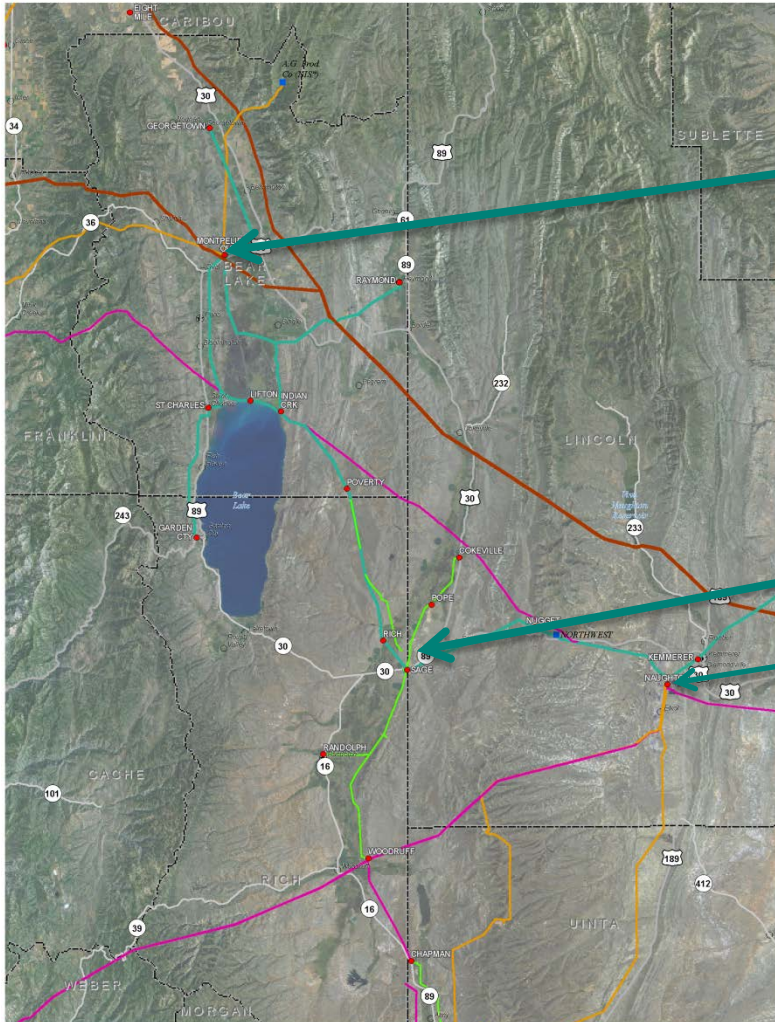


Tim Reynolds

MONTPELIER STUDY RESULTS



System Overview



– Primary Sources

→ Ovid – 138-69 kV

- 138 kV source from Oneida
- Reactive Support to the Area

▶ Sage – 69-46 kV

- 69 kV source from Naughton Generation
- Serves 46 kV Loads

Load Growth

- Base System Loads
 - ▶ Summer 2009: 26 MW
 - ▶ Winter 2009-10: 27.9 MW
- Growth
 - ▶ Summer: 2.1%
 - ▶ Winter: 1.4%
- Projected System Loads
 - ▶ Summer 2014: 31.9 MW
 - ▶ Winter 2014-15: 30.2 MW

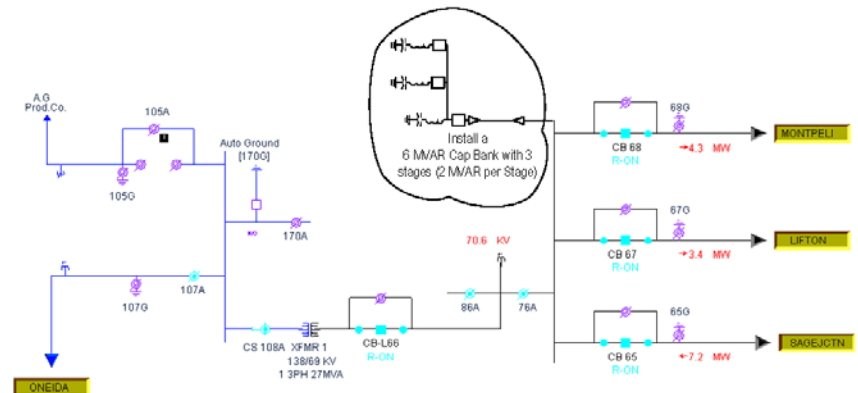
System Problems N-1

- Change switches 66A and 67A at Indian Creek to include vacuum bottles
 - ▶ Prevent loss of service to Raymond, Indian Creek, Poverty, and Rich
 - ▶ Estimated cost is \$70,000



System Problems N-1

- Add a six MVAR - 3 stage Cap Bank at Ovid
 - ▶ Loss of Ovid Transformer causes low voltage problems on the 69 and 46 kV systems
 - ▶ Estimate is \$2.3m in 2011



Total Construction Costs

- Indian Creek
 - ▶ Install switches with Vacuum Bottles
 - \$70,000
- Ovid Substation
 - ▶ Install a six MVAR capacitor bank (3 Stages)
 - \$2.3m
- Total Construction Cost
 - ▶ \$2.37m

Thank you

Any Questions?