

The Railbelt Reliability Council (RRC) Presentation to Senate Resources

May 16, 2025

Presented by: Ed Jenkin, CEO

Lou Florence, Board Chair





The Railbelt Bulk Electric System

- An interconnected network of ~700 miles of highvoltage transmission lines, providing a physical path to serve approximately 750 MW peak load from ~2 GW of installed generating capacity
- Operated by 5 interconnected public utilities, 1 DoD contractor, and the State of Alaska.
- Encompassing three regions connected by single transmission lines with stability limits of about 10% of the peak load.
- Providing electricity for nearly ³/₄ of Alaska's population.



A stakeholder organization



The RRC is governed by a thirteen voting-member :

- 6 utilities (CEA, GVEA, HEA, MEA, Seward, Doyon Utilities)
- Alaska Energy Authority
- 2 Independent Power Producers
- 1 seat advocating for residential-small commercial interests (Alaska Public Interest Research Group)
- 1 seat advocating for large commercial and/or industrial users (Fairbanks Gold Mining Inc./ Kinross)
- 1 seat representing electricity consumers who advocate in support of the reduction of environmentally harmful greenhouse gas emissions and/or other environmental concerns regarding the Railbelt electric system (Renewable Energy Alaska Project)
- 1 independent, non-affiliated member

The RCA and RAPA each hold one non-voting, ex-officio seat on the Board

CEO & STAFF

INDEPENDENT TECHNICAL GROUP (TAC)

WORKING GROUPS

The TAC

- **David Hilt** Founder, Grid Reliability Consulting, LLC, Marion, Illinois. Past NERC VP responsible for the development of their Compliance and Monitoring Program.
- Haider Naveed Senior NERC Compliance Specialist, Electric Power Engineers, Austin, Texas. 15 years of international industry experience.
- **Todd Ponto** Director of OT and NERC Compliance, ScottMadden, Raleigh, North Carolina. Supported the develop the Utility Consensus Critical Infrastructure Protection Standards in 2018.
- **David Burlingame** Principal, Electric Power Systems, Anchorage, Alaska. 40 years of engineering and operations experience focusing on islanded systems.

Funded by Utility Members

 The RRC is funded through a surcharge that is allocated to load-serving entities (Railbelt utilities) through the ERO tariff. Most LSEs have implemented a transparent per-KWh line item on customer bills, similar to the Regulatory Cost Charge.

Regulated by the Regulatory Commission of Alaska

• The commission shall adopt regulations governing electric reliability organizations (AS 42.06.770)

The RRC's Purpose

Legislatively Established Electric Reliability Organization

- Establish reliability standards through an open and transparent public process. (AS 42.05.765)
- Monitor and enforce compliance with reliability standards, including investigation of alleged and possible imposition of penalties for confirmed compliance violations, (AS 42.05.775)
- Develop and adopt a comprehensive Integrated Resource Plan (IRP) for the applicable Bulk Electric System. (AS 42.05.780)







Why the RRC -Reduce Long-Term Costs

Generation Planning

- Utility Generation
 - CEA 2013 200MW 3X1 Combined Cycle Facility (w/ ML&P)
 - MEA 2014 171MW Reciprocating Engine Facility
 - ML&P 2016 129MW 2X1 Combined Cycle Facility
- Transmission System Concerns

Why the RRC – Ensure Reliability

Reliability Standards Development and Enforcement

- System Modeling
- Generation and Load Balancing
- Facilities Interconnection
- Transmission Planning
- Monitoring and Enforcement

The RRC and the RTO

- The RRC develops a regional Integrated Resource Plan to provided the greatest value to Railbelt utility members and customers
- The RTO administers a regional tariff to recover transmission costs equally to all Railbelt utility customers and members
- Both look at the Railbelt as a single region
- **RRC** develops a regional generation plan, and the **RTO** removes transmission wheeling rates to facilitate the operation of the plan

Standards and IRP Development

Applicable RRC Rules and Policies

- ER7 Public Notice and Meetings Rule
 - Notice Content
 - Notice Timeline
- ER1 Product Development Rule
 - Invitation and Schedule
 - During Development
 - Board Submission
 - RCA Report
- BPR602 TAC Structure and Process Procedure
 - Task Order Work Plan and Budget
 - Formation of the Working Group
 - Manager's Recommendation
 - Dissents
 - TAC Recommendation
 - Board Action

Standards and IRP Development

Integrated Resource Planning

- Board Workshop and Kickoff
- Independent Technical Expertise
- Policy Development
- Define Objectives and Greatest Value
- 2026 Completion



Standards and IRP Development

Standards Development

- Weekly working group meetings
- Four standards before the RCA for approval
- Two additional standards passed by RRC Board
- Six standards coming before the Board in June
- 28 Standards to be approved by the RRC in 2025



ELECTRIC RELIABILITY ORGANIZATION

Questions

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