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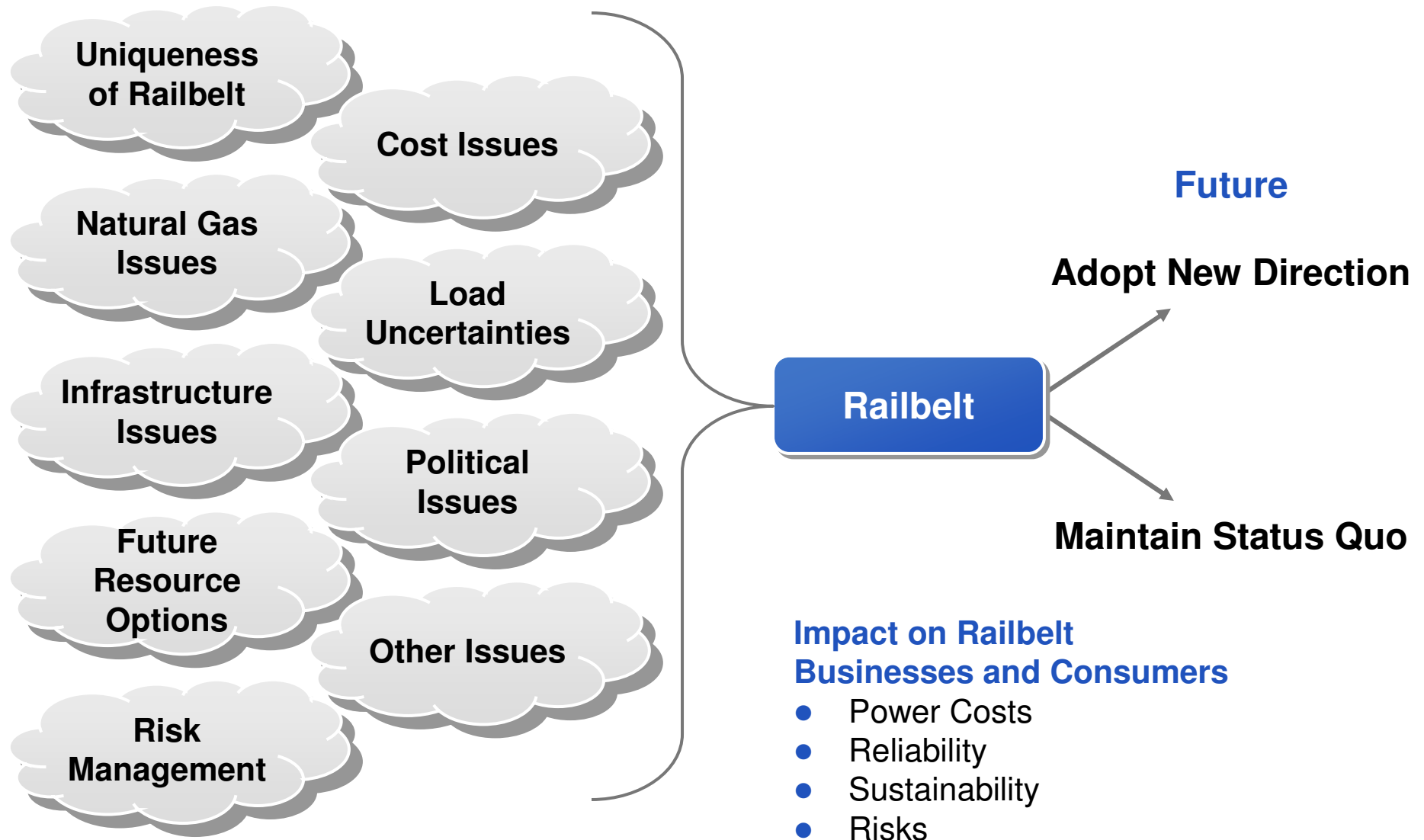


Alaska Railbelt Electrical Grid Authority (REGA) Study

Results and Recommendations

March 26, 2009

Summary of Railbelt Issues



Project Overview – Objectives

- Identify and assess a list of business structure options for the future Railbelt generation and transmission system
- For each option, further analyze alternative structures to manage and dispatch electric power throughout the Railbelt region
- Provide a final work product for stakeholders and decision-makers to consider in planning how to meet the Railbelt region's energy needs over the next 30 years

Project Overview - Definitions

- ***Coordinated Grid Operations*** – relates to the coordinated operations of the transmission grid to ensure the reliability of electric service throughout the region.
- ***Economic Dispatch*** – involves the operation of generation facilities to produce energy at the lowest cost to reliably serve consumers, recognizing any operational limits of generation and transmission facilities.
- ***Regional Integrated Resource Planning*** – a planning process for electric utilities that evaluates many different generation and transmission supply-side and demand-side options for meeting future electricity demands and selects the optimal mix of resources that minimizes the cost of electricity supply while meeting reliability needs and other objectives.
- ***Joint Project Development*** – involves the development of future generation and transmission projects by multiple parties for the joint benefit of all participants.

