CPRG IMPLEMENTATION GRANTS COMPETITION
COVER PAGE FOR APPLICATION

APPLICANT INFORMATION

Organization: City of Nome, Alaska
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TYPE OF APPLICATION: Individual Applicant
FUNDING REQUESTED: $67,030,000.00
APPLICATION TITLE: Nome Renewable Energy Project

BRIEF DESCRIPTION OF GHG MEASURES: Wind Generation - (1) new EWT wind turbine at Banner Ridge; (4) new EWT turbines at Cape Nome with an 8 mile distribution line. Solar Generation - 3MW of solar PV capacity on Banner Ridge. Battery Storage - 5 MWh battery energy storage system (BESS) additional capacity at the power plant.
SECTORS: Electricity Generation

EXPECTED TOTAL CUMULATIVE GHG EMISSION REDUCTIONS

Estimated cumulative GHG reductions for 2025-2030 (in metric tons): 35.2 kMT

Estimated cumulative GHG reductions from 2025-2050 (in metric tons): 236.6 kMT

LOCATIONS:
City: Nome **State:** Alaska

APPLICABLE PRIORITY CLIMATE ACTION PLAN(S) (PCAP) ON WHICH MEASURES ARE BASED
PCAP Lead Organization(s): PSEAP prepared by the Alaska Municipal League for the Alaska Department of Environmental Conservation. PCAP is being prepared by the Village of Solomon, King Island Native Community, Native Village of Council, and Nome Eskimo Community.
PSEAP Title(s): 2024 State of Alaska Priority Sustainable Energy Action Plan (PSEAP), 2024 Priority Climate Action Plan (PCAP).
PSEAP Website link(s) (if applicable): https://akfederalfunding.org/cprg/

List of GHG reduction measures and PCAP page reference for each measure: Wind generation, solar generation, distribution lines, and battery storage measures are supported in the 2024 State of Alaska PSEAP, *Community Electric Generation and Transmission Projects*, Remote, Islanded Electric Grids, pg. 44-46. The aforementioned renewable energy measures (wind, solar, battery) are also supported in the 2024 PCAP for the Village of Solomon, Nome Eskimo Community, Native Village of Council, and King Island Native Community, *Nome Joint Utility System, pg. 43-44.*

Workplan

Section 1: Overall Project Summary and Approach

The City of Nome has a strong and substantial commitment to provide renewable electric generation to community members in an economically efficient way. The Nome Renewable Energy Project (NREP) is a holistic approach to climate change mitigation that combines the benefits of multiple technology solutions to achieve both immediate and long range GHG reduction. The absence of a larger electric grid requires Nome to generate electricity via a local diesel power plant, creating an isolated grid. These diesel engines emit pollutants and are inefficient, which results in both increased fuel consumption and higher power costs. Installing renewables will help reduce emissions per unit of fuel and improve electricity generation efficiency. The result will collectively offset a substantial amount of KWh annually, leading to long-term emissions reductions. The proposed project is the implementation of (4) EWT turbines at Cape Nome with an 8 mile distribution line, 5MWh battery energy storage system (BESS) at the power plant, and an additional wind turbine and 3MW of solar PV capacity on Banner Ridge.

Nome Joint Utility System (NJUS)'s near-term (by year 2030) vision is to replace 50+ percent of its diesel fuel usage for electricity generation and to help offset heating fuel usage in the Nome school with an electric boiler to make use of excess energy production. Adding (1) 1 MW turbines to Banner Ridge, and a Battery Energy Storage System (BESS), at the power plant, will increase Nome's percentage of energy from renewables to > 20%. This would build out Banner Ridge for wind production. Adding (4) 1 MW turbines to Cape Nome, 12 miles east of Nome, and the installation of a BESS would increase the percentage from renewables to > 40%. The Cape Nome site would have significant room for expansion. The wind turbines will be new generation EWT DW58-1 MW models, yielding a total of 6.8 MW wind power capacity. With enhanced wind turbine utilization from use of a BESS, modeling indicates 64 percent renewable energy penetration, displacement of nearly 1 million gallons of diesel fuel per year, and a decrease of 11,900 MT/year of CO2 emissions (to 9,800 MT/year). Modeling also predicts that 1.2 GWh/year of excess electrical energy not needed to meet electric load demand or necessary to charge the BESS will be diverted to an electric boiler in the Nome school hydronic system to offset 38,000 gallons of the school's 400,000 gallons of annual heating fuel usage.

