Advisory Group Study Issues

- Cost of Capital and Leverage
- Wind Alternatives
- Hydro Alternatives
- DSM Alternatives
- Transmission System Expansion
- Existing Economy Transactions
- Coal Alternatives
- Natural Gas Price Projections

Capital Structure Assumptions

		Capital Structure	
Utility	**WACC (%)**	**Debt**	**Equity**
ML&P	7.3	60.0	40.0
HEA	6.1	80.0	20.0
CEA	6.5	70.0	30.0
MEA	7.5	60.0	40.0
GVEA	6.5	100.0	0.0
Joint	6.0	100.0	0.0

Wind Alternatives

- 50 MW 2013
- 50 MW 2018

- Proportioned to Railbelt Utilities by Ratio of 2007 Peak Loads
- Transmission from Fire Island to Anchorage 2013

Hydro Alternatives

- 300 MW 2020
- 300 MW 2025

- Proportion to Railbelt Utilities by Ratio of 2007 Peak Loads
- Transmission to Northern Intertie 2020 and 2025

DSM Alternatives

- Minimal Reduction in Demand and Energy

Transmission System Expansion

- Northern Intertie 2020
- Southern Intertie 2020
- Wind Interconnection
- Hydro Interconnections

Existing Economy Transactions

- Existing Transmission Limitations
- Transactions Clear with $15 Margin

Coal Unit Alternatives

- 118 MW Unit 1 2020
- 118 MW Unit 2 2025

- Proportioned to Railbelt Utilities by Ratio of 2007 Peak Loads
- Transmission to GVEA 2020

Natural Gas Price Projections

Year	$/MBtu
2008	7.67
2010	7.77
2015	7.65
2020	9.00
2025	11.21
2030	14.68
2035	19.18

- Projection based on 2008 EIA AEO for Henry Hub. Natural Gas assumed to be available to GVEA 2020. Assume $2.00/MBtu discount for GVEA. ML&P BRU gas available at discount until it runs out.