ALASKA STATE LEGISLATURE
HOUSE RESOURCES STANDING COMMITTEE
March 6, 2020
1:06 p.m.

MEMBERS PRESENT

Representative John Lincoln, Co-Chair
Representative Geran Tarr, Co-Chair
Representative Grier Hopkins, Vice Chair (via teleconference)
Representative Sara Hannan
Representative Chris Tuck
Representative Ivy Spohnholz
Representative George Rauscher

MEMBERS ABSENT

Representative Dave Talerico
Representative Sara Rasmussen

COMMITTEE CALENDAR

HOUSE BILL NO. 151
"An Act relating to the regulation of electric utilities and electric reliability organizations; and providing for an effective date."

- HEARD & HELD

PREVIOUS COMMITTEE ACTION

BILL: HB 151
SHORT TITLE: ELECTRIC RELIABILITY ORGANIZATIONS
SPONSOR(s): ENERGY

05/03/19	(H)	READ THE FIRST TIME - REFERRALS
05/03/19	(H)	ENE, RES
05/09/19	(H)	ENE AT 8:30 AM CAPITOL 17
05/09/19	(H)	Heard & Held
05/09/19	(H)	MINUTE(ENE)
01/23/20	(H)	ENE AT 10:15 AM CAPITOL 17
01/23/20	(H)	Heard & Held
01/23/20	(H)	MINUTE(ENE)
01/27/20	(H)	ENE AT 3:30 PM SENATE FINANCE 532
01/27/20	(H)	Heard & Held
01/27/20	(H)	MINUTE(ENE)
01/29/20	(H)	ENE AT 3:30 PM SENATE FINANCE 532

01/29/20	(H)	Heard & Held
01/29/20	(H)	MINUTE(ENE)
02/11/20	(H)	ENE AT 10:15 AM CAPITOL 17
02/11/20	(H)	Heard & Held
02/11/20	(H)	MINUTE(ENE)
02/20/20	(H)	ENE AT 10:15 AM CAPITOL 17
02/20/20	(H)	Heard & Held
02/20/20	(H)	MINUTE(ENE)
02/25/20	(H)	ENE AT 10:15 AM CAPITOL 17
02/25/20	(H)	Moved CSHB 151(ENE) Out of Committee
02/25/20	(H)	MINUTE(ENE)
02/26/20	(H)	ENE RPT CS(ENE) NT 5DP 1NR
02/26/20	(H)	DP: RAUSCHER, FIELDS, SPOHNHOLZ, ZULKOSKY, HOPKINS
02/26/20	(H)	NR: PRUITT
02/26/20	(H)	LETTER OF INTENT WITH ENE REPORT
03/04/20	(H)	RES AT 1:00 PM BARNES 124
03/04/20	(H)	Heard & Held
03/04/20	(H)	MINUTE(RES)
03/06/20	(H)	RES AT 1:00 PM BARNES 124

WITNESS REGISTER

JULIE ESTEY, Senior Director
External Affairs and Strategic Initiatives
Matanuska Electric Association; Spokesperson
Organizational Development Team
Palmer, Alaska
POSITION STATEMENT: Provided a PowerPoint presentation entitled, "Railbelt Reliability Council and Enabling Legislation," dated 3/4/20, and answered questions during the hearing on HB 151.

ANTONY SCOTT, PhD, Commissioner
Regulatory Commission of Alaska
Anchorage, Alaska
POSITION STATEMENT: Provided a PowerPoint presentation entitled, "Economic Dispatch and HB 151/SB 123," dated 3/6/20, and answered questions during the hearing on HB 151.

JOMO STEWART, Project Manager
Energy
Fairbanks Economic Development Corporation
Fairbanks, Alaska
POSITION STATEMENT: Testified in support of HB 151.

CHRIS ROSE, Executive Director

Renewable Energy Alaska Project
Anchorage, Alaska
POSITION STATEMENT: Testified in support of HB 151.

VERI DI SUVERO, Executive Director
Alaska Public Interest Research Group
Anchorage, Alaska
POSITION STATEMENT: Testified in support of HB 151.

BRIAN HICKEY, Chief Operating Officer
Chugach Electric Association, Inc.
Anchorage, Alaska
POSITION STATEMENT: Testified in support of HB 151.

ACTION NARRATIVE

1:06:05 PM

CO-CHAIR JOHN LINCOLN called the House Resources Standing Committee meeting to order at 1:06 p.m. Representatives Tuck, Hannan, Tarr, Spohnholz, Hopkins (via teleconference), and Lincoln were present at the call to order. Representative Rauscher arrived as the meeting was in progress.

HB 151-ELECTRIC RELIABILITY ORGANIZATIONS

[Contains discussion of SB 123]

1:06:47 PM

CO-CHAIR LINCOLN announced the only order of business would be CS FOR HOUSE BILL NO. 151(ENE), "An Act relating to the creation and regulation of electric reliability organizations; relating to participation of electric utilities in electric reliability organizations; relating to duties of electric reliability organizations; providing for integrated resource planning; requiring project preapproval for certain interconnected large energy facilities; and providing for an effective date." [Before the committee was CSHB 151(ENE).]

