

Navajo Generating Station Potential Customer Considerations

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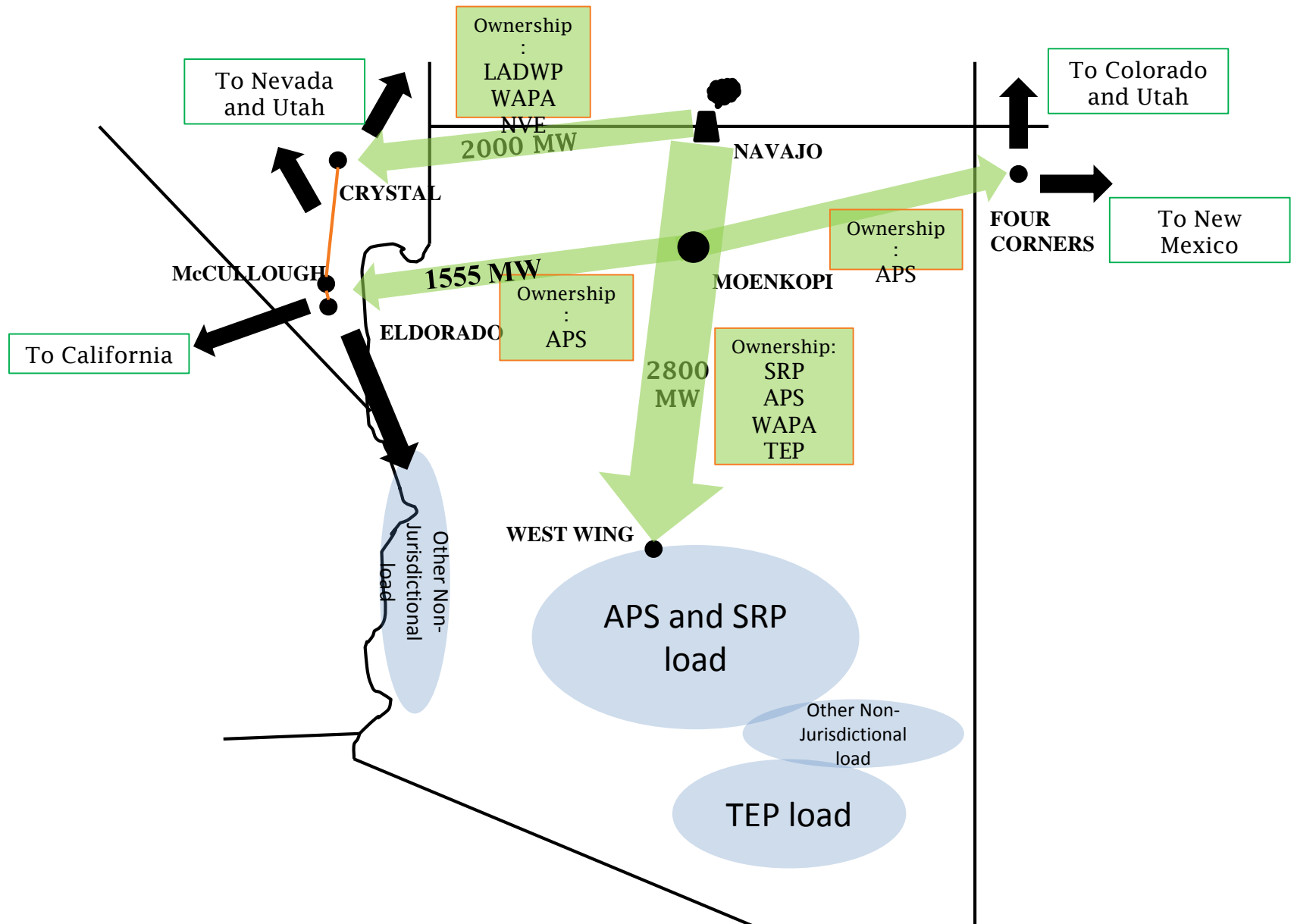
Priority Tasks / Deliverables

- Overview of regional transmission availability to consider for potential customers
- Q-3 operational considerations
- Assessment of how decisions at NGS can affect other base load plants as well

General Considerations

- California and Nevada have state policies that restrict/prohibit the import of coal generation
- Energy delivery that utilizes multiple transmission systems is subject to tariffs from each system (“pancaking”)
- Increased production from NGS likely reduces the contribution from other base load resources

Some regional transmission is available but “pancaking” of various system rates would be a factor



Q3 Operational Considerations

- **Customer load for regional utilities spike in Q3, NGS operations that provide available capacity in this window could have value**
 - The summer season could be must-take energy for a certain cumulative amount of energy over the entire period; options for operating the plant beyond the summer months would require mutual agreement among parties
 - Customers could be required to take the unit minimum generation during all hours but would have flexibility of running up to the unit maximums
 - Increased performance risk for owners because of tight summer capacity
 - Could a seasonal arrangement with a must-take threshold be an option?
 - Most viable option would be a summer-only period from June 1- September 30
 - Pricing must still be competitive; increased renewables and low gas prices will keep market prices low
 - What is a reasonable time duration for an operating arrangement?
 - 1 / 5 year terms, then re-evaluate ?
 - Transmission capacity scheduling is a limiting factor, particularly Phoenix-bound capacity

Final Thoughts

- Coal mine operations and production thresholds; can the mine be scaled down and run at a lower level on a continuous basis in order to stack up enough coal for a summer season run?
 - Relationship of volume to cost
 - Significantly reduced coal royalties to tribes
- How much O&M savings can be realized by switching to a seasonal operation?
 - Seasonal operations will create maintenance issues at the plant and mine
- Are there enough buyers for this product to be viable?
- Continued uncertainty would likely reduce upkeep and capital spend, decreasing long-term reliability
 - If regional conditions change, a potentially big investment would be required to bring the plant back to optimal performance
- Carbon costs and potential for Clean Power Plan impacts are low in the near term but downstream changes could create significant risk
- Pressure on other regional base load assets
- Need to continuously consider the system balance and reliability of generation and transmission flows coming on and off