a. Description of GHG Reduction Measures

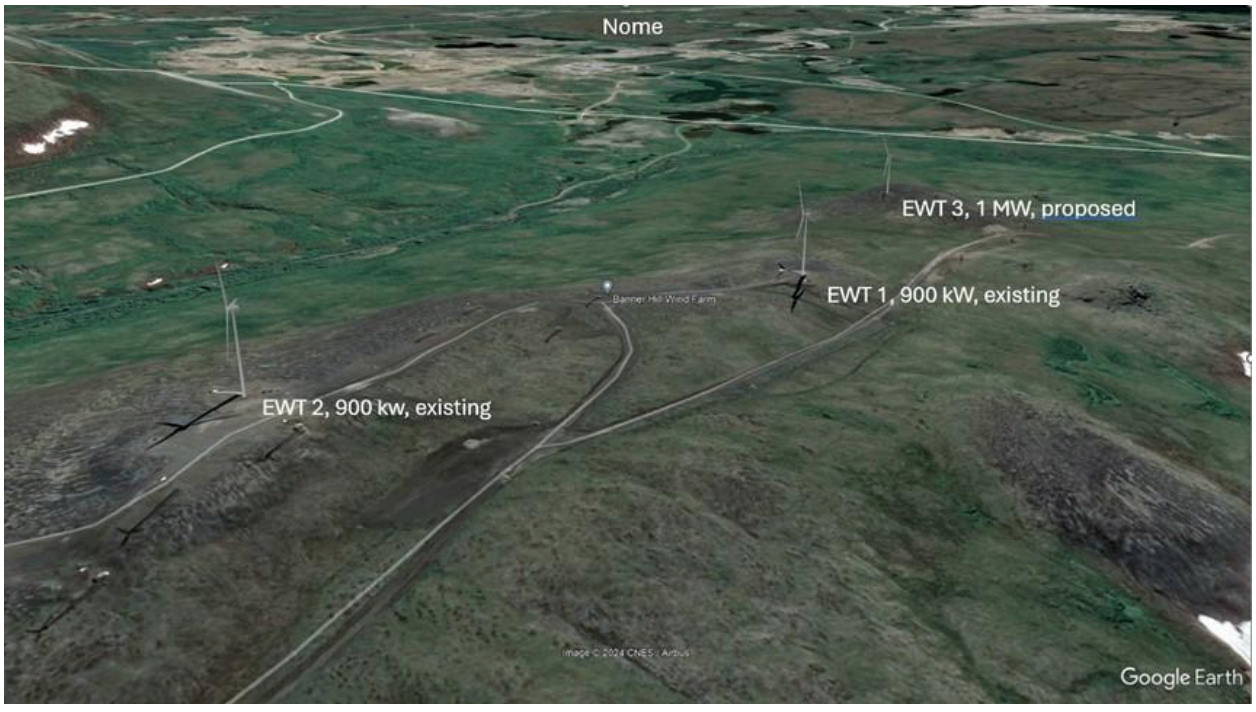
GHG Reduction Measures			
Measure	**Reduction**	**Benefits / Rewards**	**Risks**
Measure 1: Solar Power (3 MW capacity)	1.5 kMT/y	Rapid installation, uncomplicated permitting; relatively low capital cost; low risk	New distribution connection; relatively low capacity factor due to maritime climate

Measure 2: Wind Power and BESS (5 MW new capacity), + Battery Energy Storage System	8.6 kMT/y	Captures Nome's most salient renewable resource, the wind; 300% higher capacity factor than solar power. The BESS is essential for high penetration wind power and will add grid resilience and stability.	Moderately energetic wind environment; high instantaneous penetration requires sophisticated integration; industry-wide production delays
Measure 3: Distribution Line	Enables 6.6 kMT/y	The distribution line to cape Nome enables expansion of renewable energy for the City of Nome. The existing site has a limited footprint and the line to Cape Nome will help the City of Nome reach its renewable energy goals.	Limited line construction crews to complete the work in rural Alaska. Increased material costs due to inflation. Construction window for installation is short due to the northern climate.

Wind Electric Generation

Wind energy has contributed to the community energy grid since 2008, and currently provides 8% of Nome's electrical energy production (and as much as 40% during peak periods). NJUS has two 900 kW capacity EWT wind turbines located on Banner Ridge, approximately 5 miles north of Nome proper (shown as EWT 1 and EWT 2 in the following figure).

