

**Summary**  
**Issues Associated with an Independent System Operator or Unified System Operator in  
Conjunction with a TRANSCO (Transmission Company) in the Railbelt Area of Alaska**

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**RAILBELT ELECTRICAL TRANSMISSION AUTHORITY / INDEPENDENT SYSTEM  
OPERATOR-LIKE AUTHORITY**

**PURPOSE:** This summarizes current issues associated with electrical transmission and region-wide generation in the Railbelt area of Alaska. This summary will also discuss what was accomplished during the 2014 and 2015 Alaska Legislature sessions and highlight the findings and recommendations of the Regulatory Commission of Alaska to date. The focus is restructuring of transmission in the Railbelt, moving toward an integrated grid with access and appropriate tariffs, and resolution of key issues.

**BACKGROUND:**

There are six electric utilities in the Railbelt area, including Golden Valley Electric Association (GVEA), Matanuska Electric Association (MEA), Chugach Electric Association (CEA), Homer Electric Association (HEA), Municipal Light and Power of Anchorage and the City of Seward (four cooperative utilities and two municipal utilities, respectively).

The concept of grid unification through various entities has been discussed for years in numerous studies and reports. Several prior attempts to reform and reorganize the Railbelt electrical system have not been successful. The ability to balance supply and demand of electricity across the entire region, rather in particular utility sub-regions, would be substantially more efficient, and should save millions of dollars for consumers by adopting the principle of economic dispatch throughout a unified grid.

Creating a structure that ensures equitable rate recovery for the six utilities is a key priority, as is ability to allow non-discriminatory open access to the grid by independent power producers (IPPs) which would also likely have substantial benefits to consumers by making additional renewable energy projects feasible and facilitating competition. Regional planning of transmission and generation resources would also benefit consumers. All of these benefits could be derived via the creation of a single regional system operator in the Railbelt region. Such an operator would likely be a non-profit, non-asset owning entity that focuses on economic dispatch for the entire region – always running only the most efficient generating assets at any given time.

Some benefits may also flow from the creation of a distinct, for-profit or non-profit asset owning transmission only utility company, also known as a TRANSCO that would consolidate ownership of regional transmission assets and secure financing and execute projects determined to be necessary by the single regional system operator. A for-profit or non-profit transmission company may earn a regulated rate of return on the transmission assets that it builds and maintains.

## 2014 Alaska Legislature Directs the Regulatory Commission of Alaska (RCA) to Recommend Options

In spring of 2014, the legislature appropriated \$250,000 to the RCA to provide a recommendation on “whether creating an independent system operator or similar structure in the Railbelt area is the best option for effective and efficient electrical transmission.” (RCA June 30, 2015, first paragraph; 6p. Letter addressed to the Hon. Kevin Meyer, President of the Senate, Alaska Legislature and to the Hon. Mike Chenault, Speaker of the House of Representatives, Alaska Legislature).

The RCA study was contracted through the Alaska Center for Energy and Power at UAF, completed in early 2015, and on June 30, 2015, the RCA issued the six-page letter to the Alaska Legislature with key findings and recommendations, including the necessity to form a transmission utility and a single regional system operator for the Railbelt. RCA’s findings and recommendations addressed how to reform and reorganize the Railbelt electrical system, which has fallen short in a number of critical areas that they identified through five major findings and associated recommendations. The letter focuses on policy making and regulatory proceedings and rulemaking with the responsibility to implement grid integration and regional planning, as well as to achieve economic dispatch.

Among their recommendations, the RCA addressed allowing “voluntary” efforts of the six Railbelt utilities to succeed in addressing these matters; it was stated that if they were not forthcoming in development of solutions to the unified grid transmission and economics of generation issues, that RCA planned to work with the Administration and the Alaska Legislature to develop and implement specific legislation and to prioritize actions necessary to create an independent Railbelt electrical transmission company.

### Major Benefits of Grid Integration

In its letter to the Alaska Legislature, the RCA focused on major benefits of grid integration:

- Economic dispatch
- More efficient use of transmission
- Better opportunities for Independent Power Producers (IPPs), and
- Reduced emissions.

A single regional system operator is now being variously called an “independent” system operator (ISO) or a “unified” system operator (USO). The biggest difference between the two types of entities is reflected in its governance structure. An ISO could be made independent by virtue of not having any of the utilities within its jurisdiction on the governing board, whereas a USO would likely include Railbelt utilities on the governing board.

The ISO or USO would:

- be regulated by the RCA
- not own assets – either transmission or generation
- be responsible for planning, management and control of the electric grid
- ensure non-discriminatory access to the grid and;
- promulgate and monitor compliance with statutes, policies and regulatory rulemaking.

## **MECHANISMS:**

Given the short- and long-term goals of improving efficiencies and benefiting customers through a unified grid and economic dispatch, the RCA has directed Railbelt electric utilities to come up with plans for both a TRANSCO like entity and an ISO- or USO-like entity. Exact forms of these mechanisms have not been specified by the RCA, although they have pointed to the need to resolve issues before the Intertie Management Committee (IMC).

## **IMPLICATIONS AND BENEFITS**

### ISO or USO

Governance, as noted above, is perhaps the biggest issue regarding a single regional system operator. Most (if not all) of the Railbelt utilities agree that the Railbelt would benefit from a regional approach to transmission planning and reliability rules, one regional transmission tariff that is the same for all users of the transmission system, non-discriminatory access to the transmission system, and ultimate regulation by the RCA. However, what types of entities have a voice on the ISO or USO governing board is of crucial importance to stakeholders in the Railbelt. If an *ISO* is developed, the Railbelt utilities are concerned that their collective and individual voice and operational experience will be missing. If a *USO* is developed, IPPs, consumers and other stakeholders are concerned that the entity may not pay enough attention to the concerns of those stakeholders as it develops policies related to planning, reliability, tariffs and access.

### TRANSCO

Most stakeholders agree that the biggest benefits of having a TRANSCO the creation of an entity that has an incentive to build transmission assets that no one utility now has an incentive to build. Such assets are those that have region-wide benefits. A TRANSCO would also be responsible for raising the capital necessary to build such transmission infrastructure. In return, the for-profit or non-profit TRANSCO would earn a regulated rate of return on those investments.

### Legislative Direction and Authority

One of the outstanding questions is whether or not the Regulatory Commission of Alaska has the authority that it requires to foster the twin goals of an integrated Railbelt grid and economic dispatch that would benefit electricity consumers in the Railbelt area.

Another question is whether voluntary efforts proposed by the RCA in its 6-p. Letter to the Alaska Legislature (June 30, 2015) are proceeding toward a successful negotiated conclusion among the six electric utilities. This affects the timing and need for passage of the proposed bill.

Should RCA decide to work with the Legislature and the Administration to implement legislation and prioritize a work program to create an independent Railbelt area electric transmission company, there will be implications associated with the fiscal note and means to recover these costs; as funding via the Alaska Unrestricted General Fund (UGF) is not envisioned by bill sponsorship.

## **DOCUMENTS IN THE BILL PACKET**

Appendix A: RCA Letter dated June 30, 2015

Appendix B:

HB 187

"An Act creating the Railbelt Electrical Transmission Authority; and relating to the duties of the Regulatory Commission of Alaska."

HB 187-RAILBELT ELECTRICAL TRANSMISSION AUTH. (Short Title)

Appendix C:

Fiscal Note