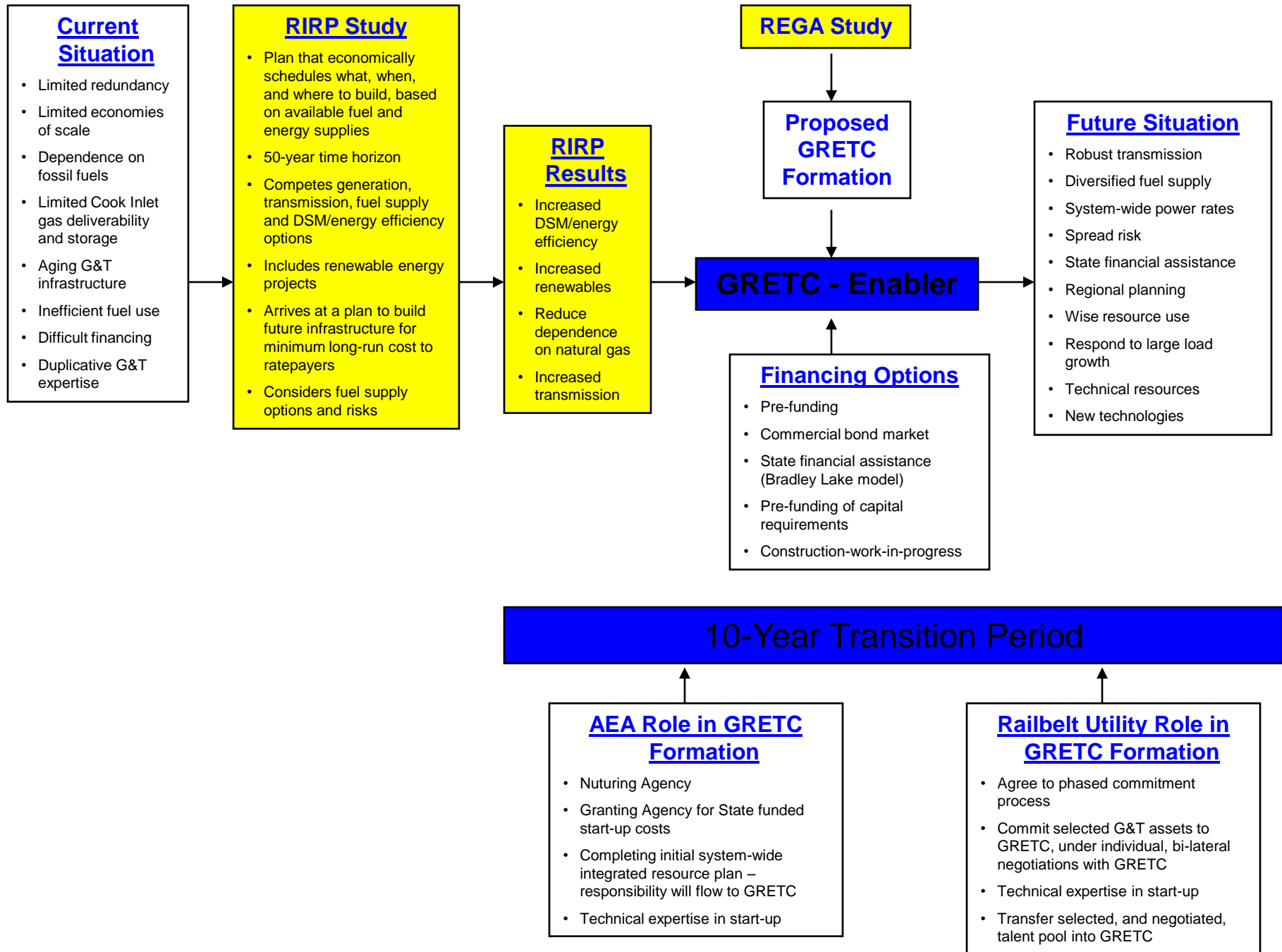


# Interplay Between GRETC and Regional Integrated Resource Plan (RIRP)



# RIRP-Related Risks, Uncertainties and Implementation Roadmap

## Fundamental RIRP-Related Risks and Uncertainties

### *General*

- Regional implementation of RIRP elements
- Financial capability of Railbelt utilities