Banner Ridge wind farm, Google Earth image with WAsP model overlay, view south



Banner Ridge existing EWT DW52-900 wind turbines, view northeast (D. Vaught photo)

In 2022, NJUS commissioned a study to select the best site on Banner Ridge to host an additional 1 MW capacity turbine. This new turbine is shown in the image above as EWT 3, which would be the turbine's designation in the power plant SCADA system. With a Battery Energy Storage System (BESS), this would increase Nome's annual percentage of electrical energy from renewables (at current consumption levels) to more than 20%.

Erecting four EWT wind turbines on the north side of Cape Nome (located 12 miles east of Nome proper and approximately 1 mile north of the Cape Nome quarry site on the southern face of the cape), along with the BESS installation, would increase Nome's percentage of electrical energy generation (at current consumption levels) from renewables to 40%. This requires extension of the electrical distribution line but has significant room for future expansion.

Cape Nome summit, north side, view west toward City of Nome (D. Vaught photo)

Wind-derived energy saves the community money by offsetting diesel use. Its variable nature however does not diminish the need to maintain diesel generation capacity.

Battery Storage

Residents need a reliable supply of electricity because winter temperatures can fall as low as minus 50 °F. Backup power therefore has to be available in the event of an outage. A battery energy storage system (BESS) backup solution is a cost-effective solution that enables greater reduction of carbon emissions than solar and wind power assets alone. The new battery energy storage system will be used to balance system demands with its greater ability to deliver or receive energy. This also allows base-loaded thermal units to be run more efficiently while allowing for increased integration of utility scale non-dispatchable renewable energy sources.

Additional Key Information

Nome's current electric energy production is 32,500 MWh/yr to meet community electric needs. Ninety-two percent of Nome's electric power is produced by diesel generators and 8% from the two existing EWT DW52-900 wind turbines. Approximately 1.8 million gallons of #2 diesel are consumed annually for power generation. The total diesel capacity is 16 MW. Of that, 10.4 MW is from two Wartsila 5.2 MW prime generators in the new powerhouse and 5.6 MW of backup generator capacity (and potentially prime use again with expanded wind power and BESS) from smaller Caterpillar generators in the old powerhouse.

Wind energy saves ratepayers by displacing diesel consumption. Nome's diesel efficiency is one of the highest in the state based on PCE statistical data, but the disadvantages of diesel are the cost and emissions that contribute to climate change.

Generator	Description	Size (kW)	Remarks
12	Caterpillar Diesel-Fired	3,660	Backup
14	Caterpillar Diesel-Fired	1,875	Backup
15	Wartsila Diesel-Fired	5,211	Primary
16	Wartsila Diesel-Fired	5,211	Primary
EWT1	EWT DW52-900 Wind Turbine	900	Primary
EWT2	EWT DW52-900 Wind Turbine	900	Primary

Fuel oil for heating water and buildings represents a significant cost to area residents. Nome Census Area space heating costs per square foot for a single-family home are more than three times higher than costs in Anchorage and more than double those in Fairbanks (source: Bering Strait Community Needs Assessment prepared for Kawerak, Inc., by McKinley Research Group, March 2022). On average, fuel vendors in Nome deliver approximately 1,100 gallons per building each year. Using an estimated cost of $7.50 / gallon for fuel delivered this summer, this works out to over $8,300 per Nome household.

Less fuel consumption also means that fuel deliveries do not have to occur as regularly, resulting in greater resilience to disruptive events concerning fuel conveyance such as freight disruption by weather and disaster that may materially delay fuel shipments. Over the long-term, reduced dependence on diesel may mean that bulk fuel systems in Nome will not need to maintain such high levels of available fuel, reducing a community's exposure to risks regarding spills such as surface water contamination, fire, and/or personal injuries.

NJUS is the only utility in Nome, thereby serving all four Nome-based tribes. NJUS is managed by an elected board of directors, all of which represent the City of Nome as a whole, including Larry Pederson who is an elected leader of the Native Village of Council. NJUS' aim is to decrease the heavy reliance on fuel for electricity, heating and water needs within Nome. For a successful and holistic approach to developing action items in efforts to reduce greenhouse gas emissions and mitigate climate change in a geographic location that has huge negative impacts from extreme weather events, NJUS elected to collaborate with the Climate Action Planning Committee for the Village of Solomon, Nome Eskimo Community, Native Village of Council, and King Island Native Community Tribal Climate Action Planning

