How Does ATLAS represent the Railbelt Generating Capacity?

- Each existing unit is separately listed in the spreadsheet, which calculates its effective capacity (net of forced and scheduled outages)
- Hydro units also have specified annual energy limits and limits on the amount of spinning reserves they may supply
- Unit retirements and available dates for firmly planned units are a user input
- Future additional capacity additions are determined by the generation capacity benefits part of ATLAS, and are assumed to be generic combined cycle units

Our representation of the Railbelt's generating capacity is quite detailed, with each unit represented individually.

The integration of capacity addition logic with operating logic is a feature found in very few other models.

Chugach Review Comment -	Use of "effective capacity" (net of forced and scheduled outages) is very misleading: treats 100MW unit as 85MW unit all the time instead of 100MW 85% of time and zero MW 15% of the time, which ignores the 15% of time when the unit is not available. Many transmission constraints and use of inefficient units happen during this 15% of the time. This substantially underestimates the savings of the Southern Intertie.

Chugach Review Comment -	Chugach disagrees that "the integration of capacity addition logic with operating logic is a feature found in very few other models" as standard production models do integrate capacity addition logic with operating logic.

Chugach Review Comment -	See December 5, 2002 memo: Ratepayer Impacts of Proposed Transmission Projects Final Report, February 16, 1998 and Chugach Staff Review.