1:07:53 PM

JULIE ESTEY, Matanuska Electric Association (MEA), said she was speaking on behalf of the Organizational Development Team which is comprised of the members from each of the six utilities and is working to put together an electric liability organization (ERO) called the Railbelt Reliability Council (RRC). She began

a PowerPoint presentation entitled, "Railbelt Reliability Council and Enabling Legislation." Slide 2 was an outline of the presentation. She turned to slide 3, entitled "What is the Railbelt Electric System?" As shown on the map on slide 3, she relayed that the railbelt electric system goes from Homer to Fairbanks and in the east to Delta Junction and Glacier View, through MEA service territory. [Slide 3 shows the six utilities are: Chugach Electric Association ("Chugach"); City of Seward; Golden Valley Electric Association ("Golden Valley"); Homer Electric Association; Matanuska Electric Association (MEA); and Municipal Light & Power (ML&P).] Ms. Estey said these six utilities are public power, which means either member-owned cooperatives or "uni-led" and organized. She said the benefits of this are lower costs and the ability to align with the interests of local members. Ms. Estey stated, "Our load is about 800 megawatts." Rather than a grid, this is an interconnectivity of different groups of utilities working together to keep one system aligned. She said there is a lot of infrastructure for few members, so there is constant focus on how to balance the cost. There are large sections where infrastructure is needed for critical functions but in which there are no members. She stated, "And so, a lot of times we'll solve some of the reliability issues with generation instead of additional transmission, because the transmission between all of us can be great. We also primarily are fueled by natural gas, aside from Golden Valley up in Fairbanks, and ... we pay two to three times the cost for natural gas." The goal, she said, is to burn less fuel.

1:11:52 PM

MS. ESTEY directed attention to slide 4, which read as follows [original punctuation provided]:

> What Problems Are We Trying To Solve?
>
> • Address the June 2015 Letter from the Regulatory Commission of Alaska (RCA) to the Alaska State Legislature.
>
> • Identify and tackle reliability needs of the system, including cybersecurity threats.
>
> • Plan and execute future infrastructure projects that benefit the system.

- Develop a mechanism to equitably allocate costs for improvements that create system benefits.

- Prepare for the changing needs of the utility industry, including integration of new technology and other generators.

- Maintain each individual utility's ability to address specific local needs as appropriate.

MS. ESTEY noted that the June 15 letter communicated that there are a lot more benefits that could be achieved through enhanced coordination from the utilities, as well as a recommendation that "utilities do that first." She said, "As you all know from a follow-up letter that was sent earlier this session, the RCA applauded the efforts that had happened - the accomplishment that we were able to achieve - but indicated that we need help getting some of these things over the line." She said the needs for the system are changing dramatically, and she urged integration as a means to being less vulnerable to the constant attacks on the system. Ms. Estey, regarding liability expectation, emphasized the increasing need for power to operate cell phones and provide medical care, for example. She said reliable and reasonably priced power is necessary in attracting business and economic development. She said a combined effort is more effective in addressing the integration of new technologies, such as battery storage, renewables, and carbon reduction goals. Combined efforts help, also, in considering development costs. She expressed the importance of continuing to support local issues while working together regionally. She said the true value of the structure being put in place is the development of trust and having a forum in place for critical conversations. She said this does not just encompass trust and conversations among the utilities but also other voices, such as independent power producers, the Alaska Energy Authority, and other affiliated stakeholders and advocacy groups. She stated, "What we're finding as we go through this process is even though it takes longer when we widen the circle, the product is always better."

1:15:58 PM

REPRESENTATIVE HANNAN asked whether the ERO would be responsible for a cybersecurity system used by each of the producers in a cooperative.

MS. ESTEY said she would touch on that issue in an upcoming slide. She said cybersecurity is presently included in liability standards, and "some of the outputs of this ERO will help us have [a] common set of integrated standards around cybersecurity." She added that cybersecurity landscape changes daily, thus "the more ... we can be in contact of what we're seeing on the system," the quicker action can be taken.

1:17:33 PM

MS. ESTEY returned to the PowerPoint, to slide 5, which read as follows [original punctuation provided]:

> Progress - Consistent Railbelt Reliability Standards
>
> In 2014 the Intertie Management Committee (IMC) adopted open access rules for the Alaska Intertie
>
> In April 2018 the Railbelt electric utilities and Alaska Energy Authority (AEA) filed consensus Railbelt Reliability Standards with the Regulatory Commission of Alaska (RCA)
>
> Compliance with reliability standards is mandated no later than one year after the Electric Reliability Organization (ERO) is established, until then compliance is voluntary

MS. ESTEY explained that reliability means redundancy; however, redundancy is expensive and there must be a balance of how much redundancy is "nice to have" versus how much is essential. She related that typically, discussion of reliability in the Lower 48 centers around transmission and creating a more robust grid. In Alaska, the topic of liability centers around generation; the need for excess generation to maintain equilibrium when a piece of equipment at a power plant fails means extra generation online and in reserve.

1:19:57 PM

REPRESENTATIVE SPOHNHOLZ recounted that approximately $1.5 billion had been recently spent in creating new generation, and 50 percent of the rate charged to users was going toward that new generation. She questioned whether more reliability was necessary and suggested instead that more economic dispatch and careful management of the resource may be what was needed.

MS. ESTEY replied that the target for that "new generation suite" was not all directed to increased liability but to burning less fuel. She said the Beluga Power Plant was carrying one-third of the railbelt load for decades. It was old and needed upgrade or replacement. She said in looking at alternate options, MEA determined that it could burn 30 percent less fuel per megawatt if it upgraded to new generation. She said the gas cost for MEA members is 40 percent of their electric bill. Burning less fuel is where MEA can save its members money. The generation suite was built in order to stop burning as much natural gas. Burning less fuel is all-around good, in terms of cost, the environment, and energy security. She noted that at the time [the generation suite] was built, the health of the Cook Inlet gas fields was in question; therefore, the ability to limit the amount of gas that would be burned was critical. In terms of dispatch, she said a lot is being done to use the generation suite more effectively. Now that there is more diversity in the suite, sharing power and making better economic decisions is easier.

1:22:49 PM

REPRESENTATIVE SPOHNHOLZ said she hoped attention would be given to economic dispatch and carbon emissions, and she expressed concern that without focus on reduction of fuel consumption and the carbon footprint, "we will continue to move forward in sort of spending a lot of money on assets which cost rate payers a lot of money." She said she is trying to understand the tradeoffs and to consider "those details and that nuance" when making policy decisions.