Committee in the development of the 2024 Priority Climate Action Plan (PCAP) which will support the Tribes and Territories CPRG Competition. Collectively, all four Nome based tribes have decided to target a minimum 40% GHG reduction, with a goal of 60% GHG reduction by 2032. The biggest benefit of having such a targeted GHG reduction is understanding that lowering the cost of heating in cold climates for comfortability, air quality, and healthy homes is also contributing to the mitigation of the GHG atmosphere and pollution that our community members are breathing in who rely on our land/environments for eating, surviving, and culturally thriving. The partnership between NJUS and the four Nome-based tribes is integral planning and implementation of clean, healthy, sustainable electrification alternatives to diesel fuel consumption. Wind generation, solar generation, distribution lines, and battery storage measures are supported in the 2024 State of Alaska PSEAP, *Community Electric Generation and Transmission Projects*, Remote, Islanded Electric Grids, pg. 44-46. The aforementioned renewable energy measures are also supported in the 2024 PCAP for the Village of Solomon, Nome Eskimo Community, Native Village of Council, and King Island Native Community, *Nome Joint Utility System, pg. 43-44.*

b. Demonstration of Funding Need

National competitive funding opportunities are frequently difficult to access for Alaska projects, especially for remote, islanded grid communities. Beyond the limited nature of funding, there are a combination of factors that make federal funding for Alaska rural energy projects difficult to access. These include logistical hurdles – which increase costs and timelines – and administrative burdens – which decrease the ability of short-staffed utilities to respond. Additionally, with inability to fully-substitute diesel fueled electric generation with renewable generation owing to considerations for life and safety, with many potential renewable generation types characterized as intermittent in their ability to deliver power when it is needed, many of the critical projects regarding operational and efficiency upgrades to diesel-generation related infrastructure are found to be ineligible for such national, competitive opportunities and otherwise.

City of Nome has acquired steady, but limited funding to implement measures such as renewable energy projects, energy efficiency improvements, and carbon capture and storage facilities. Given the impetus to identify high impact measures that are ready to implement, existing projects can be boosted or completed with CPRG funding to deliver significant, long-lasting emissions reductions.

SECURED GRANTS

- 2008 Alaska Energy Authority, Renewable Energy Fund: 900 kW EWT Wind Turbine, $4M grant + $1.5M utility match
- 2009 Alaska Energy Authority, Renewable Energy Fund: 900 kW EWT Wind Turbine, $4M grant + $611k utility match
- Alaska Energy Authority, Renewable Energy Found Round 14 (REF14): Nome Battery Energy Storage System (2MW, 2MWh), $2M grant + $700k utility match

RANKED – AWARD PENDING POTENTIAL APPROPRIATION

- 2024 Alaska Energy Authority, Renewable Energy Fund: NJUSolar 1 MW solar farm, $4M
- 2023 USDA High Energy Cost Grant, repurpose diesel generator jacket water (waste) heat for organic rankine cycle power units, $2.9M

c. Transformative Impact

Environmental Benefits: Nome is a remote and isolated community that is strategically located along the Bering Sea. The region around Nome has been inhabited by Alaska Native peoples, including the Inupiat, for thousands of years. The city's name is derived from the Inupiaq word "Sitnok," meaning "where there is an abundance of fish." The city has a rich cultural heritage, with traditional practices and customs still observed by many residents. Nome experiences a subarctic climate, characterized by long, cold winters and short, cool summers. It is one of the coldest inhabited places in the United States. It is home to a variety of Arctic wildlife, including caribou, muskoxen, seals, and numerous bird species. Alaska's Bering Sea is particularly vulnerable to the effects of climate change, including warming temperatures, ocean acidification, and changes in sea ice extent and timing. These changes can have significant impacts on marine ecosystems, fisheries, and indigenous communities that depend on them. This project aims to reduce those impacts.

Cost Savings: At $232.14, the average monthly residential electric bill in the Nome Census Area is 69.2% higher than the nationwide average. Nome residents purchase electricity for, on average, 47.64 cents per kilowatt hour, which is 99% higher than the average Alaska price of 23.89 cents/kWh and 197% higher than the national average of 16.01 cents/kWh. Harnessing power from the combined wind, solar, and BESS system will not only result in sustainable energy, including reducing diesel fuels consumption and will maintain energy rates for future generations. A distinguishing feature of this project is its commitment to directly benefit low-income and disadvantaged households. With no financial burden imposed on participants, the impact becomes readily accessible to such low-income and disadvantaged households, granting access to the transformative potential of renewable energy to those who might otherwise never have the opportunity. The project aims to provide more predictable and stable electricity prices for residents, which can help households, businesses, and industries to budget more effectively. Additionally, cost savings from lower energy bills can translate into increased disposable income for consumers, stimulating local economic activity and supporting businesses. During times of excess renewable energy and low community loads (warmer months of the year) will allow the community pools electric boiler to heat the swimming pool. As previously stated, the model shows a reduction in 38,000 gallons of diesel fuel being saved by this electric boiler and the additional renewable energy provided by this grant.

