

**ALASKA STATE LEGISLATURE  
HOUSE SPECIAL COMMITTEE ON ENERGY**

February 2, 2016  
10:18 a.m.

**MEMBERS PRESENT**

Representative Jim Colver, Co-Chair  
Representative Benjamin Nageak  
Representative David Talerico  
Representative Cathy Tilton  
Representative Matt Claman  
Representative Adam Wool

**MEMBERS ABSENT**

Representative Liz Vazquez, Co-Chair

**COMMITTEE CALENDAR**

HOUSE BILL NO. 187

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

- HEARD & HELD

**PREVIOUS COMMITTEE ACTION**

BILL: HB 187

SHORT TITLE: RAILBELT ELECTRICAL TRANSMISSION AUTH.

SPONSOR(s): ENERGY

04/10/15	(H)	READ THE FIRST TIME - REFERRALS
04/10/15	(H)	ENE, L&C
01/28/16	(H)	ENE AT 11:00 AM CAPITOL 17
01/28/16	(H)	Heard & Held
01/28/16	(H)	MINUTE(ENE)
02/02/16	(H)	ENE AT 10:15 AM CAPITOL 17

**WITNESS REGISTER**

STEVE KONKEL, Staff  
Representative Jim Colver  
Alaska State Legislature  
Juneau, Alaska

**POSITION STATEMENT:** Speaking on behalf of Representative Colver, Co-Chair, House Special Committee on Energy, sponsor, provided a PowerPoint presentation entitled, "Issues Associated with an Independent Systems Operator [or Unified Systems Operator] Governing Electrical Transmission in the Railbelt Area of Alaska," dated 2/2/16.

**ACTION NARRATIVE**

[10:18:36 AM](#)

**CO-CHAIR JIM COLVER** called the House Special Committee on Energy meeting to order at 10:18 a.m. Representatives Colver, Nageak, Wool, and Talerico were present at the call to order. Representatives Tilton and Claman arrived as the meeting was in progress.

**HB 187-RAILBELT ELECTRICAL TRANSMISSION AUTH.**

[10:18:48 AM](#)

CO-CHAIR COLVER announced that the only order of business would be HOUSE BILL NO. 187, "An Act creating the Railbelt Electrical Transmission Authority; and relating to the duties of the Regulatory Commission of Alaska."

[10:20:00 AM](#)

STEVE KONKEL, Staff, Representative Jim Colver, Alaska State Legislature, and staff to the House Special Committee on Energy, said he would address the issues of an independent systems operator (ISO) - and its alternative, a unified systems operator (USO) - along with electrical transmission issues in the Railbelt area of Alaska, as related to HB 187. He advised that the foregoing subjects have been of great interest to the Regulatory Commission of Alaska (RCA) and the legislature for the past two years. The topics of the presentation were as follows: electrical transmission and region-wide generation; utilities in the Railbelt area: four electrical cooperatives and two municipal utilities; previous studies on grid unification; RCA report to the legislature issued on 6/30/15; transmission company (Transco) proposal; independent systems operator; unified systems operator; benefits and challenges of ISO or USO mechanism for pooling and economic dispatch [slide 1]. Mr. Konkell noted that the electrical utilities in the Railbelt are connected by an integrated transmission line to Golden Valley Electric Association (GVEA), Matanuska Electrical

Association (MEA), Chugach Electric Association (CEA), Homer Electric Association (HEA), Anchorage Municipal Light & Power (ML&P) and [City of Seward, Seward Electric System] [slide 2]. Grid unification has been discussed since the passage of the Public Utility Regulatory Policy Act of 1978 (PURPA) because of the benefits to the electrical utility industry garnered by separating transmission and generation in the Lower 48; however, in Alaska, the system differs. There have been studies of the benefits of an integrated transmission system - known as a Transco - and testimony from interested parties was heard during the 1/28/16 hearing on HB 187. He explained that a Transco would either be a for-profit or a nonprofit entity whose main task would be to invest in transmission upgrades, planning, construction, and maintenance [slide 3].