Summary of Organizational Paths

Path 1

Status Quo

Path 2

Form an Entity That Would be Responsible
for Independent Operation of the Grid

Path 3

Form an Entity That Would be Responsible for Independent
Operation of the Grid and Regional Economic Dispatch

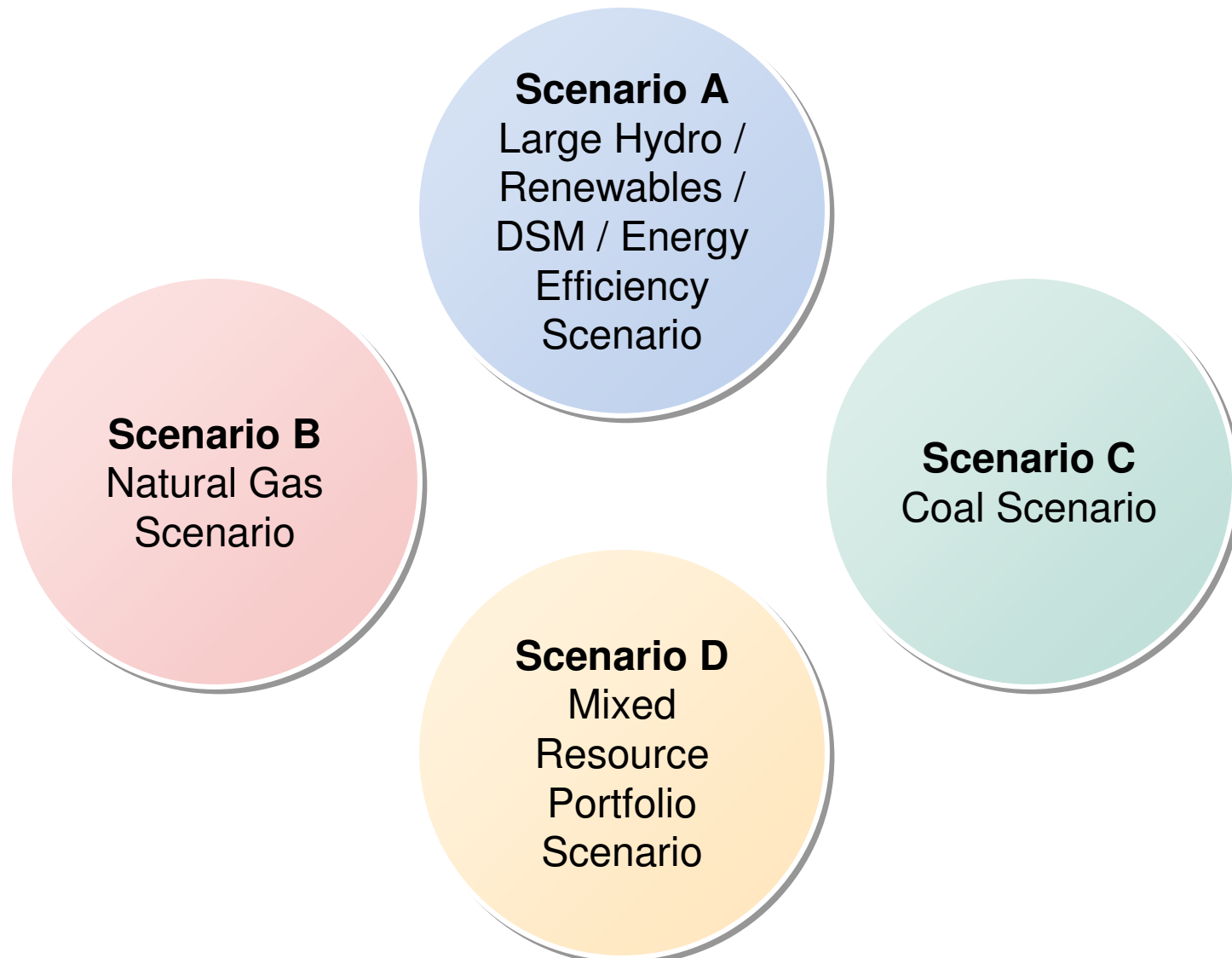
Path 4

Form an Entity That Would be Responsible for Independent
Operation of the Grid, Regional Economic Dispatch, Regional
Resource Planning and Joint Project Development