Community Energy Security & Resilience: Beyond the immediate cost savings, transitioning to renewable energy generation plays a pivotal role in bolstering the reliability and resilience of aging and isolated infrastructure. The risk of damage to associated community infrastructure rural Alaskan communities face significantly increases when blackouts occur, especially during the harsh winter months when rapid freeze-ups can damage the fragile above-ground water and sewer systems. Integration of wind turbines and battery systems into the existing diesel grid will be a game-changer, significantly diminishing the

frequency, duration, and impacts of these disruptive events. In essence, this project serves as a lifeline for a community in dire need of enhanced energy stability.

Reduced Carbon Footprint for Port of Nome: Nome's proximity to the Arctic Circle and its location on the Bering Sea make it a strategic spot. The Port of Nome is under expansion which will enable it to accommodate a wide range of vessels for trade, tourism, and national security. By transitioning to renewable energy generation, Port of Nome could significantly reduce its carbon footprint and contribute to local and global efforts to combat climate change. This is particularly important in Alaska, where climate change impacts are already being felt acutely. Nome's role as the largest fisheries port in the U.S. and its strategic trade route location means the impact of the increased resilience and electricity cost is experienced in Unalaska, throughout the U.S., and globally.

Subsistence Community Sustainability: The Bering Sea is particularly vulnerable to the effects of climate change, including warming temperatures, ocean acidification, and changes in sea ice extent and timing. These changes can have significant impacts on marine ecosystems, fisheries, and indigenous communities that depend on them. Indigenous communities such as the Yup'ik, Inupiat, and Siberian Yupik have inhabited the coastal regions of the Bering Sea for thousands of years. These communities have deep cultural and subsistence ties to the sea, relying on its resources for food, materials, and cultural practices. Transitioning to clean energy not only preserves the environmental integrity of ancestral lands but also supports traditional livelihoods tied to the land.

Job Creation: Construction, operation, and maintenance of renewable energy systems require a skilled workforce, leading to training and employment opportunities in the region. The transition to clean energy creates new job opportunities in tribal communities in the region, contributing to economic development, poverty alleviation, and self-sufficiency. The Bering Strait region has systems in place to support partnerships between Municipalities and Tribal Governments such as green jobs programs and initiatives to promote workforce participation in clean energy projects. It is estimated that at least 50% of the workforce in current clean energy projects in the region are DAC/tribal members. The workforce goals will be similar for the Nome Renewable Energy Project.

Reduced Out-migration: Households in Nome rely on heating oil (with rates that fluctuate from $3.23/gallon to $16/gallon) and incur a separate heating fuel bill in addition to their electric bill ($215.41/month on average). With energy costs being a primary cost input regarding cost-of-living expenses, there also remains additional risk that such cost escalations may result in further out-migration from Unalaska to elsewhere in the nation. Clean energy sources have lower operating and maintenance costs and are not subject to fuel price fluctuations. Lower electric bills help alleviate energy poverty by making energy services more affordable and accessible to all members of society. When native peoples are forced to relocate from their ancestral lands due to financial reasons, it represents not only an economic issue but also a profound social, cultural, and environmental injustice with long-lasting consequences for both the affected communities and society as a whole. By implementing these measures in a holistic and culturally sensitive manner, it is possible to stem out-migration from

indigenous communities and support sustainable development that respects the rights, aspirations, and well-being of indigenous peoples.

Geopolitical Importance: Nome's proximity to the Arctic Ocean make it an important hub for transportation, commerce, and security in the northernmost reaches of the United States. The Port of Nome provides a critical link with 60 communities and the rest of Alaska. The Port is currently being expanded and will be the United States only deep water port in the Arctic. This expansion will improve support for maritime missions: cargo transportation, search and rescue, emergency and oil spill response, natural resource exploration, and national security. One of the Navy's energy goals is to demonstrate and then deploy a "Great Green Fleet," which will include ships and aircraft using alternative sources of energy. There is a shared need and priority to increase the deployment of renewable energy technologies to generate electricity for shore installations.

