

## **Distributed Generation Workgroup of the Energy Task Force**

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### **Distributed Generation Workgroup Proposal**

Develop a campaign to increase participation in Golden Valley Electric's Sustainable Natural Alternative Power (SNAP) program for both contributions and generation. The growth in contributions is critical in maintaining a healthy market that will attract additional generators.

Consider launching an entirely new program under a different name dedicated to distributed generation and green energy. SNAP could be integrated into new program that would aggressively fund viable & fiscally sound green energy by offering GVEA customers the option to pay 5-10-20% more for "renewable energy". To recognize those committed to green energy this program could have bumper stickers, lawn signs, & even window signs for businesses along with other promotional tactics could also be employed. Work with Golden Valley Electric's Green Power Advisory Committee (GPAC) to develop a "green premium" for the renewable electric generation sold to Golden Valley.

Work with the Railbelt utilities in the development of Interconnection Standards.

Initiate a public education campaign that outlines the costs and paybacks of installing various systems that use renewable energy for small scale electric production to homes and businesses.

### **Discussion**

Golden Valley has developed the SNAP program to encourage the generation of distributed generation resources. As explained on the [www.gvea.com](http://www.gvea.com) website the SNAP program places a willing seller with a willing buyer, with Golden Valley acting as a broker. Contributions to the SNAP program are made by GVEA members on their electric bill and placed into the SNAP account. Each year the available funds are distributed to the SNAP generators based on the kilowatt-hour of SNAP energy generated. There is a \$1.50/kWh cap on the amount that will be paid to producers under the SNAP program. Excess funds stay on the SNAP account for pay out in future years. There is not cost to GVEA members who do not want to participate in the SNAP program.

The \$1.50/kWh cap should not be assumed as the payout amount for any economic analysis. As larger SNAP producers come online, the kWh production will increase and the payment per kWh will decrease unless more funds are contributed to the SNAP program. If the contributions stay constant and the generators increase production, the SNAP payments will decrease. The decrease will continue until producers determine that additional SNAP generation is uneconomic or until additional contributions are made to sustain the program at an economic level for the producers. Ideally, a new generator

would not only add new generation but would bring additional contributions to the SNAP program to maintain the amount per kWh paid to the producers.

The GVEA Board has asked the GPAC to investigate a “green premium” that would be an additional payment under a power sales agreement to generators for the production of renewable energy.

The Energy Policy Act and FERC directed each State to evaluate several issues, one being Interconnection Standards. The Regulatory Commission of Alaska has recently opened a docket to investigate these standards and has conducted a workshop with utilities to hear proposals for the interconnection of generators to the electric system.

**The proposal will have the effect on the following ‘looming issues.’**

*Reduce the cost of energy for Interior residents* – SNAP is cost neutral, Green premium will have a minor increase for the renewable generation. After initial investment in a system is recovered cost of electricity becomes minimal and potential net positive revenue is possible. In addition if distributed generation continues to grow then it can also lead to a more robust grid, which can also result in lower energy costs.

*New generation capacity/fuel source moved to production* – Small capacity additions are expected under the SNAP program.

*Aging Generation* - Distributed generation – as through the SNAP program – adds increments of new generation capacity.

*PM 2.5 Standards* – Slightly lowered use of fuels from fossil fuels will result in slightly lower emissions.

*Waste stream use* – Wood and paper waste can be used as a fuel source for clean burning combination heat and power units (CHPs) if they prove practical.

*Economic development* – Funds will be paid to local SNAP generators. Should stimulate growth of renewable energy companies that install and distribute systems.

*Sustainability* – SNAP is sustainable

*Global warming* – Reduction in greenhouse gas emissions from use of green technologies. Distributed generation also means less transmission losses, which means higher energy effectiveness, also lowering net greenhouse gas emissions.

*Meeting Renewable Portfolio Standards (RPS)* – SNAP generation can be included in the Existing GVEA RPS.

*Wildfire mitigation* – If combined heat and power generation systems (CHPs) develop and are viable using woody biomass as a fuel source, a significant resource in renewable

and carbon neutral clearing waste created by maintaining area wide fire breaks will be available.

*Joint Utility Planning* – Development of a system-wide Interconnect Standard will aid in determining the rules of the road for distributed generators throughout the State of Alaska.

### **Recommendations for Next Steps**

Evaluate new technologies for use in distributed generation that will decrease capital or production costs.

Assist the GPAC in their evaluation of a “green premium” for renewable electric energy.

Provide input to the RCA or Golden Valley on the proposed Interconnection Standards.  
Support research on clean burning wood fired CHPs for the Tanana Valley.