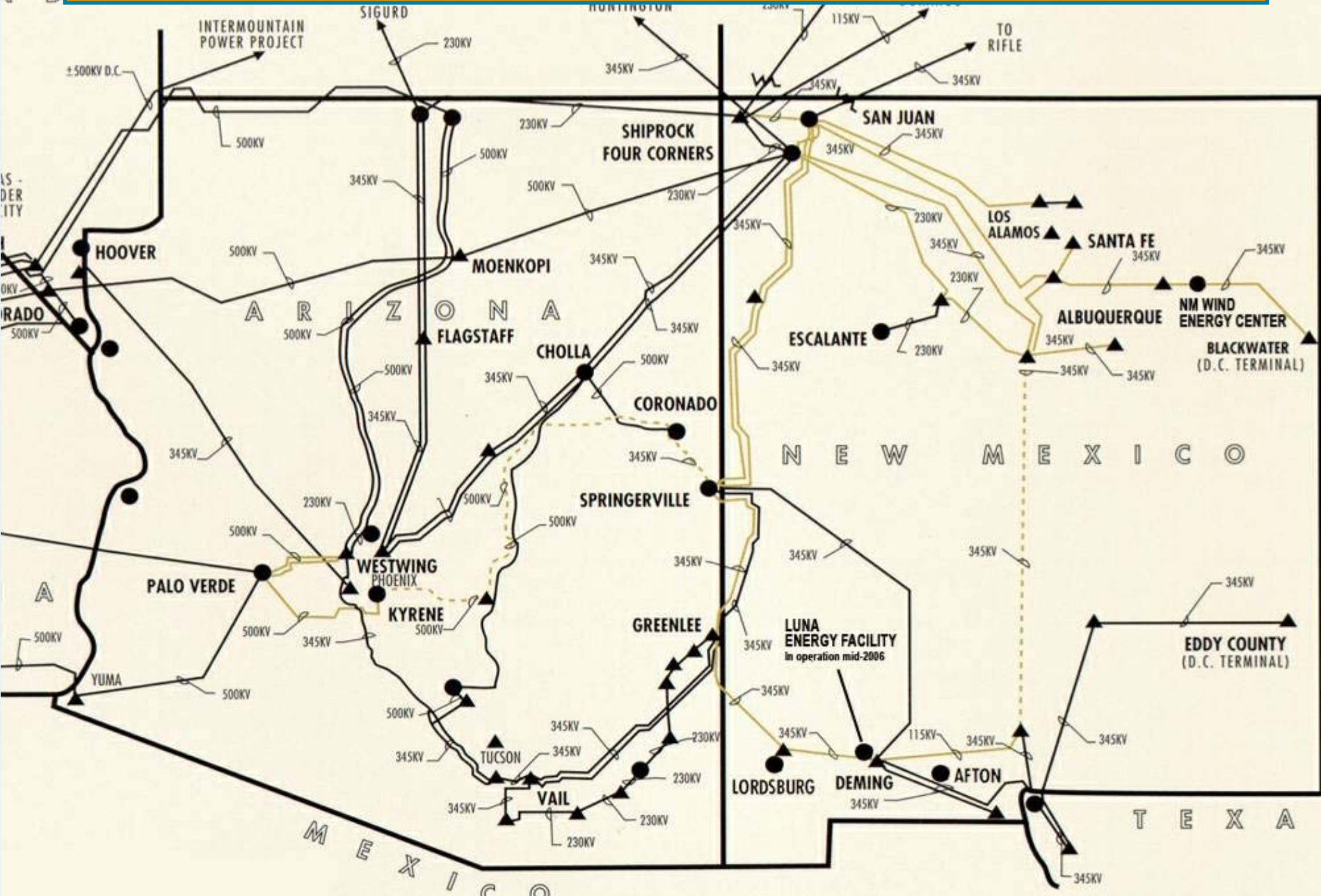


# 2008 Updates

- Afton Expansion (CC) Placed in Operation in 2007
- Valencia CT (Belen) in June, 2008