Infrastructure Development: The new distribution line connecting Nome's existing power grid to the expanded renewable energy site located at Cape Nome will provide expanded economic opportunities for the community. The community of Nome currently faces housing shortages due to limited infrastructure and expanding affordable power to the community and opening additional accessible land will provide additional opportunities to build housing for the community. Additionally, the line will provide an opportunity to provide power to the Cape Nome rock quarry that typically operates crushers and large equipment on diesel fuel. With the additional wind and solar resources available at Cape Nome, electric vehicles and crushers that will be used to expand the Port of Nome will become feasible and cost effective, reducing GHG even further for the expanding community. The deep water port currently planned for Nome will require additional power and the only way to offset the use of diesel fuel will be the expanded renewable energy site located at Cape Nome.

Scalability: Cape Nome's renewable energy site is very large and will allow for future expansion of solar and wind energy at this location. As the community of Nome energy needs expand due to the planned Nome Deep Water Port, Cape Nome's wind and solar capacity can be expanded to support the energy demand. The Cape Nome site is critical for the community of Nome to reduce its dependency on diesel fuel and provide the community with sustainable energy for future generations.

Section 2: Impact of GHG Reduction Measures

In addition to carbon dioxide, Homer software that was used to model the electrical system from baseline to project completion with 3 MW solar, 5 MW new wind, and 7.75 MWh BESS calculates other environmental pollutant emissions associated with burning fossil fuel for electrical energy generation. These co-benefits are listed below. See the Technical Appendix for details.

Environmental pollutant summary table

	Baseline (2 MW wind)		7 MW wind, 3 MW solar, 7.5 MWh		Reduction	Reduction Quantity	
Pollutant	Value	Units	Value	Units	%	Value	Units
Carbon dioxide	18.9	kMT/y	8.8	kMT/y	53.3	10.1	kMT/y
Carbon monoxide	58.9	MT/y	6.2	MT/y	89.4	52.7	MT/y
Unburned HC	4.4	MT/y	1.6	MT/y	64.8	2.9	MT/y
Particulate matter	0.8	MT/y	0.4	MT/y	53.8	0.4	MT/y
Sulfur dioxide	38.4	MT/y	18.0	MT/y	53.1	20.4	MT/y
Nitrogen oxides	54.8	MT/y	47.4	MT/y	13.5	7.4	MT/y

a. Magnitude of GHG Reductions from 2025 through 2030

NJUS anticipates 10.1 kMT/year of GHG reduction, or 53% compared to baseline, with 3 MW solar, 5 MW new wind, and 7.75 MWh BESS capacities for the electric load demands of the City of Nome. Note that this 10.1 kMT reduction rate will occur during year 3 when the full project build-out is completed. To account for the ramped build out of the project with solar power only in year 1 and wind construction in two phases over the following two years, a phase-in of GHG reduction was calculated. This sums to 35.2 kMT for project years 1-to-5 (2025 to 2030) of the project. See the Technical Appendix for details.

b. Magnitude of GHG Reductions from 2025 through 2050

The project is planned to be completed in year 3 of the project and then operational through 2050. This results in a total GHG reduction of 236.6 kMT/year for the life of the project. See the Technical Appendix for details.

c. Cost Effectiveness of GHG Reductions

The total reduction in GHG metric tons for years 1-5 is 35,200 MT of CO2e and a total project cost of $67,030,000.00 provides a cost effective rate of $1,905.00/MT CO2e. The $1,905.00/MT C02 is only for years 1-5. The model developed for this project includes a life expectancy of 25 years and will most likely have a total project life of 35 years. The cost effective rate for 25 years is $284.02/MT C02e, which is substantially less than the $1,905.00/MT C02 for the first 5 years. See the Technical Appendix for further details.

Documentation of GHG Reduction Assumptions

A technical appendix demonstrating the reasonableness of the GHG emission reduction is attached. See TechAppx_CityofNome.pdf

Section 3: Environmental Results – Outputs, Outcomes, and Performance Measures

a. Expected Outputs and Outcomes

The specific outcome of these measures will be significant and lasting CAP and HAP reduction for the Nome region. With diesel fueled power generation shifted to renewables, every gallon of fuel saved results in a direct reduction of carbon emissions, nitrous oxides, and PM. The high output diesel units operated by the city are presently located in areas of the community populated by disadvantaged community members.

