

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

February 15, 2022

10:25 a.m.

**MEMBERS PRESENT**

Representative Calvin Schrage, Chair  
Representative Chris Tuck  
Representative Matt Claman  
Representative Zack Fields  
Representative James Kaufman

**MEMBERS ABSENT**

Representative Tiffany Zulkosky  
Representative George Rauscher

**COMMITTEE CALENDAR**

HOUSE BILL NO. 247

"An Act relating to the power cost equalization endowment fund."

- HEARD & HELD

HOUSE BILL NO. 299

"An Act relating to microreactors."

- HEARD & HELD

**PREVIOUS COMMITTEE ACTION**

BILL: HB 247

SHORT TITLE: POWER COST EQUALIZATION FUND

SPONSOR(s): REPRESENTATIVE(s) THOMPSON

01/18/22	(H)	PREFILE RELEASED 1/7/22
01/18/22	(H)	READ THE FIRST TIME - REFERRALS
01/18/22	(H)	ENE, FIN
02/15/22	(H)	ENE AT 10:15 AM ADAMS 519

BILL: HB 299

SHORT TITLE: MICROREACTORS

SPONSOR(s): RULES BY REQUEST OF THE GOVERNOR

02/04/22	(H)	READ THE FIRST TIME - REFERRALS
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02/04/22	(H)	ENE, RES
02/08/22	(H)	ENE AT 10:15 AM ADAMS 519
02/08/22	(H)	Heard & Held
02/08/22	(H)	MINUTE (ENE)
02/10/22	(H)	ENE AT 10:15 AM ADAMS 519
02/10/22	(H)	Heard & Held
02/10/22	(H)	MINUTE (ENE)
02/15/22	(H)	ENE AT 10:15 AM ADAMS 519

**WITNESS REGISTER**

REPRESENTATIVE STEVE THOMPSON  
 Alaska State Legislature  
 Juneau Alaska

**POSITION STATEMENT:** As prime sponsor, provided a brief introduction to the proposed CS for HB 247, Version I.

TOM WRIGHT, Staff  
 Representative Steve Thompson  
 Alaska State Legislature  
 Juneau, Alaska

**POSITION STATEMENT:** Provided an explanation of changes and answered questions on the proposed CS to HB 247, Version I, on behalf of Representative Thompson, prime sponsor.

PAUL ROEGE, Executive Director  
 The Advanced Nuclear and Production Experts Group  
 Corvallis, Montana

**POSITION STATEMENT:** Provided testimony in support of HB 299.

MARY WOOLLEN, Director of Stakeholder Engagement  
 Ultra Safe Nuclear Corporation  
 Minneapolis, Minnesota

**POSITION STATEMENT:** Provided testimony in support of HB 299.

RICHARD THEILMANN, representing self  
 Fairbanks, Alaska

**POSITION STATEMENT:** Provided testimony in support of HB 299.

TRAVIS MILLION, CEO  
 Copper Valley Electric Association  
 Glennallen, Alaska

**POSITION STATEMENT:** Provided testimony in support of HB 299.

PAMELA MILLER, Executive Director  
 Alaska Community Action on Toxics  
 Anchorage, Alaska

**POSITION STATEMENT:** Provided testimony in opposition to HB 299.

**ACTION NARRATIVE**

[10:25:46 AM](#)

**CHAIR CALVIN SCHRAGE** called the House Special Committee on Energy meeting to order at 10:25 a.m. Representatives Tuck, Claman, Kaufman, and Schrage were present at the call to order. Representative Fields arrived as the meeting was in progress.

**HB 247-POWER COST EQUALIZATION FUND**

[10:26:17 AM](#)

CHAIR SCHRAGE announced that the first order of business would be HOUSE BILL NO. 247, "An Act relating to the power cost equalization endowment fund."

[10:26:52 AM](#)

REPRESENTATIVE CLAMAN moved to adopt the proposed committee substitute (CS) for HB 247, Version 32-LS1301\I, Marx, 1/26/22, as a working document.

[10:27:03 AM](#)

CHAIR SCHRAGE objected for the purpose of discussion.

[10:27:14 AM](#)

REPRESENTATIVE STEVE THOMPSON, Alaska State Legislature, as prime sponsor, stated that the proposed CS for HB 247 would help reduce energy costs for communities receiving funds from the Power Cost Equalization Program (PCEP). He stated that the proposed legislation would do two things: it would remove the \$25 million cap for funds going into the Renewable Energy Fund (REF), and it would add bulk fuel upgrades, which could be funded through the REF. He expressed the hope that these steps would reduce the number of PCEP participants. With this goal, he stated, if renewable energy sources are installed, communities would no longer require power cost equalization (PCE), leaving more funds available to be put into the REF.