MS. ESTEY agreed. She said there are many people in each of the utilities that "spend most of their day trying to figure out how to burn less fuel." She said, "While we need the reliability and the redundancy to make sure that we can meet the basic criteria of providing this essential service, doing that in a reasonably priced manner is really where that fuel supply comes in, and that's really at the heart of utility operations." She said that with the new structure, all involved are planning and making decisions together. She stated that she is encouraged that the new system "will achieve those goals in a way that was never possible before."

1:26:56 PM

REPRESENTATIVE TUCK asked Ms. Estey whether she has ever seen rates decrease for consumers or whether they always remain static or increase.

MS. ESTEY answered that MEA rates decreased last quarter due to fuel savings. She said she cannot speak for the other utilities, but noted they were available for comment. She said over the last few years, MEA has had more quarters than not where the rates decreased.

1:28:05 PM

MS. ESTEY moved on to slide 6 of the PowerPoint presentation, which read as follows [original punctuation provided]:

> Progress - Coordinated Cyber Security Rules
>
> All utilities engaged a nationally recognized cybersecurity consultant and developed cyber security standards that went into effect January 1, 2020, starting a 3-year compliance clock.
>
> Utilities are currently conducting internal cyber security audits to identify gaps between the current practices and the new standards.
>
> The Railbelt Cyber Security Working Group (RCWG), comprising IT subject matter experts from the six Railbelt utilities and Doyon Utilities, meets monthly to execute standards implementation.

MS. ESTEY emphasized not only is it critical to keep the security of the system a secret, but it is also imperative to secure member information. She remarked, "We're actually pleased with the bill of health that we're receiving, but there's always more that we can do. And, as I said, the landscape is always changing."

1:30:06 PM

CO-CHAIR TARR noted Ms. Estey had talked about constant attacks to cyber security, and she asked whether that compared to typical e-mail threats from malware or whether there has been indication of suspected interference on a national security level.

MS. ESTEY answered the threats are both typical and on a bigger scale; the latter which she could not talk about except to say that "we are working with the different federal and state agencies ... as much as we can to provide whatever information we have and to follow their advice if there's anything we could be doing further."

CO-CHAIR TARR said she is glad this issue is being considered.

1:32:26 PM

CO-CHAIR LINCOLN asked whether the integration of utilities proposed under HB 151 would result in any further cybersecurity threats.

MS. ESTEY offered to research to provide a more detailed answer. That said, she offered that the system is already integrated, and she allowed that any additional software needed may result in more vulnerability to the system and measures taken to address that.

1:34:18 PM

MS. ESTEY continued to slide 7, which read as follows [original punctuation provided, with some formatting changes]:

> Progress - Power Pool Development
>
> A tight power pool is a contractual structure that pools generation resources and loads to facilitate economic dispatch for efficiency and cost savings.
>
> Chugach, ML&P and MEA drafted preliminary dispatch protocols, financial settlement procedures, and other processes. GVEA and HEA have been engaged in this development.
>
> Power pool development process was put on hold due to the Chugach/ML&P acquisition, expected to achieve approximately 75% of anticipated pool savings.
>
> Utilities will return to power pool discussions after the Chugach/ML&P acquisition docket has been adjudicated.

MS. ESTEY talked about economic dispatch. She explained, "As the next increment of load comes online, anywhere in the system,

it is met with the next most efficient generator on the system - anywhere." The idea is to use the most efficient power plant at any given time, which means using less fuel "to create that megawatt." This, in turn results in lower costs and better use of resources. She said, "Currently what the utilities are doing is what's called a loose power pool." She explained that any excess power of one utility is offered to other utilities at a cost. This results in a benefit to the utility selling and the one gaining the excess, and it happens daily. She offered some examples of how it works. She said, "We're finding that we're achieving about 80 percent of the value just by this informal action." She noted this is voluntary.

MS. ESTEY said the next step is called a "tight power," which is contractual and automatic. Consideration is being made to do this with the utilities in Southcentral Alaska: ML&P, Chugach, and MEA. Analysis showed most of the benefits are in that small area. She said Golden Valley in Homer was invited. She stated, "We've really come close to bringing that across the finish line." She said once the outcome of the sale is known from RCA, the hope is "that we can begin moving toward that tight power pool, which looks a lot more like economic dispatch." Ms. Estey said more consideration needs to be made to determine whether this could benefit Homer members, "but it's something that the utilities are very interested in doing, and we hope to get that back on track as soon as ... we know the outcome of the sale."

1:39:46 PM

REPRESENTATIVE TUCK asked whether the merger of MEA and Chugach has restricted the loose power pool.

MS. ESTEY answered no. She clarified that Golden Valley has been one of the utilities on the loose power pool. She said, "We call those 'economy energy sales,' and they are constantly trying to get as much gas-fired generation up the intertie as possible." She said this varies from hour to hour depending on how the load profile looks. She reiterated that the goal is for more economical energy. She said, "We need that as a backup, but what we don't need to do is produce power from it if we can help it." In response to a follow-up question from Representative Tuck regarding equity, she offered her understanding that who has the cheapest power at any given moment changes; therefore, not just one utility has all the power. Further, she relayed that all the savings that come from this are split evenly.

REPRESENTATIVE TUCK asked why the tighter power pool was necessary if the loose power pool is working and the merger is not adversely affecting that.

MS. ESTEY responded, "There are still benefits that we can eke out, if this is automatic, if somebody's doing this constantly." She said she thinks another opportunity lies in the different shares of the hydro projects. Each of the utilities currently has a certain percentage of those projects and uses those increments in different ways. She deferred to those with more information to expound on the answer. She spoke of working with contracts, using automatic software systems, and ensuring the viability on a long-term basis. She said the goal is to have these structures in place so that they work no matter what is happening politically and to ensure commitment from "all of us."

