

GVEA

Golden Valley Electric Association

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Your Touchstone Energy Cooperative 

February 4, 2015

Representative Dave Talerico
Alaska State Legislature
State Capitol, Room 104
Juneau, AK 99801
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RE: House Joint Resolution No. 8 — Urging the federal government to empower the state to protect the state's access to affordable and reliable electrical generation.

Dear Representative Talerico:

Golden Valley Electric Association appreciates your introducing the House's version of Joint Senate Resolution No. 4 recognizing how important electric generation with coal is for the interior of Alaska.

Many special considerations affect generation and delivery of electric power in Alaska, particularly for GVEA. The GVEA service area is located in Interior Alaska. In a climate which drops to 50 degrees below zero, having reliable generation is imperative; truly a matter of life and death. Available fuel is restricted in the Interior largely to naphtha, diesel, and coal. Reasonably priced or low cost liquid fuel has rarely been available, a cost issue that has been exacerbated with the closure of the Flint Hills Resources (FHR) refinery at North Pole, Alaska in 2014. This closure has also increased the vulnerability of the liquid fuel supply chain to interruption. Given this increased vulnerability and the high cost, additional oil-fired EGUs are not an appropriate option for compliance with Subpart UUUU. Local natural gas resources do not exist in the region and no natural gas pipeline to Interior Alaska exists. Natural gas would

need to be liquefied and trucked into the Interior from significantly distant locations. As a result, installing cost effective natural gas-fired generation is not an option at this time.

Unlike the lower 48 states, Alaska is stranded from inter-state transmission grids. Alaska is electrically isolated from the lower-48 states and our nearest neighbor, Canada. One constrained transmission system, the Railbelt Grid, exists. The Railbelt Grid provides limited interconnection within the most populated region of the state. Currently, GVEA typically maximizes the capabilities of the existing transmission system. Additional transmission of power from Southcentral Alaska to the Interior is not an option without significant costly upgrades. Transmission is limited to a single 80 megawatt (MW) transmission line between Anchorage and Healy where the line bifurcates into two lines, both serving the GVEA service area. In addition, in the past, the purchase of energy from Southcentral utilities has been limited during the winter months due to limited gas supplies in extreme cold weather. Regardless of the availability of power from Southcentral utilities, the transmission infrastructure between Southcentral Alaska and the Interior cannot support the transmission of additional energy.

Moreover, reliance on transmission of electrical power from outside of the Interior introduces increased reliability risk to GVEA members. GVEA must have the ability to supply electricity to the Interior 365 days a year, particularly during the winter to protect against the loss of life and destruction of property under extreme climate conditions and deliver the power despite system upsets and malfunctions. Any electrical transmission line from Southcentral Alaska to the Interior must navigate the mountains of the Alaska Range and hundreds of miles of rugged, remote areas. Repair and maintenance of this remote line is challenging at best. Given the climate and rugged territory, particularly in the winter months, it is not prudent or acceptable for GVEA members to rely primarily or exclusively on electrical transmission from Southcentral Alaska.

The Interior lacks economically viable renewable resources. GVEA has already developed one of the more practicable RE resources, installing approximately 25 MW of wind generation near Eva Creek. GVEA is currently evaluating the Eva Creek windpower units to determine whether the equipment will withstand sub-arctic climate conditions and produce power at predicted rates. Even if the wind-power units are successful, these units and other renewable resources cannot displace Units 1 and 2 at the Healy Power Plant as essential baseload units.

Given the natural gas, renewable resource, and transmission constraints, GVEA members rely on electric power produced by the small coal-fired steam generating units at the Healy Power Plant. Healy Unit 1 has heat input capacity of 327.0 million British thermal units per hour (MMBtu/hr), a name plate output rating of 22 MW, and a nominal gross output of 27 to 28 MW. Healy Unit 2, also known as the Healy Clean Coal Project, has a heat input capacity of 658.0 MMBtu/hr and an anticipated net output of 52.5 MW following the mandated installation of selective catalytic reduction (SCR) for nitrogen oxides (NO_x) emission control. Though small, these units help ensure the delivery of reliable and affordable power to GVEA members. Both units are existing steam generating units as defined in proposed 40 CFR 60 Subpart UUUU.

Golden Valley supports House Joint Resolution No. 8 encouraging the Federal Government to leave to the States regulation of energy production which takes into account the unique circumstances that Alaska presents.

If you should have any further questions, please advise.

Very Truly Yours,



**Cory R. Borgeson
President and Chief Executive Officer**