[10:23:48 AM](#)

REPRESENTATIVE WOOL asked whether a Transco can function in either a for-profit or a nonprofit status.

MR. KONKEL advised that the proposals are submitted from companies which are established as one or the other; for example, the American Transmission Company (ATC) is a for-profit company, and the Alaska Railbelt Cooperative Transmission and Electric Company (ARCTEC) have both submitted proposals. He said, "It could be either for-profit or parts of it could be for-profit, parts of it could be profit ... this would have to be regulated by the RCA, and the RCA, if [the Transco] invested additional money in the Railbelt grid, would allow a rate of return."

REPRESENTATIVE WOOL expressed his understanding that ARCTEC is not a transmission company but is a USO. However, the status of "a Transco, a company that's going to ... build infrastructure or, you know, improve our transmission lines" is predetermined; for example, ATC is a for-profit company.

MR. KONKEL agreed. He returned attention to slide 3, noting that for the proposed Transco approach, financing is very important, and studies have shown that additional investment is needed to move electricity through the service territories, and the rate of return would be based on regulation by RCA. Mr. Konkkel provided a brief history of recent activities related to the generation of electricity in the Railbelt: in 2014 the legislature appropriated \$250,000 to RCA for a study which was completed by the Alaska Center for Energy and Power (ACEP); RCA sent a letter to the Alaska State Legislature on 6/30/15 which

outlined five key findings and recommendations in terms of the benefits of an integrated grid and economic dispatch; benefits of an integrated grid and economic dispatch flow to consumers; economic dispatch as a direct result of PURPA saves consumers millions of dollars; PURPA has been updated; nondiscriminatory access to the grid is also an issue; major savings from grid integration are estimated by ACEP to be \$50 million to \$150 million, which is of great interest in this budget climate. In addition, forming a Transco is an approach to grid integration, and RCA set two deadlines: 9/30/15 for the first status report from the utilities, and [December 31, 2015] for the second status report. Both reports have been signed and submitted by all of the utilities and are included in the committee packet. [Regulatory Commission of Alaska] also expressed interest in the concept of region-wide management, planning, and integrated resources planning, thus another deadline of 1/31/16 was set for submittals related to recommendations comparing the concepts of an ISO to those of a USO. Mr. Konkell reminded the committee that according to previous testimony, the key terms for forming an ISO or a USO are "independence" and "governance" related to whether the members of the board of directors for either are focused on the benefits for the region, or on specific service territories [slide 4].

[10:30:16 AM](#)

CO-CHAIR COLVER asked for the difference between an ISO and a USO.

MR. KONKEL opined there is a philosophical difference in the amount of utility representation on each respective board. A USO board could consist of all utilities and members representing the public interest; an ISO envisions it would have the capability to run a region-wide system with the participation of utilities, but without utilities having a majority interest on the board.

CO-CHAIR COLVER asked for an explanation of the briefings requested by RCA, and its intent in this regard.

MR. KONKEL explained that RCA made findings and recommendations. The findings are that there are benefits from integration and economic dispatch which can be realized, and that RCA prefers that the utilities working together develop a voluntary approach to do so. However, RCA also said it would work with the legislature and the executive branch toward implementation if the voluntary approach does not make sufficient progress.

Further, RCA expects to see - from the reports requested from the utilities - the progress made by each and their arrangements.

CO-CHAIR COLVER opined barriers between the utilities are being broken down and they are now looking for common ground to facilitate economic dispatch.

MR. KONKEL agreed that is true for some. However, participation from all of the parties is needed in order to move power throughout the system and to add renewable power where it is needed.

REPRESENTATIVE WOOL surmised independent power producers (IPPs) will be included along with the utilities. He recalled that recently some of the utilities downplayed the estimated savings from economic dispatch, and asked whether all of the utilities agree that savings from economic dispatch could reach \$50 million to \$100 million.