1:45:08 PM

The committee took an at-ease from 1:45 p.m. to 1:46 p.m.

1:46:13 PM

ANTONY SCOTT, PhD, Commissioner, Regulatory Commission of Alaska (RCA), said he would discuss HB 151 in relation to economic dispatch. He provided a PowerPoint presentation entitled, "Economic Dispatch and HB 151/SB 123" [hard copy included in the committee packet], and directed attention to slide 2, which read as follows [original punctuation provided, with some formatting changes]:

> Economic Dispatch
>
> • Economic dispatch minimizes operating expenses of a system
>
> • Economic dispatch is the optimal, most efficient use of existing generation and transmission resources to meet the needs of end-use customers in an interconnected electric utility network, subject to necessary reliability constraints
>
> o Economic dispatch is accomplished by ignoring who owns which generation and transmission assets ("you built it, you bought it")
>
> o Because the fixed (or capital) costs of generation and transmission ownership must be paid for by the owners of those assets, no matter what, there

should be mutual gains from trade (for both buyer and seller) if the most efficient assets are deployed

DR. SCOTT said it makes a lot of sense to do economic dispatch, and to do it requires institutions. He moved on to slide 3, which read as follows [original punctuation provided]:

Toy Example

- Two utilities

- Utility A has enough generation to meet both Utility A and Utility B's load

- Utility A's generation is more efficient than Utility B's generation

- With economic dispatch only Utility A's generation would run, and the two utilities engage in a transaction

DR. SCOTT said in this scenario, Utility B would buy all its power from Utility A. The real system is more complicated, because each utility owns multiple generators and load comes on in different increments. He said the basic idea is that costs are minimized by operating the most efficient generation to meet the total pool's load, and the operational expenses are divvied up later. He said HB 151 would help minimize the future capital cost of the system.

1:49:35 PM

DR. SCOTT covered the information on slide 4, which read as follows [original punctuation provided, with some formatting changes]:

HB 151/SB 123 and Economic Dispatch

- Helps minimize the future capital cost additions of a system
    - o Focus is on ensuring efficient investment in utility plant to reliably meet demand (about half of the overall system cost)

- Does not mandate economic dispatch • Does facilitate economic dispatch by addressing barriers

o Facilitates new transmission build, if that's efficient, by providing a business model for same (lack of transmission can reduce efficient exchange of power across service territories)

o Facilitates new competitive entrants into the system by enabling a one-stop shop for open access interconnection agreements

o Lays the groundwork for rationalizing total transmission tariffs

DR. SCOTT, during his coverage of slide 4, interjected a response to Representative Spohnholz' previous remarks about potential tradeoffs between costs and reliability and who makes those decisions. He said historically utility management has made those decisions in each service territory and has done a good job in "keeping the lights on." He said the tradeoff between cost and liability is a social question, one that everyone should have a hand in evaluating. He emphasized that there is "ongoing, broader input in these sorts of technical questions" which includes the expertise of utility executives and engineers, the view of independent power producers, and feedback from consumer groups, the Office of the Attorney General, renewable energy advocates, and the public at large.

1:54:05 PM

DR. SCOTT directed attention to slide 5, which read as follows [original punctuation provided]:

Transmission Rates and Economic Dispatch

• Remember previous example • Now imagine that there is a per-MWh charge for moving power from Utility A to Utility B

• If the 'toll road' cost is too high, and paid for by each MWh, then the power transaction does not take place

• Conversely, if the cost of the transmission (road) is paid on a fixed basis then the power transactions do take place

DR. SCOTT added, "If we can come up with another way of paying for that transmission rather than each megawatt hour (MWh) paying a certain fixed fee, then ... again, it reduces the barriers to the free flow of electrons, and it allows the

overall system itself to achieve more efficient economic outcomes."

DR. SCOTT moved on to slide 6, the final slide, which read as follows [original punctuation provided]:

Appendix: Different Types/Scopes of Economic Dispatch

- Each utility on its own engages in "economic dispatch" within their own service territories

- A "Tight Pool" among two or more utilities is a wholesale power contract that ensures economic dispatch among those utilities

- A "Unified System Operator" for the Railbelt would be a non-profit, independent entity that performs economic dispatch across all entities within the Railbelt according to specified transaction/commercial terms

- An "Independent System Operator" for the Railbelt would be a non- profit, independent entity according to generation market bids by all Railbelt participants

DR. SCOTT, regarding the last bullet point, remarked that he does not think anybody believes that "we would have an independent system operator as that term is applied elsewhere." He offered to answer questions.

1:58:34 PM

REPRESENTATIVE TUCK asked whether, under the proposed legislation, the RCA would have the oversight of a tight power pool that was adopted contractually or whether the oversight would be between the parties.

DR. SCOTT answered that HB 151 would not require a tight power pool. He said a tight power pool involves a wholesale power contract, which must be brought to the RCA for approval via a petition. He said, "We would probably suspend that into a docket so that we fully understood what it was that we were approving, and we'd go from there."

REPRESENTATIVE TUCK offered his understanding from what he had heard that HB 151 is not necessary for someone to have a tight power pool. He added, "If they were to tighten up this power

pool contractually, there would be some RCA oversight, but currently ..., with the loose power pool, there is no RCA oversight." He asked whether his summarization was correct.

DR. SCOTT confirmed yes. He added that these power pool transactions, which are called a "common energy transaction," take place under existing tariff terms. He said the RCA approves them "at high levels" and leaves it up to the parties "to engage in transactions that make sense to their members."

