

ALASKA STATE LEGISLATURE

SESSION

State Capitol, Suite 516
Juneau, Alaska 99801-1182
(907) 465-3873 Phone
(907) 465-3922 Fax
(877) 463-3873 Toll Free
Senator_Bert_Stedman@legis.state.ak.us



INTERIM

50 Front Street
Suite 203
Ketchikan, AK 99901-6442
Phone (907) 225-8088
Fax (907) 225-0713
www.BertStedman.com

SENATOR BERT K. STEDMAN

March 26, 2012

Alaska Energy Authority
Attention: Jim Strandberg, Projects Manager
813 West Northern Lights Boulevard
Anchorage, AK 99503

RE: Comments on the Southeast Integrated Resource Plan

Mr. Strandberg:

In 2010, the Alaska State Legislature appropriated funding to the Alaska Energy Authority (AEA) to develop an Integrated Resource Plan for Southeast Alaska (SEIRP). The legislative record supporting the appropriation stated:

...now is the time for a region-wide plan to map the best way to advance hydroelectric development. There are a myriad of potential hydro projects within and/or near the interconnected region. The Integrated Resource Planning project will *evaluate existing and forecast loads, potential demand-side management, and new generation projects that can meet future load requirements*. [Emphasis added.]

I recognize considerable work went into the Draft SEIRP, but am concerned the plan falls short in meeting its original purpose and objective, particularly in terms of its evaluation of new power generation projects.

Hydroelectric power is the lifeblood of Southeast Alaska's energy supply and economic security. As a stable, locally produced, and renewable resource, it has the potential to provide competitive power for Southeast communities and industry long into the future. The SEIRP was intended to be a technical report that would synthesize regional power load data and identify a systematic approach to advance hydro development for Southeast Alaska. The SEIRP's authors, Black & Veatch, have billed their report as a "directional" document for the region. Regrettably, their analysis lacks the granular detail needed for such direction and instead takes a prescriptive approach to evaluating energy options for Southeast Alaska.

Instead of evaluating specific new power generation projects – projects that could provide much-needed relief to residents and businesses suffering under some of the highest energy costs in the nation, projects that could stimulate Southeast Alaska's huge potential for growth and development in the mining, tourism, and timber and seafood processing sectors – and presenting

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a general timeline for construction of those projects, the SEIRP proposes a path forward that veers toward ways to avoid constructing new projects. The SEIRP's four modest near-term recommendations call for constructing already "committed resources" (projects that have already been significantly funded and the decision to develop has already been made); aggressively pursuing demand side management and energy efficiency (DSM/EE) measures; aggressively pursuing biomass space heating conversion programs; and continuing reconnaissance and feasibility studies of a list of 24 potential hydro projects.

Only the final recommendation in that short list relates to actual *new* power generation projects. However, rather than fulfilling the pledge made in the SEIRP's original funding request, which promised to identify "supply-side improvements including new generation construction to increase energy production and capacity," the recommendation simply urges further study of a long list of potential hydro projects, many of which – due to varying technical, logistical, and environmental challenges – will likely fail to make it to construction phase.

Looking beyond the evaluation of new energy projects, the SEIRP also adopted a flawed approach to developing forecast loads. Specifically, in their analysis of projected future regional energy needs, Black & Veatch did not effectively account for potential economic growth in the region. Although the High Scenario Load Forecasts were developed for exactly that reason, the SEIRP itself notes that the forecasts "might not adequately capture the impact of a large mine load increase (or any other large, discrete increase)."

Furthermore, the SEIRP fails to acknowledge that the power generation needs of mining developments could be leveraged to develop generation and transmission resources that could benefit the entire region. As demonstrated by the construction of the Lake Dorothy hydroelectric project, which was designed and built to satisfy the residential and commercial needs of Juneau as well as the industrial needs of the nearby Greens Creek Mine, significant potential exists in Southeast Alaska for mines and other large industrial project to serve as anchor tenants and maximize economies of scale for new energy projects or upgrades.

I also take issue with the fact that the load forecasts developed for the SEIRP are heavily based on the Department of Labor's generally pessimistic population forecasts for Southeast Alaska. While the Department of Labor's population statistics demonstrate all too well the negative impact high energy costs can have on population trends, those statistics – and in turn the SEIRP's load forecasts – fail to show the positive impact lowering the cost of energy can have on economic, employment, and population trends. Completion of the seven projects identified as "committed resources" as well as additional new generation hydro projects could significantly stimulate economic growth in the region and create demand not accounted for in any of the three load forecasts – high, low, or reference – developed in the SEIRP.

A final concern I have is with the SEIRP relates to the recommendation to aggressively pursue biomass space heating conversion programs. Considering its prominence in the overall recommendations of the SEIRP, large-scale biomass conversion is a relatively new and untested concept for Southeast Alaska, one that seems to run counter to the fact that consumer behavior

does not support the use of pellet stoves and other forms of biomass space heating. Indeed, this recommendation neglects to address or even recognize significant barriers to large-scale conversion, including overall convenience, initial conversion cost, availability of fuel and equipment, and general lack of knowledge/familiarity with biomass technology, all of which make the assumed and very aggressive 80% penetration rate and the 10-year implementation projection highly unlikely.

Additionally, the large-scale biomass conversion proposed in the SEIRP would require a total capital investment of \$532 million in space heating equipment. (It's important to note that AEA's *2010 Alaska Energy Pathway* document estimated a total capital investment cost of \$543 million to develop *all* economically viable Southeast energy projects, including both heat and power.) As co-chairman of the Senate Finance Committee, I like to think I have a fairly good sense of what is and is not possible in the realm of legislative appropriations, and the probability of the state having the political will or the financial wherewithal to fund over a half-billion dollars to burn pellets is remote, to say the least.

In conclusion, I would like to reiterate a pithy summary of the SEIRP made by Paul Southland, Executive Director of the Alaska-Canada Energy Coalition and member of the SEIRP Advisory Group, at a House Energy Committee hearing on the SEIRP in February: "Do the projects you plan, but no more. Conserve all you can. Forget about industry or economic development. Burn pellets. In a couple of years, hire us for another million bucks or so to tell you what to do next."

In light of these concerns, I submit that the SEIRP should be intensely reexamined and redrafted with the aim of producing a workable document that lays out a clear set of options for addressing the short- and long-term energy needs of Southeast Alaska and a plan for developing the region's new generation projects.

Sincerely,



Senator Bert Stedman