[10:35:29 AM](#)

MR. KONKEL expressed his understanding that all of utilities, ARCTEC, and ATC, agree with RCA that there are substantial benefits from grid integration and economic dispatch; however, utilities want to recover costs for their ratepayers. He assured the House Special Committee on Energy that he has heard that all of the utilities agreed that there should be nondiscriminatory access for qualifying facilities.

CO-CHAIR COLVER asked Mr. Konkel to explain why utility executives testified recently that a systems operator and a Transco are needed because the utilities have incurred substantial - but unequal - debt to increase generation capacity. He asked:

Did you talk with many of the executives and the folks in utilities on how they're trying to balance cash flows, and that they felt like they needed both of those systems to be in place for it to work?

MR. KONKEL said he met with some utility representatives but did not discuss specific plans for financing and the recovery of debt. The aforementioned problem has developed over four decades during which utilities have invested in new facilities, thus there is excess capacity and needed rates of return to pay for said facilities. Although the point of unequal debt is

pertinent, another point is how to redistribute regional benefits. Modeling is one answer, but there needs to be a negotiated settlement among the utilities. The savings from an integrated system are sufficient to allow utilities to recover from their investments, and also to provide a direct economic benefit to consumers in the Railbelt. He relayed that most of the utilities urge for patience, due to complex negotiations and that working groups will progress at different rates. Mr. Konkell opined a road map and milestones are needed, with the exception that all have agreed with the idea of a Transco to deal with grid integration. However, there are still the following key questions: How to approach integrated resources planning? How much generation is needed? Are the new investments environmentally acceptable? Does the project pay for itself? Do people want the project? Unquestioned is the need for an ISO or a USO.

10:41:01 AM

REPRESENTATIVE TILTON referred to the concept of winners and losers, and inquired as to whether a "win-win" type of settlement has been proposed.

MR. KONKEL suggested that the negotiations could be structured through RCA as a single-text negotiation, using the RCA letter to the legislature. He opined the letter was very clear and articulated a plan and milestones, although a change of culture may be required.

CO-CHAIR COLVER said the situation is similar to the successful negotiations related to gas-balancing agreements on the North Slope. He remarked:

Because there's different amounts of savings, depending on who's got the cheapest power, so they ... told us ... that you needed the transmission entity and the independent system operator and then there has to be benefits that flow from each because each individual utility has different cost structures. And so that the benefits need to flow, you need both of them to make it work. ... There's different cash flows involved. ... You can't just do a transmission cooperative that may benefit some utilities, and burden others, but with the independent system operator and in combination with the transmission [cooperative] ... benefits can flow to both.

CO-CHAIR COLVER added that the governance structure is also an issue and he was also told highly-paid professional members were needed on an independent board of directors.

MR. KONKEL said:

That's exactly the point behind the Public Utilities Regulatory Policy Act, is this separation between transmission. And open competitiveness and open access is good for renewables, but it's, it's good for the system, system-wide, and it's good for the cost of power production, and more level, more of a level playing field, and the governance issues are huge.

[10:45:08 AM](#)

REPRESENTATIVE CLAMAN expressed his understanding that a USO is comprised of power companies without a consumer presence on its governing board; a "pure" ISO would have no utilities represented on its governing board. He surmised the committee is discussing a combination of a USO and an ISO, with consumers and utilities on the board, and with the utilities holding a minority position.

MR. KONKEL agreed. He said:

One other way to think about governance ... is 'How do we maximize the benefit to Railbelt consumers?' So, if somebody brings to the board expertise in power-pooling ... that could help increase that benefit from reducing the cost of power and distributing, and what we don't want is people with a special interest that want to be on the board to protect [their special interest] because that will mean the region-wide view will have to be compromised.

REPRESENTATIVE CLAMAN observed that nationally, groups with specialized interests are often the power generators, but in Alaska there are individual consumers and large commercial entities, such as mining companies, that fit within the definition of power consumers.