# Transmission Map



## Significant Transmission Path Determinations for 2008

<b>Path Name</b>	<b>TTC Determined</b>	<b>TTC</b>	<b>TRM</b>	<b>CBM</b>	<b>Committed Uses</b>	<b>ATC</b>
FOURCORNE/SJ345 – WNM/ABQ	WECC	1852*	127		<b>1833</b>	<b>0</b>
WNM/ABQ – FOURCORNE/SJ345	Owner	1376	0		<b>90</b>	<b>1286</b>
NEA – SJ345/WNM/ABQ	Subregion	64	0		<b>0</b>	<b>64</b>
TAIBAN – BW230	Owner	200	0		<b>11</b>	<b>189</b>
BW230 – TAIBAN	Owner	200	0		<b>150</b>	<b>50</b>
ABQ – GUAD	Owner	200	0		<b>11</b>	<b>189</b>
GUAD – ABQ	Owner	600	0		<b>440</b>	<b>160</b>
GUAD – TAIBAN	Owner	200	0		<b>11</b>	<b>189</b>
TAIBAN – GUAD	Owner	400	0		<b>350</b>	<b>50</b>
SJ345 – FOURCORNE345	Subregion	299	0		<b>116</b>	<b>183</b>
FOURCORNE345 – SJ345	Subregion	299	0		<b>5</b>	<b>294</b>
FOURCORNE – GAL	Owner	100	0		<b>75</b>	<b>25</b>
GAL - FOURCORNE	Owner	100	0		<b>0</b>	<b>100</b>
SJ345-MCKINLEY345	Subregion	150	0		<b>150</b>	<b>0</b>
MCKINLEY345-SJ345	Subregion	150	0		<b>94</b>	<b>56</b>
MCKINLEY345-SPRINGER345	Subregion	100	0		<b>100</b>	<b>0</b>
SPRINGER345-MCKINLEY345	Subregion	100	0		<b>94</b>	<b>6</b>
SPRINGER345 – CORONADO500	Subregion	100	0		<b>100</b>	<b>0</b>
CORONADO500 – SPRINGER345	Subregion	100	0		<b>25</b>	<b>75</b>
SHIPROCK345 – FOURCORNE345	Subregion	300	0		<b>0</b>	<b>300</b>
FOURCORNE345 – SHIPROCK345	Subregion	300	0		<b>0</b>	<b>300</b>
SJ345 – SHIPROCK345	Subregion	269	0		<b>50</b>	<b>219</b>



## Significant Transmission Path Determinations for 2008

<b>Path Name</b>	<b>TTC Determined</b>	<b>TTC</b>	<b>TRM</b>	<b>CBM</b>	<b>Committed Uses</b>	<b>ATC</b>
SHIPROCK345 – SJ345	Subregion	269	0		<b>0</b>	<b>269</b>
GREENLEE345 – HIDALGO345	Subregion	160	3		<b>157</b>	<b>0</b>
HIDALGO345 – GREENLEE345	Subregion	300	0		<b>130</b>	<b>170</b>
PALOVERDE500 – EAST(WESTWING500, KYREN500 & JOJOBA500)	Subregion	669	0		<b>358</b>	<b>311</b>
EAST(WESTWING500, KYREN500 & JOJOBA500) – PALOVERDE500	Subregion	106	0		<b>0</b>	<b>106</b>
WESTWING500 – WESTWING230	Subregion	181	0		<b>134</b>	<b>47</b>
WESTWING230 – WESTWING500	Subregion	181	0		<b>0</b>	<b>181</b>
KYREN500 – KYRENE230	Subregion	298	0		<b>0</b>	<b>298</b>
KYREN230 – KYRENE500	Subregion	298	0		<b>0</b>	<b>298</b>
WESTWING – FOURCORNE	Subregion	264	0		<b>264</b>	<b>0</b>
FOURCORNE345 – FOURCORNE230	Subregion	156	0		<b>8</b>	<b>148</b>
FOURCORNE230 – FOURCORNE345	Subregion	156	0		<b>30</b>	<b>126</b>
HIDALGO345 – LUNA345	Subregion	214	3		<b>149</b>	<b>62</b>
LUNA345 – HIDALGO345	Subregion	214	0		<b>99</b>	<b>112</b>
LUNA345 – LUNA115	Subregion	200	3		<b>157</b>	<b>40</b>
LUNA115 – LUNA345	Subregion	200	0		<b>0</b>	<b>200</b>
HIDALGO345 – HIDALGO115	Subregion	448	0		<b>110</b>	<b>338</b>
HIDALGO115 – HIDALGO345	Subregion	448	0		<b>182</b>	<b>266</b>
EDDY230-AMRAD345	Owner	67	0		<b>67</b>	<b>0</b>
AMRAD345-EDDY230	Owner	67	0		<b>0</b>	<b>67</b>