2:00:47 PM

REPRESENTATIVE HANNAN, regarding a unified system operator (USO) and an independent system operator (ISO), asked, "Are those both things that currently two utilities could engage in, and if EROs are formed, is one of them presumed to be needed under an ERO?"

DR. SCOTT answered, "An ERO is intended to establish damage for the system, to help determine needed additions to the system to ensure reliability and the ability of the system to efficiently meet demand, but the ERO itself will not operate the system."

REPRESENTATIVE HANNAN asked what the effect on the remaining partners would be if one of the entities does not want to join the ERO or at some point in the future decides it wants to remove itself from the ERO.

DR. SCOTT answered that the ERO will help establish and enforce reliability standards; the RCA will ultimately be the party that approves those standards and tariffs. The tariffs will apply to any user, owner, or operator within the interconnected system. He said this is because the Railbelt is considered "one interconnected, very complicated machine." All of the parts of the machine must be "singing to the same ... music, so to speak."

REPRESENTATIVE HANNAN concluded that even if a utility wanted to remove itself, it would still be subject to the tariff established by the ERO.

DR. SCOTT answered that's correct. He added that under HB 151, an electric utility "shall" participate. Participation is not defined in the ERO. It does not necessarily mean membership on the board, but it does mean "you can't just fold your arms, not participate in the process, and then complain to the commission when you don't like the results."

2:05:00 PM

REPRESENTATIVE RAUSCHER asked whether the MOU would put a moratorium on "acting the way ... that the utilities normally did" while a decision is being made regarding HB 151.

DR. SCOTT replied his observation was that "there has been no slacking of their efforts to work together." Further, the bill has helped spur much tighter collaboration. He said the reason is that the bill would provide a mandate for an ERO, and if passed, utilities hope to be represented on that ERO. He explained there is a parallel effort associated with the MOU to create the Railbelt Reliability Council, which would be an applicant to the ERO.

REPRESENTATIVE RAUSCHER clarified he wanted to know whether infrastructure could be put into place while waiting for proposed legislation to be passed.

DR. SCOTT answered yes. He noted that the proposed effective date of HB 151 is not for another year, which means "needed capital investments that they identify on their own can and are, indeed, being made."

2:07:48 PM

REPRESENTATIVE TUCK asked whether the merger would result in one entity or in two entities owned by a parent company.

DR. SCOTT answered that assuming the acquisition is approved, it would be a single entity operated as a single load.

2:08:40 PM

CO-CHAIR LINCOLN questioned how fixed and marginal capital costs vary with loads on a system and impact incentive to participate in economic dispatch. He queried as to whether broader cooperative effort across the railbelt would make it impossible for utilities to overinvest in capital, thus leading to better incentives for economic dispatch overall.

DR. SCOTT looked back at a plant built by Chugach some years ago, a portion of which is owned by ML&P. He said ML&P knew it needed new generation and "went in on a portion of Chugach's ongoing effort." He said it is possible for coordinated action; it happens, but there is room for improvement. In terms of economic dispatch, he said the power that is picked up in a

trade does not pick up any of the fixed costs of the system; it takes up incremental operating costs and pays a little bit of a profit margin. He said, "It already exists more efficiently." He said moving forward with a structure that would "lock these guys in a room together on an ongoing basis," the opportunities for determining the best ways to make new investments would become clearer and cooperative efforts would be facilitated.

2:12:30 PM

MS. ESTEY returned attention to the PowerPoint she had previously begun, to slide 8, which read as follows [original punctuation provided, with some formatting changes]:

> Railbelt Reliability Council - ODT Process
>
> An Organizational Development Team (ODT), comprised of representatives from the six Railbelt utilities, was established to begin building the RRC.
>
> The ODT's focus was to develop consensus among utilities and other stakeholders in forming an Implementation Committee that would develop foundational documents and stand up the RRC.
>
> The ODT representatives met with utility and non-utility stakeholders, including the RCA, AEA, REAP, AkPIRG, IPPs, and others.
>
> On December 18, 2019, six Railbelt utilities signed the MOU for the creation of the RRC.
>
> The signed MOU was filed with the RCA on December 20, 2019.

MS. ESTEY added that the RRC is like the ERO imagined in legislation. She spoke about learning from what has been done in the Lower 48 and adjustments made to get things right. She emphasized the importance of the proposed legislation.

MS. ESTEY directed attention to the information on slide 9, which read as follows [original punctuation provided]:

> Railbelt Reliability Council –Signed MOU

The RRC will be an applicant for the role of ERO with a balanced utility/non-utility board focused on accomplishing the following tasks:

1. Establish, administer and enforce reliability standards
2. Develop, adopt and administer open access rules, system cost allocation procedures, and interconnection protocols
3. Develop and adopt an Integrated Resource Plan (IRP) for the entire Railbelt electric system
4. Perform a definitive cost-benefit analysis of Railbelt-wide or regional security constrained economic dispatch.

2:16:02 PM

MS. ESTEY directed attention to slide 10, which read as follows [original punctuation provided]:

Railbelt Reliability Council -Governance

Initially, the RRC will be governed by a twelve-member Board with the CEO providing a tie-breaking vote.

- 6 Railbelt utilities
- Alaska Energy Authority
- 2 Independent Power Producers
- 1 organization advocating for consumer interests
- 2 independent, non-affiliated members
- RCA and RAPA will hold non-voting, ex-officio seats on the Board
- The RRC will hire a CEO and staff

MS. ESTEY said if one utility is sold to another, the balance would still be maintained.

2:17:18 PM

CO-CHAIR LINCOLN offered his understanding that Ms. Estey's organization approves of the change, but it is still subject to RCA approval.

MS. ESTEY answered yes. She said this is the model toward which utilities and other stakeholders are working. It is a parallel path alongside the proposed legislation and the subsequent regulations that would be created by the RCA. The end goal is

the ability to apply to the ERO "when the commission is ready to make that happen."