MR. KONKEL advised that Alaska can benefit from experience gleaned elsewhere; however, Alaska knowledge is important in order to expand the electrical grid without subsidizing uneconomic projects.

[10:48:57 AM](#)

REPRESENTATIVE WOOL asked whether the estimated \$900 million in needed infrastructure includes the Susitna-Watana Hydroelectric Project (Susitna-Watana). He expressed his understanding that a Transco would build the infrastructure and the projects would be paid for by charges to ratepayers through increased rates.

MR. KONKEL responded that the estimated \$900 million does include Susitna-Watana. Benefits from grid integration and investments would reach to all ratepayers, and are of relatively low cost when compared to a major investment in generation such as Susitna-Watana.

REPRESENTATIVE WOOL observed that four of the six utilities are cooperatives, and system integration will save the ratepayer money. He questioned whether the fact that four utilities are member-owned cooperatives, which are not trying to maximize profit, is beneficial to system integration, rather than six private, for-profit entities trying to maximize profit.

MR. KONKEL stated that cooperative utilities in Alaska have evolved historically due to lower electrical loads. In the Lower 48, there would be one or two entities for electrical loads of similar size. He opined there is a clear vision of grid integration and economic dispatch.

CO-CHAIR COLVER described the ownership of the grid, and pointed out there are bottlenecks at Bradley Lake that impede economic dispatch between the utilities. One hurdle to grid management is that some utilities have more invested in infrastructure than others thus it is difficult to balance ownership and equity. Another question is the role of the Alaska Energy Authority (AEA), Department of Commerce, Community & Economic Development (DCCED), in the ownership of the system.

[10:55:02 AM](#)

MR. KONKEL observed that moving electrons throughout the grid efficiently is important to lowering costs; however, the transmission of power through multiple service areas adds cost through pancaking, which is a series of tariffs that add transmission costs at each area. A Transco approach can solve this problem by developing a postage stamp rate, which is one rate for each electron put into the grid, or by a unified system of tariffs, which is close to one price, but that allows for slight adjustments in rates.

CO-CHAIR COLVER inquired as to whether the solution could be the creation of a cooperative that would develop internal tariffs related to the distance of transmission, and that would share in the cost of upgrades to the system. Or another solution could be to bring in a fully capitalized entity and negotiate for contributing capital and shares thereof.

MR. KONKEL agreed that a cooperative is possible, but to expand and strengthen the grid will require financing based on an acceptable rate of return and regulated by RCA. In further response to Co-Chair Colver, he opined the role of AEA would be to continue to be responsible for feasibility studies on Susitna-Watana and on integrated resources power planning. He noted that AEA "takes positions on these things ...." Further, AEA's testimony to RCA was that there are benefits to grid integration and to economic dispatch. Mr. Konkkel cautioned that AEA's testimony may be affected by its board of directors and its role that can be similar to that of a utility. He returned to the presentation, noting that three key milestones that RCA set out in its 6/30/15 letter to the legislature were:

- first status report on Transco was issued 9/30/15 and was signed by all of the utilities
- second status report was issued 12/22/15 and reported on progress
- third report dated 1/31/16 is currently being interpreted by RCA

MR. KONKEL, in response to Co-Chair Colver, said for the third milestone RCA is looking for insight into how an ISO and USO would take advantage of the benefits of grid unification - from the prospective of the utilities - along with a progress report within a timeframe. Other challenges recognized by RCA are balkanization, the many contested regulatory proceedings, problems with moving power through various service jurisdictions, and the institutional structure of the region which necessitates a culture change related to grid integration, economic dispatch, and open competition [slide 5].

[11:03:28 AM](#)

REPRESENTATIVE WOOL asked whether some ratepayers will pay more or less due to their proximity to electric generation.