[10:29:01 AM](#)

TOM WRIGHT, Staff, Representative Steve Thompson, Alaska State Legislature, on behalf of Representative Thompson, prime sponsor, read the explanation of changes for the proposed CS to HB 247, Version I, [included in the committee packet], which read as follows [original punctuation provided]:

**Section 1:** Removes all references to subsection (e) which is deleted in the I version within section 2 of the original bill.

The \$30 million to a community or revenue sharing fund is not changed in the I version. It was relegated to a lower position in the priorities for use of the PCE funding in the B draft.

MR. WRIGHT interjected that after discussions with the Alaska Energy Authority (AEA), Adult Public Assistance, and other stakeholders, it was decided that the distribution of the PCE fund earnings would not change in Version I. He continued with the explanation of changes, which read as follows [original punctuation provided]:

Version I removes the \$25 million cap that is currently in statute and adds bulk fuel upgrades to the list of items that can be funded via the Renewable Energy Fund.

**Section 2:** The I version deletes all the language found in Section 2 of the B draft. Version B moved the priority of the community assistance funding to a lower priority.

Deletes subsection (f) that required the Alaska Energy Authority to develop a methodology for prioritizing Renewable Energy Fund grant applicants. The Authority already has developed a methodology that is currently being used to rank projects.

[10:30:51 AM](#)

REPRESENTATIVE KAUFMAN requested clarification regarding "bulk fuel upgrades" in respect to renewable energy.

MR. WRIGHT responded that AEA requested this be included in the language for the REF. Referencing the deteriorating bulk fuel systems in communities, he said that some of these systems will need to be replaced or restored. He explained that the large

capacity systems would allow communities to last through the winter without relying on a fuel shipment, and buying fuel on a larger scale would help reduce energy costs.

[10:32:00 AM](#)

REPRESENTATIVE THOMPSON, in response to Representative Claman, confirmed that the bill would have nothing to do with "sweepability."

[10:32:25 AM](#)

CHAIR SCHRAGE removed his objection to the motion to adopt the proposed CS for HB 247, Version 32-LS1301\I, Marx, 1/26/22, as a working document. There being no further objection, Version I was before the committee.

[10:32:38 AM](#)

CHAIR SCHRAGE announced HB 247 was held over.

#### **HB 299-MICROREACTORS**

[10:32:41 AM](#)

CHAIR SCHRAGE announced the final order of business would be HOUSE BILL NO. 299, "An Act relating to microreactors."

CHAIR SCHRAGE opened public testimony on HB 299.

[10:33:09 AM](#)

PAUL ROEGE, Executive Director, The Advanced Nuclear and Production Experts Group (ANPEG), shared that ANPEG is a public and private collaboration affiliated with the Massachusetts Institute of Technology. He stated that the charter exists to enable a new generation of abundant resilient energy for remote communities, value-added industries, and state and national security. He argued that the proposed legislation could move Alaska into a leadership role for next-generation energy. He stated that ANPEG is ready to work through the Alaska Center for Energy and Power to help communities understand opportunities microreactors offer.

[10:34:27 AM](#)

MARY WOOLLEN, Director of Stakeholder Engagement, Ultra Safe Nuclear Corporation (USNC), stated that USNC has manufactured a micro modular reactor (MMR) specifically designed for remote applications which are difficult to support using conventional or renewable power. She expressed the opinion that this reactor would be well suited for an application in Alaska, and, because MMR is an advanced reactor, it would [align] with the proposed legislation. She expressed excitement that USNC and Copper Valley Electric Associate (CVEA) are jointly conducting a study to determine the technical feasibility, social acceptance, location cost, and operating specifics of deploying a microreactor in the Copper Valley service area. In the feasibility study a local Alaskan engineering firm has been consulted to ensure there is insight into the particular challenges in Alaska. She stated that, before entering into the formal permitting process, USNC and CVEA are concurrently engaging Alaskans by explaining the technology to them and requesting their input.