2:18:16 PM

REPRESENTATIVE HANNAN recalled that Ms. Estey had delineated two independent power producers in relation to the independent governance council. She asked whether there were only two independent power producers or several, in which case they would have to choose two to serve on the governance council.

MS. ESTEY answered that there is a variety of independent power producers; the [Alaska] Independent Power Producers [Association] (AIPP) will select the board members. She said out of 17 applications, 5 were from independent power producers. She continued:

> One of the stipulations in the MOU was to have those independent power producers all have active projects on the system; and so, of the five, four met that criteria, and we've asked for the ... AIPPA to resend all the applications to them and ask for a response by March 20 on ... the two people that they would like to fill their seats.

2:20:11 PM

CO-CHAIR TARR referred to "organization advocating for consumers" and wondered whether the Alaska Public Interest Research Group (AkPIRG) would be "the likely participant." She asked for clarification as to who the nonaffiliated members would be. She asked whether "any of this should be referenced in the legislation" or was "specifically intended to be outside the legislation through this MOU" rather than being governed by the legislation.

MS. ESTEY replied that AkPIRG has been an active and constructive member in the process and was the only consumer advocacy group that applied. There were 11 applicants for the nonaffiliated seats. She noted that this information can be found on alaskapower.org. She said there are subcommittees that will decide among the applicants, hopefully by mid-May. The legislation states that it could be either a balanced board or an independent board.

2:23:00 PM

REPRESENTATIVE TUCK asked what the RRC "group" can do now and what it can do after establishment of the ERO.

MS. ESTEY responded that there has been consideration of what would happen if the legislation failed to pass. She said she thinks there is a lot the RRC could still do; however, it is unclear what the RCA's jurisdiction over that body would be. She noted that "it's very clear about what that looks like for load-serving entities." She said, "One of the reasons why this legislation is critical is so that the RCA does have jurisdiction over this body and that the actions of this body can stick." The governing council can be formed without the legislation, but it may not be as effective, she noted.

REPRESENTATIVE TUCK asked how members were solicited.

MS. ESTEY answered that notice included: a two-month application process posted on the website; posting on the RCA listserv; quarter-page advertisements in each of the regional newspapers; and a press release. She opined that the efforts were successful, because the applicants include "a lot of folks ... that aren't necessarily a part of the family, that we don't see every day."

REPRESENTATIVE TUCK asked whether the operator of the railbelt transmission line would be unified or independent.

MS. ESTEY responded that the council would make that decision, and having a broader group answer these types of questions would be beneficial. In response to a follow-up question, she said MEA is committed to making the tight pool happen, and she reemphasized the benefits of working with more utilities to determine what can be achieved and make it happen.

2:28:46 PM

MS. ESTEY, in response to a question from Representative Spohnholz, restated that the applicants are listed on the previously mentioned webpage, and she read the list.

2:30:44 PM

MS. ESTEY returned to the PowerPoint and discussed slide 11, which read as follows [original punctuation provided]:

Why Is The Railbelt Reliability Council Important?

Regulatory compact (contractual commitment) with the State of Alaska.

Commitment that the utilities will be bound by the decisions of the RRC.

Commitment of the utilities to support statutory language to provide the RCA authority to regulate the RRC as described in the MOU.

Commitment of the utilities to be inclusive of a variety of perspectives in decisions relating to the Railbelt bulk electric system.

Commitment of the utilities to participate with one another and non-utility stakeholders to achieve benefits for ratepayers across the Railbelt region.

MS. ESTEY stated, "We've all recognized the need to think regionally and be able to act in a more coordinated manner." She said this is an historic agreement.

MS. ESTEY moved on to slide 12, which read as follows [original punctuation provided]:

Next Steps for the RRC - Timeline

✓ January 2-Feb 1 – Thirty-day public notice for applications to fill the non-utility seats

✓ January 17 – Utility, AEA, RCA and RAPA delegates named

✓ February 17 – All other non-utility applications due

• March 20 – IPP seats selected by Alaska Independent Power Producer Association

• March 25 (est.) – Firm retained to conduct review of applications

• May 11 – Consumer advocacy seat selected

• May 15 – Independent, unaffiliated seats selected

• May 30 – Implementation Committee Kick off

- December 2020 – Complete foundational documents and stand up the organization

MS. ESTEY said this information is in the MOU, which is on the web page. She noted that the Implementation Committee does the foundational documents, one of which is "the code of conduct," which ensures "we're not acting in our own best interest, but in the interest of the RRC." She stated, "We also know that if we fail, the RCA can establish ... their own, so we were very motivated to be part of the process in a constructive way."

2:34:06 PM

CO-CHAIR LINCOLN asked, "Who does the selection?"

MS. ESTEY answered that a subcommittee comprising the two IPPs, the AEA, and one of the utilities select who will fill the consumer advocacy seat. Once that seat is selected, a new subcommittee comprising one of the IPPs, the AEA, and the consumer advocacy seat will pick the two independent, unaffiliated seats. She remarked on the time this process takes.

2:35:10 PM

MS. ESTEY moved on to slide 13, which read as follows [original punctuation provided]:

> The Railbelt utilities support HB151 and SB123 as enabling legislation
>
> Establish a statutory framework for the RRC to operate under the RCA's regulatory authority.
>
> Provide a mechanism to enforce consistent reliability, facility and cyber security standards developed by the RRC.
>
> Authorize the RRC to execute a robust, transparent Integrated Resource Planning process and support resulting outcomes.
>
> Provide for RCA pre-approval of projects that are consistent with the Integrated Resource Plan and/or reliability standards.

Allow the RRC time to accomplish its goals but provide discrete timelines.

