

**NORTHWEST ARCTIC BOROUGH ASSEMBLY  
RESOLUTION 21-69**

**A RESOLUTION OF THE NORTHWEST ARCTIC BOROUGH ASSEMBLY TO APPROVE A REQUEST FOR FUNDING TO THE ALASKA ENERGY AUTHORITY'S RENEWABLE ENERGY FUND ROUND 14 FOR THE FINAL DESIGN AND PERMITTING OF SOLAR PHOTOVOLTAIC AND BATTERY SYSTEMS FOR THE COMMUNITIES OF SELAWIK, NOORVIK, AMBLER, AND KIANA, AND FOR RELATED PURPOSES.**

**WHEREAS:** the Northwest Arctic Borough Assembly is the governing body of the Northwest Arctic Borough; and

**WHEREAS:** the Borough is a home rule regional government providing essential programs and services to improve the quality of life for all residents in the 11 communities within our boundaries, including Noorvik, Selawik, Ambler, and Kiana; and

**WHEREAS:** the communities of Noorvik, Selawik, Ambler, and Kiana are almost completely dependent on diesel-based electricity generation with extremely high costs for electricity; and

**WHEREAS:** the Northwest Arctic Borough/NANA region has successfully demonstrated solar photovoltaic (PV) projects in all 11 communities in our region with the local water plants and with high penetration solar and battery utility-scale projects in 3 NAB communities; and

**WHEREAS:** to help address the extremely high cost of energy, the four above-identified communities have requested that the Borough support an application to the Renewable Energy Fund for 2022 in an amount up to \$1 million to develop the final design and permitting of high penetration solar-battery systems to connect to their stand-alone diesel power plants and distribution systems; and

**WHEREAS:** the Borough will commit to contributing a 7% cost share of the total budget by providing in-kind staff time associated with grant and project management; and

**WHEREAS:** if awarded, the four communities will directly benefit by having "shovel-ready" projects ready to advance to construction of high


penetration solar-battery hybrid projects that will reduce fossil fuel consumption and lower electricity production costs.

**NOW THEREFORE BE IT RESOLVED:** the Northwest Arctic Borough Assembly approves the NAB's application for the 2022 Alaska Energy Authority's Renewable Energy Fund Program, on behalf of the communities of Noorvik, Selawik, Ambler, and Kiana and supports the Borough's provision of necessary administrative and grant management in-kind support if the funding request is awarded.

**PASSED AND ADOPTED THIS 28<sup>th</sup> DAY OF DECEMBER 2021.**

  
Nathan Hadley, Jr., Assembly President

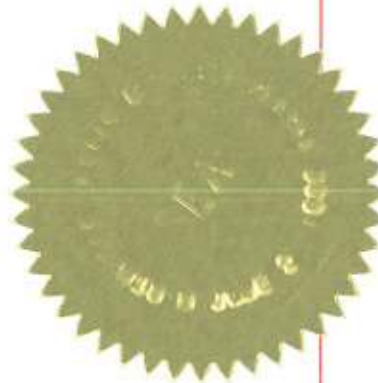
**PASSED AND APPROVED THIS 28<sup>th</sup> DAY OF DECEMBER 2021.**

  
Dickie Moto, Sr., Mayor

**SIGNED AND ATTESTED TO THIS 28<sup>th</sup> DAY OF DECEMBER 2021.**

  
Helena Hildreth, Borough Clerk

**ATTEST:**



## **Project Description for Northwest Arctic Borough Assembly Consideration**

### ***High Penetration Solar and Battery Hybrid Systems for Selawik, Noorvik, Ambler, and Kiana***

The Alaska Energy Authority (AEA) has announced a Renewable Energy Fund grant opportunity that the NAB and our project partners have successfully pursued in the past, with a new deadline of January 18, 2022. We propose conducting final engineering design and permitting for High Penetration Solar and Battery Hybrid Systems for Selawik, Noorvik, Ambler, and Kiana. This is a necessary step prior to actual construction and will result in four “shovel ready” projects with completed system designs, engineering drawings, construction budgets, geotechnical analysis, powerplant details for system integration, and related outputs. The fully constructed projects will allow for each community to completely turn off their diesel generators for hours at a time when there is enough sun and charge in the batteries, and will roughly save 10-15% of total diesel fuel for electricity generation on an annual basis.

Based on recent solar battery hybrid projects in Deering, Buckland, Kotzebue, Shungnak, and Kobuk, and a funded, soon-to-be constructed similar project in Noatak, we have an excellent track record on these projects. This grant request is aimed to facilitate construction of similar projects in the other four communities. It is estimated that the grant funding request will be between \$800,000 - \$900,000, with an in-kind contribution of 7% of the total budget request being provided by waiving some of the grant and project administration costs. This in-kind contribution provides for more points in the scoring of the grant application, making it more competitive and a higher chance of receiving the funds.

The AEA funding announcement states that most (75%) of the funds statewide will be put toward feasibility and final design, NOT toward construction, hence, we are reluctant to ask for construction funds since each of the individual projects is expected to cost about \$2.5 - \$3 million, and there is approximately \$14 million for the entire grant program for all of Alaska. As in previous projects, we will be working closely with NANA Regional Corporation's Village Energy Program on implementing this project if grant funds are awarded.

Thank you for your consideration.