MR. KONKEL acknowledged that this is an issue that still needs to be resolved; in fact, the exact level of the benefits of grid

unification to ratepayers is undetermined, although there has been progress. He continued to slide 6, and pointed out that benefits from a more efficient operation of the regional system are estimated to be greater than \$50 million annually.

MR. KONKEL advised establishing an ISO or a USO is a critical and complicated issue, although RCA has set up two dockets, I-15-001, and I-13-001, which deal with grid integration and transmission, qualifying facilities for renewable energy, and access to the grid. In addition, RCA has established that the Railbelt electrical region needs a non-asset owning entity - an ISO or a USO - in conjunction with a Transco. He said creating the Transco is progressing, but creating an ISO/USO has been slow and uncertain; although the utilities "seem to be willing to go forward" many questions have been raised. One approach RCA can take is to pause and see what the utilities accomplish, or it can ask for legislative authority to address the ISO issue. He concluded that the transmission "side" is moving and does not require new legislation, but does need agreement between the utilities. Policies of the executive and legislative branches of government need to involve all of the parties [slide 9].

[11:11:17 AM](#)

CO-CHAIR COLVER asked Mr. Konkel to contact AEA and familiarize the committee with its various projects and assets, so that the committee can make recommendations. He added:

So that we can like maybe have a recommendation on what role they would have, going forward. ... We have oversight over what they're doing and to a certain extent, it's a state-owned asset.

MR. KONKEL said he is well-versed in this field through his experience with power plant construction and at the Oak Ridge National Laboratory, U.S. Department of Energy, and noted that AEA has issued its most recent Renewable Energy Fund (REF) report. He spoke to the value of competitiveness in the electrical energy marketplace in Alaska.

REPRESENTATIVE WOOL returned attention to the response to RCA from the utilities, dated 9/30/15, found in the committee packet. On page 3, paragraph 2 read [in part]:

Independent Transmission Company

... Governance of the Transco must balance the need to effectively operate and invest in the Railbelt's transmission infrastructure ....

REPRESENTATIVE WOOL surmised the Transco would be making investment decisions about the overall transmission system, and inquired as to the governance of the Transco.

MR. KONKEL said the Transco is not governed by an ISO but works in conjunction with regional planning for generation; the Transco may buy all of the transmission assets from the utilities, or follow one of many business models.

REPRESENTATIVE WOOL directed attention to the same document on page 6, paragraph 4, which read [in part][original punctuation provided]:

Governance

The Governance Subgroup has been tasked with creating the Transco's governance and organizational structure

....

REPRESENTATIVE WOOL observed that the foregoing relates to the structure of the Transco, the company that owns the transmission lines, and not the systems operator.

MR. KONKEL said correct. He added that the Transco's tasks are straightforward such as economic dispatch, integrated resources planning, and "the like."

[11:15:35 AM](#)

REPRESENTATIVE CLAMAN explained that the legislature has a choice to advance a bill that would dictate what an ISO/USO looks like in Alaska, or to let the utilities continue a process through RCA to develop an ISO that responds to representation from the interests of consumers and utilities. He advised that the Alaska State Legislature can take action if there is consensus to do so.

MR. KONKEL agreed. In further response to Representative Claman, he agreed that if Susitna-Watana were removed from the estimate of needed transmission upgrades, the cost would be reduced significantly.

REPRESENTATIVE TILTON supported allowing the utilities to work together and make progress through RCA. In addition, she said the ultimate winners in this endeavor should be the ratepayers.

MR. KONKEL agreed. He opined RCA wants to see milestones such as identifying problems, viable alternatives, an open grid, and economic dispatch, which are in the best interest of consumers.

CO-CHAIR COLVER concluded that the committee highly regards and supports the leadership of RCA, and its efforts to make progress toward an ISO/USO and a Transco. After further filings from RCA, the committee will review the findings with its staff.

[HB 187 was held over.]

[11:20:19 AM](#)

#### **ADJOURNMENT**

There being no further business before the committee, the House Special Committee on Energy meeting was adjourned at 11:20 a.m.