MS. ESTEY said she thinks utilities are rule followers that can follow a deadline. She said there is unprecedented alignment happening, and she urged the committee to support HB 151. In conclusion of the presentation, she showed slide 14, which provides contact information.

2:37:57 PM

CO-CHAIR LINCOLN opened public testimony on CSHB 151(ENE).

2:38:26 PM

JOMO STEWART, Project Manager, Energy, Fairbanks Economic Development Corporation, testified in support of HB 151. He noted that the Fairbanks Economic Development Corporation (FEDC) had sent a letter of support for HB 151 and SB 123 [included in the committee packet]. He spoke of the need for coordination among utilities and related groups to have "a more robust, reliable, cost-effective, and efficient system for the greater railbelt region on a move-forward basis." He explained that each utility has taken care of its utility area, but that does not necessarily mean what is best for the broader region.

2:40:41 PM

CHRIS ROSE, Executive Director, Renewable Energy Alaska Project (REAP), testified in support of HB 151. As in his written testimony [included in the committee packet], he related that REAP was established in 2004 and is a statewide, nonprofit coalition with over 75 dues-paying energy stakeholders, including large and small Alaska electric utilities, clean energy developers, and nongovernmental organizations (NGOs) that "share the mission of increasing the development of renewable energy and promoting energy efficiency across the state."

MR. ROSE paraphrased the first segment of his written testimony, which read as follows [original punctuation provided]:

REAP notes that there have been efforts to reform the Railbelt grid to gain better efficiencies since at least 1986 when the Railbelt Energy Fund was established. Though the Railbelt utilities do a terrific job keeping the lights on, REAP believes that the new electric reliability organization (ERO) for

the region contemplated in the legislation will bring new benefits to electric consumers, and help set the stage for more stably priced, local renewable energy.

MR. ROSE said he agrees with Ms. Estey's assessment that these are unprecedented times. He continued paraphrasing the next portion of his written testimony, which read as follows [original punctuation provided]:

REAP has been involved in efforts to make the Railbelt more efficient since 2011, when I served as a member of the Citizen Advisory Committee for a failed state effort to develop a Railbelt Integrated Resource Plan. REAP became more involved after the legislature appropriated money for the Regulatory Commission of Alaska (RCA) to study the issue of Railbelt reform and the Commission opened docket I-15-001 in 2015. In 2015, REAP urged the legislature to introduce HB 187 to create an independent system operator (ISO). That effort was repeated in 2018 with the introduction of HB 382. Both bills were designed to establish an entity governed by an independent board of directors that would operate the region's generation assets in the most cost-efficient manner. Over the last year and a half, REAP has been working with the utilities to develop a memorandum of understanding (MOU) to form an electric reliability organization called the Railbelt Reliability Council (RRC) that would carry out mandatory functions and be governed by a board that includes non-utility stakeholders. All six utilities signed that MOU in December 2019.

2:43:22 PM

REAP believes HB 151 does at least six important things. The legislation:

1. Gives the RCA the authority to oversee the new RRC if it is successfully established voluntarily via the process the utilities have outlined in the MOU;

2. Gives the RCA the authority to establish an ERO on its own, if the voluntary efforts to form the RRC fail;

3. Gives the RCA authority to oversee regional integrated resource planning led by the ERO that would

allow a public process to decide the future generation and transmission needs for the Railbelt;

4. Gives the RCA the authority to preapprove all large new generation and transmission projects to protect Railbelt consumers;

5. Requires the new ERO to develop regional, nondiscriminatory interconnection standards and;

6. Requires the new ERO to develop a methodology to recover the costs of the transmission system.

REAP notes that the bill does not require the kind of regional economic dispatch that an independent system operator would perform. However, the MOU that the utilities have executed requires the new RRC, once it is stood up, to study the benefits and costs of economic dispatch. REAP supports that effort.

MR. ROSE said REAP would like to see the railbelt function as "one single load balancing area for the entire railbelt." He said that would facilitate more renewable energy because it is a lot easier "to integrate variable electrons into a larger area." Regarding the governance structure of the MOU, he said he thinks there may be some disagreement between REAP and other stakeholders as to whether another utility would be added if the acquisition of ML&P is approved by the commission. He said REAP sees AEA as more of a utility than an independent power producer and would like to discuss that; however, he indicated that is not an issue that would be addressed through legislation.

2:46:11 PM

MR. ROSE returned to paraphrasing another portion of his written testimony, which read as follows [original punctuation provided]:

REAP sees electric grid reform as risk management. Establishing an ERO will help the Railbelt address existing challenges in the region that are associated with fuel price volatility, climate risk, technology innovation, changing customer needs and desires, and grid resiliency and security.

Today, just one producer in Cook Inlet controls approximately 85 percent of the natural gas production

the region relies on, creating a virtual monopoly situation. In addition, there is flat demand for electricity and a small market for gas in the Railbelt. The utilities have no leverage. The gas infrastructure is aging and the production costs for the gas are high. Furthermore, even the high prices that Railbelt utilities pay for natural gas relative to Lower 48 utilities have been subsidized by the state. All these factors are a risk for the region that can better be addressed by a new, regional entity.

The region is also at risk for higher prices that will inevitably occur when the federal government puts a price on carbon emissions. The oil companies themselves have been asking for a price on carbon for five years in order to have more certainty for their business model, and the threat of climate change is likely to eventually result in a carbon tax that will make the region's high dependence on natural gas for electric generation even more expensive. The Railbelt already has some of the highest electricity costs in the nation, and those costs are not attracting investors.