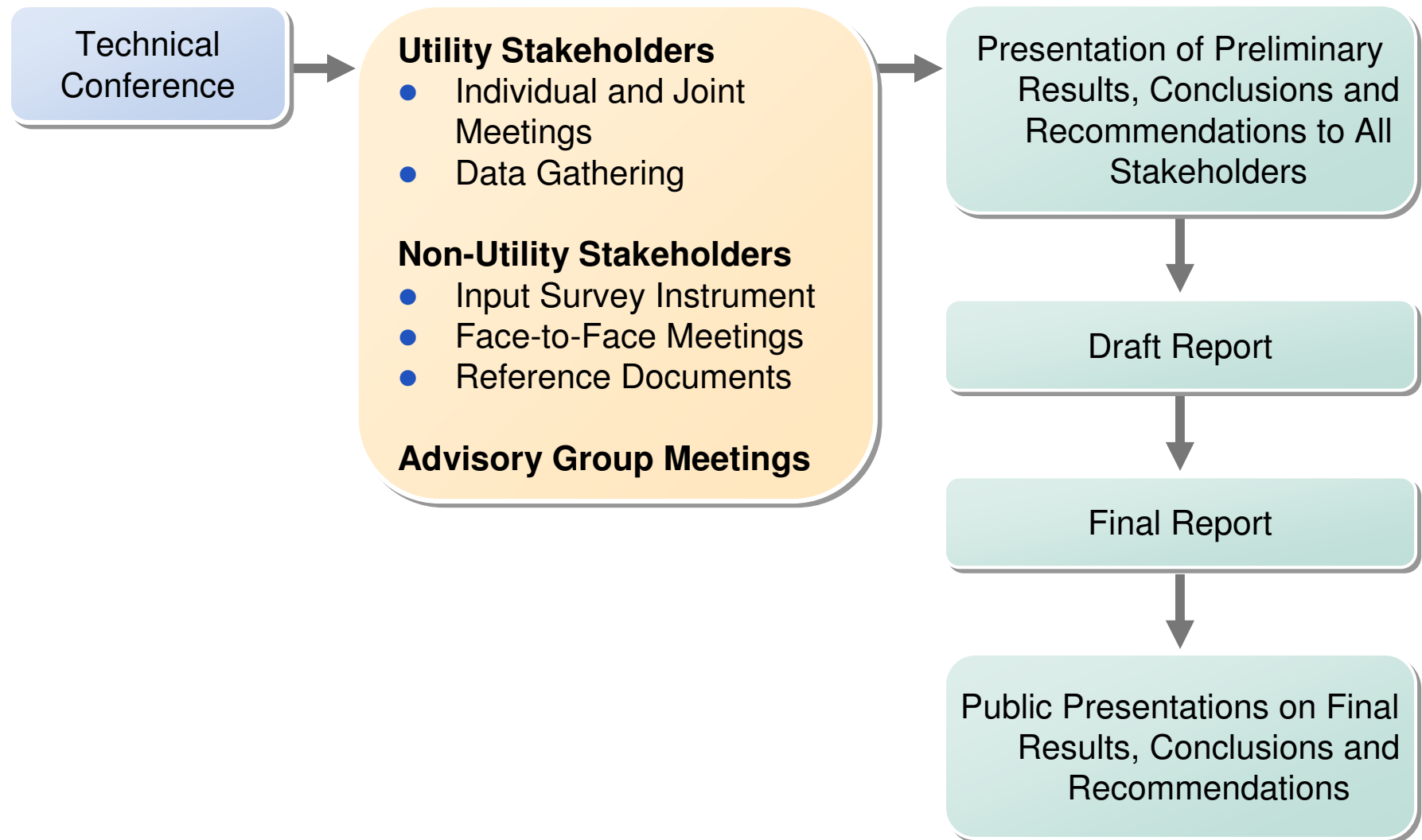
Path 5

Form a Power Pool

Summary of Evaluation Scenarios



Stakeholder Involvement Process

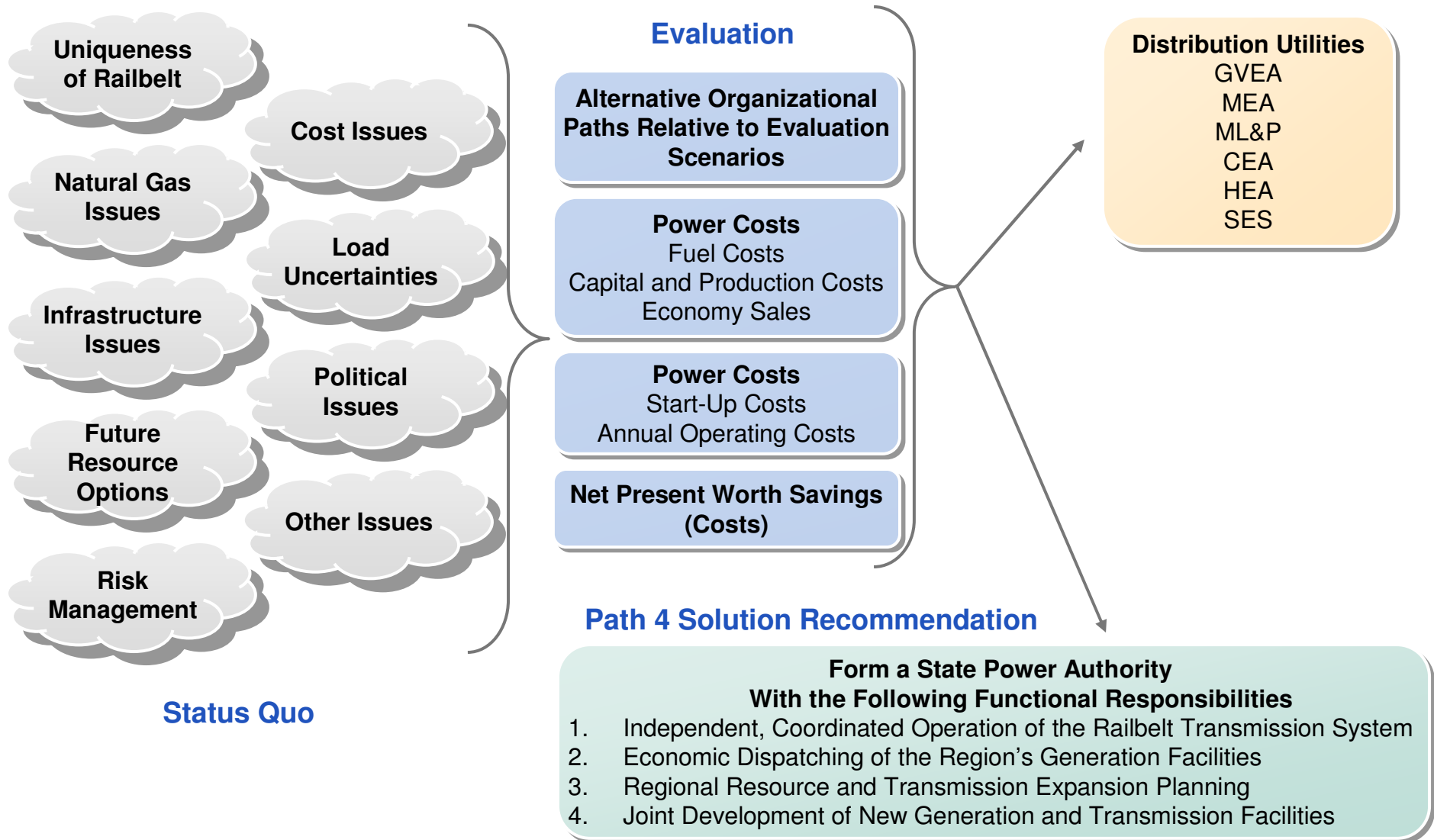


Results – Average Net Savings (\$'000)

Scenario	Path 2 Independent Operation	Path 3 Independent Operation / Economic Dispatch	Path 4 Independent Operation / Economic Dispatch / Resource Planning / Project Development	Path 5 Power Pool	Relative Path 4 Results	
					% Savings	Impact on Typical Monthly Residential Bill
Tax-Exempt Debt						
A – Hydro / Renewables / DSM	(\$1,272)	\$8,229	\$42,683	\$46,097	10.9%	\$11.50
B – Natural Gas	(\$1,272)	\$7,199	\$12,795	\$16,209	4.1%	\$4.30
C – Coal	(\$1,272)	\$10,645	\$37,177	\$40,591	10.8%	\$11.30
D – Mixed	(\$1,272)	\$8,804	\$34,195	\$37,608	9.4%	\$9.90
Taxable Debt						
A – Hydro / Renewables / DSM			\$28,166		7.9%	\$8.30
B – Natural Gas			\$10,452		3.6%	\$3.70
C – Coal			\$30,872		10.1%	\$10.60
D – Mixed			\$25,114		7.5%	\$7.90

Path 5 considered as transition approach and not feasible for long-term solution.

Recommended Organizational Structure



Region's Need to Finance the Future

Scenario	Required Capital Investment Over Next 30 Years – Path 4 (\$000'000)
A – Hydro/Renewables /DSM	\$8,070
B – Natural Gas	\$2,475
C – Coal	\$3,769
D – Mixed	\$5,840

Combined Railbelt Utility Financial Information – 2007 (\$000,000)

- Total Net Electric Plant \$1,475
- Total Revenues \$729
- Total Long-Term Obligations \$1,081

Implementation Steps

- Make Decision Whether to Form Regional Entity and Finalize Functional Responsibilities
- Finalize Legal Form for Regional Entity
- Establish Transition Management Team to Oversee Implementation (Including State Representative)
- Adopt Required Legislative/Regulatory Actions
- Complete Formation of New Entity
- Develop Initial Regional Integrated Resource Plan and Transmission Expansion Plan