### *DSM/Energy Efficiency (DSM/EE)*

- Lack of Alaska-specific information
- Total achievable resource potential
- Long-term reliability of savings
- Funding source

### *Generation Resources – Conventional*

- Natural gas supplies, deliverability and prices
- Future emissions regulations (including CO2)

### *Generation Resources – Renewables*

- Total economic resource potential
- Optimization of potential sites
- Project completion risks associated with large hydro and tidal
- Integration of non-dispatchable resources
- Environmental and permitting issues

### *Transmission*

- Adequacy of backbone grid to move power and ensure reliability
- Generation site-specific interconnections
- Desired grid cannot be justified solely on economics
- Siting and permitting issues

## Near-Term Implementation Roadmap (2010-2012)

<i>Action</i>	<i>Timeline</i>	<i>Estimated Cost</i>
<b>General</b>		
<ul style="list-style-type: none"> <li>• Form GRETC</li> </ul>	2010	\$6.8 million
<ul style="list-style-type: none"> <li>• Establish State policies regarding desirability of large hydro, DSM/EE savings targets, Renewables Portfolio Standard, and system benefit charge to fund DSM/EE programs and renewable projects</li> </ul>	2010-2011	\$0.2 million
<ul style="list-style-type: none"> <li>• Choose Preferred RIRP Resource Plan and develop related public outreach program</li> </ul>	2010-2011	--
<ul style="list-style-type: none"> <li>• Determine general framework related to the level and form of State financial assistance</li> </ul>	2010	Included in GRETC budget
<b>Capital Projects</b>		
<ul style="list-style-type: none"> <li>• Conversion of Nikiski LNG facility</li> </ul>	2012-2013	TBD
<ul style="list-style-type: none"> <li>• Develop local gas storage capability</li> </ul>	2011-2012	TBD
<ul style="list-style-type: none"> <li>• Generation projects completed within first six years</li> </ul>	2011-2016	\$1.05 billion
<ul style="list-style-type: none"> <li>• Substation projects completed within first six years</li> </ul>	2011-2016	\$142 million
<ul style="list-style-type: none"> <li>• Transmission projects completed within first six years</li> </ul>	2011-2016	\$211 million
<ul style="list-style-type: none"> <li>• DSM/EE Programs within first six years</li> </ul>	2011-2016	\$34 million
<b>Supporting Studies</b>		
<ul style="list-style-type: none"> <li>• Gather Alaska-specific information and evaluation protocol to support DSM/EE programs</li> </ul>	2010-2011	\$0.6 million
<ul style="list-style-type: none"> <li>• Identify and address resource agencies' issues related to large hydro projects</li> </ul>	2010-2012	TBD
<ul style="list-style-type: none"> <li>• Complete resource potential/siting studies for selected renewable resources</li> </ul>	2010-2012	\$1.5 million
<ul style="list-style-type: none"> <li>• Develop regional strategy for integrating non-dispatchable resources</li> </ul>	2011	\$1.0 million
<ul style="list-style-type: none"> <li>• Develop regional standard purchase agreements and competitive power procurement process to encourage IPP projects</li> </ul>	2011-2012	\$0.4 million
<ul style="list-style-type: none"> <li>• Short-term LNG gas supplies should be secured as transition fuel</li> </ul>	2010-2011	TBD
<ul style="list-style-type: none"> <li>• Complete detailed risk and cost evaluation of available long-term gas supply options to determine the best option</li> </ul>	2010-2011	\$1.0 million
<b>Other</b>		
<ul style="list-style-type: none"> <li>• Close coordination between Railbelt utilities, Enstar and AHFC related to implementation of DSM/EE programs</li> </ul>	2010-2011	\$0.1 million
<ul style="list-style-type: none"> <li>• Aggressively pursue Federal funding for DSM/EE programs and renewable projects</li> </ul>	2010-2012	\$0.2 million
<ul style="list-style-type: none"> <li>• Develop streamlined siting and permitting processes for transmission projects</li> </ul>	2010-2011	\$0.5 million