Meanwhile, renewable energy is getting cheaper and cheaper. According to Lazard's annual comparison of the unsubsidized cost of electric generation, land-based wind and utility solar are already the cheapest ways to generate electricity in the world. Lazard reports that over the last decade, wind energy prices have fallen 70 percent, and solar photovoltaic prices have fallen an astounding 89 percent, on average. In 2020, the U.S. Energy Information Administration (EIA) expects that 76 percent of all new additional electric generation capacity in the United States will be wind and solar. These precipitously falling prices, along with technology innovation, are a disruption that the Railbelt can better address through a regional entity like an ERO. When combined with other disruptive technologies such as battery energy storage and electric vehicles that are advancing rapidly, Railbelt reform cannot happen too soon.

Customer needs and desires are also changing quickly. People in the Railbelt are installing solar on their roofs and demanding cleaner sources of energy. Even

more important, more than 60 percent of Fortune 500 companies have set their own climate and clean energy targets which require the purchase of renewable electricity. This means the Railbelt will not be able to attract a company like Apple, Google, Facebook or a host of others unless the region can provide those businesses with 100 percent renewable electricity.

A new ERO will also allow the Railbelt to better address issues of reliability, cyber security and grid resiliency.

Finally, REAP believes that the establishment of a regional electric reliability organization has statewide benefit. As the average cost of electricity in the Railbelt has risen almost 50 percent over the last decade, the floor for Power Cost Equalization (PCE) has also risen. That is, the difference between the average electric prices in Fairbanks, Anchorage and Juneau and the rest of the state has narrowed. More efficient and affordable electricity in the Railbelt means more PCE support for rural communities that still rely primarily on expensive, imported diesel fuel to generate electricity.

MR. ROSE requested that the House Resources Standing Committee pass HB 151, and he expressed his appreciation for the committee's consideration of the matter.

2:49:51 PM

REPRESENTATIVE TUCK asked for clarification on Mr. Rose's statements regarding the cost of various energy sources.

MR. ROSE clarified that currently, on a worldwide basis, land-based wind and utility solar are the first and second cheapest forms of electricity, respectively. In response to a follow-up question, he confirmed those two sources are cheaper than nuclear and hydropower. He qualified that "it's cheaper than any new plant."

2:50:42 PM

CO-CHAIR LINCOLN asked whether that included the price of storage necessary to maintain a consistent load.

MR. ROSE answered no. He related that in his home state of Iowa, 40 percent of all the electricity is generated by wind. He added, "There is no storage whatsoever, because the grid itself acts as storage." He said there are lower prices in larger grids where storage is not required. In response to a follow-up question, he explained that it is not always necessary to have storage when there is a large, economically dispatched grid, where the electrons can move immediately to where they are needed.

CO-CHAIR LINCOLN asked about the effect of having higher percentages of penetration regardless of the size of the system. He surmised that at 70-80 percent, storage becomes more important with increasing penetration "to provide the next marginal increment to the load that's being provided by renewables." He asked whether that was a true statement.

MR. ROSE answered that's correct. He added, "I think that most experts would say once you get to the 70-80 percent penetration, that is true."

2:54:25 PM

VERI DI SUVERO, Executive Director, Alaska Public Interest Research Group (AkPIRG), testified in support of HB 151. She gave a brief background of AkPIRG, which she said has been involved in the creation of the MOU for the RRC, as well as having testified before the legislature. She opined that the creation of an ERO with oversite by the RCA "cannot happen too soon." She echoed the testimony of Commissioner Scott regarding the annual savings to consumer of $17 million annually from just a 2 percent increase in efficiency. Further, the ability of the RCA to have project preapproval is an historically recognized need. She stated that HB 151 would help utilities claim capital investments more efficiently through integrated resource planning, as well as cost-saving through increased efficiency rate payers. She stated that AkPIRG supports HB 151, "as is," and encourages the committee to pass it as quickly as possible.

2:56:26 PM

BRIAN HICKEY, Chief Operating Officer, Chugach Electric Association, Inc. ("Chugach"), offered a brief background of his experience. He agreed that the alignment happening is historic. The utility industry is changing. He said Chugach believes the ERO will help create a grid to adapt to changes in the industry and add to reliability and security. He emphasized that

mandatory and enforceable adoption of these standards is the most effective way to ensure a secure electric grid. Mr. Hickey said electricity is unique in that it must be produced at the exact moment that it is used or required. A grid such as the interconnected railroad grid is a single physical machine, which "operates in near perfect synchronism at all times." Deviations from that system, as can happen when generators are brought online or trip offline unexpectedly, or when loads are brought online or trip offline unexpectedly, result in shutting down all or portions of the grid. He said, "A machine of this nature should be planed as a single machine rather than as individual separate parts of a machine, and we believe that the [International Registration Plan] (IRP) process and the preapproval process will assist us in achieving that." Mr. Hickey said Chugach believes that increasing the diversity of input into the planning process through the broader stakeholder governing board envisioned in the RRC "will help us increase both the scope and the effectiveness of the planning project." He concluded by stating that Chugach supports both HB 151 and SB 123.

2:59:59 PM

CO-CHAIR LINCOLN, after ascertaining no one further wished to testify, closed public testimony on CSHB 151(ENE).

3:00:08 PM

CO-CHAIR TARR indicated she was excited at the possibility this issue may be resolved. She emphasized the importance of a reliable infrastructure for the state. She expressed gratitude "for everybody who's worked so hard to get us to this point."

REPRESENTATIVE TUCK recalled the first energy policy for the state back in 2009 or 2010. He recalled the Greater Railbelt Energy and Transmission Corporation (GRETC), among other efforts in the evolution of this effort to work toward an alliance that would result in "better impacts" and "better efficiencies for the consumer and for new development of industries ...." He said this is "a testament of how you just can't rush things." He expressed appreciation the work of many years "that's brought us to this point."

3:02:41 PM

CO-CHAIR LINCOLN announced [that CSHB 151(ENE) was held over].

3:02:57 PM

ADJOURNMENT

There being no further business before the committee, the House Resources Standing Committee meeting was adjourned at 3:03 p.m.