MS. WOOLLEN stated that technical analysis is combined with public engagement to begin the process of earning a "social license," but to build and operate the reactor, a regulatory license would be required. If the results of the feasibility study are favorable and a financial agreement is found with CVEA, USNC will pursue a regulatory license with the U.S. Nuclear Regulatory Commission (NRC). She cautioned that the process is long, expensive, and rigorous, but it would ensure the nuclear reactor system is safe and well-designed before it would be sited. She explained that the current law in Alaska requires legislative preapproval for siting a reactor, and this creates a risk for any company considering the deployment of an advanced reactor in the state. If any nuclear reactor is to be sited in Alaska, she reiterated that it would require a regulatory license from the NRC and support from local communities. She said that [the passage of] HB 299 would serve to open the door for possibilities, but it would not ensure success. In order for success, UNSC is committed to working with Alaskans to find solutions that would support a zero-carbon energy system which is safe, economical, sustainable, and embraced by the local communities.

[10:37:56 AM](#)

RICHARD THEILMANN, representing self, said that he is a "huge advocate" for having a microreactor in Alaska. Referencing air pollution problems, he stated that microreactors would produce heat and electricity "at almost zero risk." He added that there

would be no refueling for 10 or 20 years, and then the manufacturer would take "the material back out." He said, for example, the coal-fired Aurora Plant in Fairbanks, which has a built-in hot water tapping network for the local building, could be eliminated, reducing the particulates in the air. He stated if Eielson Air Force Base were to acquire [a microreactor] another coal plant would be "out of the mix." He argued that the idea of replacing one coal plant with a microreactor puts Alaska "on the map" by providing heat and eliminating air pollution.

[10:40:08 AM](#)

TRAVIS MILLION, CEO, Copper Valley Electric Association, stated, as testimony has indicated, CVEA is considering a feasibility study to potentially bring an advanced micronuclear reactor to the area. He stated that over the last couple of decades CVEA has been searching for a way to resolve wintertime energy needs. He said the community has nearly 100 percent hydropower from May to around the end of October, before "hydro assets freeze." He described the summertime electricity rate as low, or less than 20 cents a kilowatt hour, but the community is "at the whim of whatever the costs of fossil fuels are in the wintertime." For example, he said that between December and January of this year there was a 44 percent increase of fuel costs. He continued that there is no predictability from month to month, and, unfortunately, those rates are passed on [to the customers]. Currently residents are paying just over 40 cents a kilowatt hour in the Copper River Basin and just a small percentage less in Valdez. To stabilize and reduce energy costs for the winter, he said CVEA has looked at wind, solar, biomass, tidal, and other hydro opportunities, but nothing solves the problem. He indicated that technological advancements with micronuclear reactors could possibly be the solution, and this is why the feasibility study is going forward. He provided that each of Alaska's delegates in Washington D.C. has expressed excitement about this opportunity. He stated that U.S. Senator Lisa Murkowski has been very vocal in support of Alaska having one of the first [microreactor] deployments in the nation.

[10:43:01 AM](#)

PAMELA MILLER, Executive Director, Alaska Community Action on Toxics (ACAT), testified in opposition to HB 299. She argued that micronuclear reactors are not subject to nuclear reactor siting and permitting regulations in Alaska, which could result in reactors being constructed on lands which have not been

designated by the legislature. She offered that ACAT holds the belief that nuclear reactors are a serious health and safety concern and provide a false solution for energy needs and the climate crisis. She expressed the opinion that nuclear power is destructive throughout its life cycle with uranium mining, the process of enrichment, and radioactive waste disposal. She continued that the mining process is done predominately on Indigenous lands, and waste disposal is an untenable problem. She stated that NRC determined Oklo Inc., a manufacturer of micronuclear reactors, has failed to provide sufficient information concerning potential accidents and safety systems. She stated that microreactor vendors are pushing to reduce personnel, such as operators and security officers. She cited a safety report by the Union of Concerned Scientists which determined that leaving microreactors without human guards would be not safe. She argued that none of these reactors have demonstrated they would be safe enough to function without operators. She expressed the opinion that even a small nuclear reactor would contain enough radioactive material to cause problems. She expressed concern that the primary proponents of the proposed legislation are representatives from the nuclear power industry who have a vested interest. She stated that the state is still addressing the radioactive contamination from the experimental nuclear reactor at Fort Greely. She opined that opening the door to nuclear power in Alaska again is unwise and dangerous.

[10:45:25 AM](#)

CHAIR SCHRAGE closed public testimony on HB 299.

[HB 299 was held over.]

[10:45:34 AM](#)

The committee took a brief at-ease at 10:45 a.m.

[10:46:00 AM](#)

#### **ADJOURNMENT**

There being no further business before the committee, the House Special Committee on Energy meeting was adjourned at 10:46 a.m.