b. Performance Measures and Plan

GHG reduction will be indirectly tracked with Nome's integrated Supervisory Control and Data Acquisition (SCADA) control network in the powerhouse. The SCADA system records high-resolution operational data, such as the operational status of all generators and power levels and fuel usage of each. This SCADA system currently only records generation assets in the powerhouse, but will be expanded during this project to include data from the solar farm, wind turbines, and BESS. To measure GHG reduction, City of Nome will calculate expected fuel usage from baseline operations (no solar, wind, and BESS assets) and compare to actual fuel usage. This can be accomplished automatically with algorithms programmed into the SCADA and be high resolution. Summary data extracted from the SCADA will form the basis of reporting to demonstrate to itself and others that the City of Nome is meeting its renewable energy goals.

c. Authorities, Implementation Timeline, and Milestones

The projected grant performance period for the project is from October 1, 2024 to September 30, 2029. This schedule allows for long lead times in procurement of equipment and supplies, and severe weather which can cause flight cancellations delaying contractors' travel to Nome, and considers the short window for construction activities in Nome, typically April through October. All large equipment will be shipped to Nome from the Port of Seattle. Due to the cold climate in Nome the shipping and construction window to complete the installation of the turbines, BESS and solar array are limited from June 1st through October 15th.

Key contractors, technology vendors, and stakeholders are listed as follows. The contractor team was selected based on directly applicable experience and each was involved in the development of this grant proposal. The City of Nome intends to de-risk the project by starting with an experienced team from day one of the project execution.

- **City of Nome (CON)** is the lead applicant and will oversee all funding and work under this contract
- **Nome Joint Utility System (NJUS)** is a subsidiary of the City of Nome and will provide project controls and budgeting. This information will be provided monthly to the EPA. NJUS has managed several large grant projects in the past including the power plant construction, wind turbine installation and the new BESS.
- **Electric Power Systems (EPS)** will be the lead engineering and Right-of-Way (ROW) firm representing the City of Nome. EPS will coordinate all design, permitting, and commissioning activities under the oversight and cost controls of the City of Nome project manager. EPS is an experienced consulting firm based out of Anchorage, Alaska with expertise in all aspects of electric power generation and distribution.
- **V3 Energy, LLC (V3)** will provide wind resource studies and GHG reduction modeling. V3 is one of Alaska's leading consulting groups that provides wind studies and has an extensive project history at locations throughout the state.

- **EWT** is the proposed wind turbine vendor. The extreme weather conditions and remote region of Alaska is best served with 1 MW direct-drive turbines such as those provided by EWT. EWT was recently selected to replace three Class 1A turbines on the South Pole, has a support network in the State of Alaska, and has specialized experience that is applicable to this application.

Year 1: Planning and Preparatory Phase
Months 1-6: Project Initiation and Planning

- Define project scope, objectives, and requirements.
- Engage with the established project team and key stakeholders.
- Conduct initial site assessments and data collection for Cape Nome and Banner Ridge.
- Provide design concepts and major equipment costs.
- Begin stakeholder engagement and public outreach efforts.
- Provide project presentation to board of directors and community leadership.

Months 7-12: Detailed Design and Permitting

- Obtain necessary environmental and regulatory permits for project activities
- Develop project specifications, materials lists, and major procurement plans
- Complete land surveys, easement acquisitions, and right-of-way negotiations
- Procure major material for Banner Ridge and Cape Nome
- Finalize project schedule and risk management plans
- Prepare issued for construction drawing packages
- Prepare performance specifications

Year 2: Procurement and Site Preparation
Months 13-18: Procurement and Contracting

- Issue requests for proposals (RFPs) or bids for construction and contracted services
- Evaluate vendor proposals and select contractors based on technical and commercial criteria
- Negotiate contracts and finalize agreements with selected contractors
- Mobilize contract teams and equipment to project sites
- Establish temporary facilities, access roads, and safety measures
- Conduct kick-off meetings with contractors to review project plans and safety protocols

Months 19-24: Install of Banner Ridge Solar and Wind Turbine Infrastructure, Installation of BESS at Power plant

- Installation of foundations and racking system for Banner Ridge Solar Farm
- Installation of foundation for third wind turbine at Banner Ridge
- Installation of all underground conduits to existing 25kV rock creek distribution line
- Installation of solar panels, inverters, combiner boxes and step up transformers
- Installation of BESS at existing Power Plant 4.16kV bus

Year 3: Continue Banner Ridge Wind Turbine Installation and Cape Nome Wind Turbines