San Juan-Four Corners  
TTC-299 ATC-183

Four Corners-San Juan  
TTC-299 ATC-294

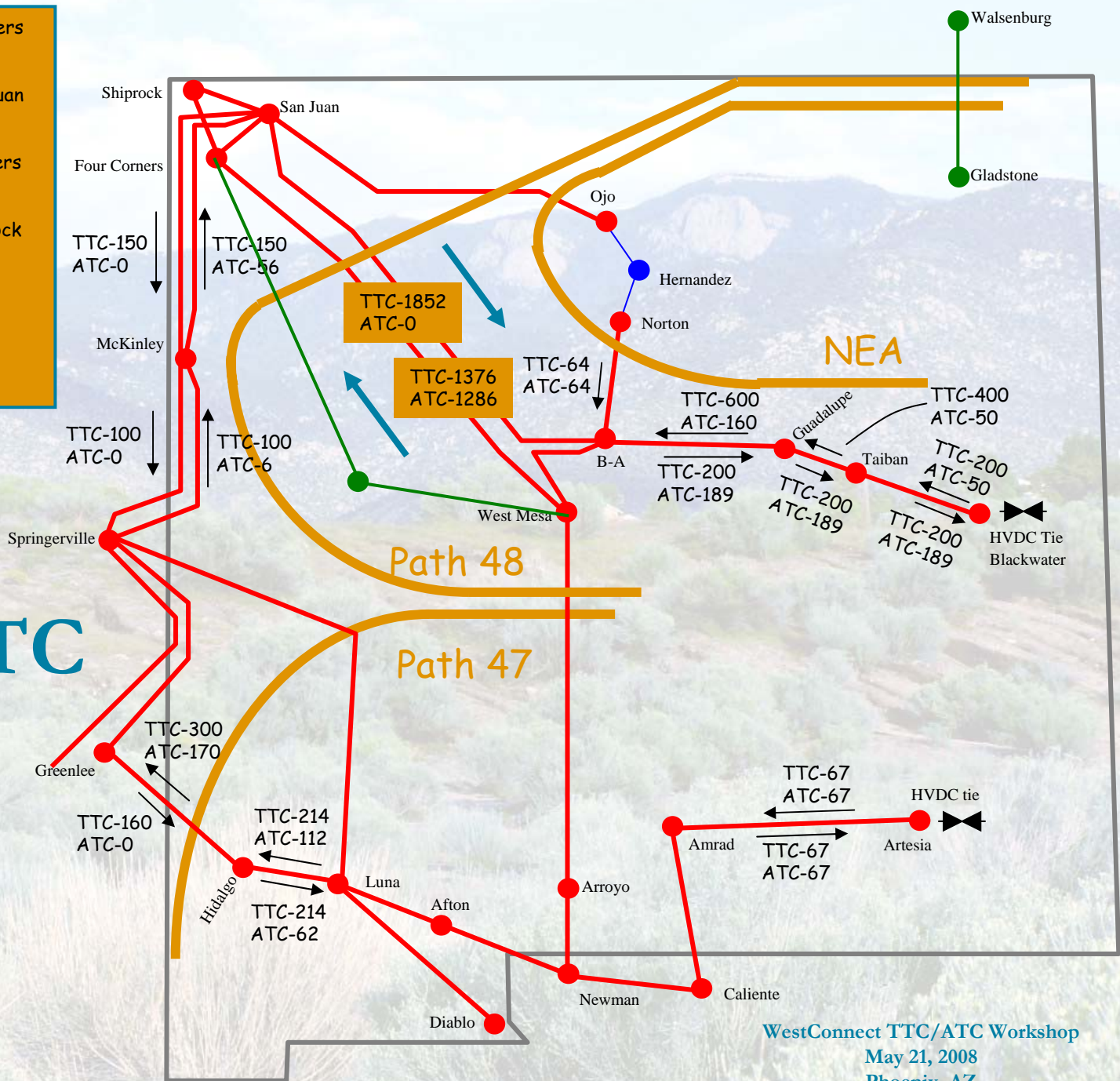
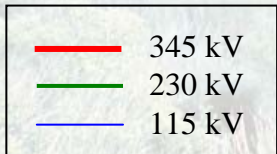
Shiprock-Four Corners  
TTC-300 ATC-300

Four Corners-Shiprock  
TTC-300 ATC-300

San Juan-Shiprock  
TTC-269 ATC-176

Shiprock-San Juan  
TTC-269 ATC-269

# TTC/ATC



# Path 48 - Total Transfer Capability (TTC)

- The TTC is based on voltage stability and thermal limits depending on the amount of reactive support in-service.
- Load-side resources are needed to meet load serving requirements during peak periods.
- For operational purposes the following factors can influence the capacity at any given moment:
  - Shunt Capacitors/Reactors
  - Power Factor Levels
  - Load-Side generation
  - Series Capacitors



# Path 48 – Committed Uses

- **Existing Committed Uses Are:**
  - Retail Loads
  - Network Customers
  - Transmission Service Provided To Others
  - Losses
  - Transmission Reliability Margin (TRM)



Questions?