Months 25-30 : Installation of Distribution Line to Cape Nome

- Installation of 14 miles of 25kV distribution line to Cape Nome Wind Turbines
- Installation of 25kV reclosers
- Installation of step up transformers
- Installation of underground electrical
- Installation of Wind Turbine Foundations
- Commissioning of BESS
- Commissioning of Banner Ridge Solar

Months 31-36: Installation of Wind Turbine Structures at Cape Nome

- Energize 25kV Distribution line to Cape Nome
- Installation of Wind Turbine Structure
- Installation of Wind Turbine
- Commissioning of Wind Turbines

Year 4: Finalization and Closeout Phase
Months 37-48: Finalization and Closeout

- Complete remaining activities, inspections, and quality assurance checks
- Address any outstanding punch list items or deficiencies identified
- Conduct final testing, Integration, and performance evaluations of equipment and infrastructure.
- Prepare project documentation, record drawings, as-built plans, and operation and maintenance manuals
- Provide final detailed cost breakdowns for each portion of the project. This will include equipment, material, subcontracts and any additional costs the City of Nome incurs during the project.
- Conduct project closeout meetings and transition project deliverables and responsibilities to City operations and maintenance team

Section 4: Low-Income and Disadvantaged Communities

a. <u>Community Benefits</u>

Communities Affected: *All designations of disadvantaged or not disadvantaged communities were made using the Climate and Economic Justice Screening Tool.*

Alaska Natives comprise half of Nome's 3,506 residents, and about 75% of residents in nearby communities for a total of over 10,000 residents in the region. Stabilizing the cost of electricity, while exceeding environmental standards will ensure that traditional food gathering and other culturally important activities continue to thrive. All residents of the City of Nome, Tribal Members of Village of Solomon, Nome Eskimo Community, Native Village of Council, and King Island Native Community, and renters and homeowners with residences built and maintained by the specific building owner (building maintenance varies from the individual homeowner, Bering Straits Regional Housing Authority, Nome

Eskimo Community, etc.) will see stable, lower electricity rates and improvements in public health and economic development as a result of diminished use of fossil fuels for electricity and heating.

Nome Census Area: This tract (02180000200) is considered partially disadvantaged. It is surrounded by tracts that are disadvantaged but does not meet the adjusted low income threshold. The 4 Alaska Native Villages in this tract that are Federally Recognized are considered disadvantaged. Nome is completely surrounded by a disadvantaged census tract where 16 Alaska Native Villages are located. Nome's energy costs are at the 81st percentile. The number of people that have been told they have asthma is in the 73rd percentile. According to the CDC/ATSDR Social Vulnerability Index, Nome is considered a distressed community and its SVI is High. HUD also considers Nome a Difficult Development Area (DDA) with high land, construction, and utility costs relative to the area median income.

DAC Benefits of the proposed project are detailed below:

<table>
<tr><td colspan="2">(1) A decrease in energy burden (costs)</td><td colspan="2">Metrics: Quarterly tracking of residential rates & electrical consumption.</td><td>Milestones: Project Initiation.</td></tr>
<tr><td>DAC: Low income households in City of Nome and in the surrounding Native Villages.</td><td>How: Direct, via rates to households.</td><td>When: Project Initiation.</td><td colspan="2">CBO: Bering Straits Native Corporation, Alaska Energy Authority.</td></tr>
<tr><td colspan="5">Benefit 1.1 Keep electricity rates low (30% energy cost reduction): The costs of operating electrically based heating systems are directly proportional to the cost per kWh used. Increasing availability of electrical energy beyond that which is currently needed will enable the sale of electricity at substantially reduced rates during times that the energy would otherwise not be captured (curtailed). Renewable energy systems have relatively low operating costs once installed, providing stable and predictable energy prices for low-income households. According to the CEJST, Energy costs in Nome are at the 81st percentile and at the 99th percentile for the surrounding native villages. A typical cost for a Nome resident to heat their home with home heating fuel is $7,600 / yr (for 2023). Nome homes use on average 1070 gallons of fuel oil per year (last year's average price was $7.10 / gallon). This project aims to reduce energy costs by 30% for 100% of disadvantaged residents in Nome and the surrounding communities of King Island, Council, and Solomon.</td></tr>
<tr><td colspan="2">(2) A decrease in environmental exposure and burdens</td><td colspan="2">Metrics: Hospital/Doctor visits related to respiratory episodes.</td><td>Milestones: Project Completion.</td></tr>
<tr><td>DAC: Children and adults with respiratory illness, Low income households, Alaska Native and other minority residents in</td><td>How: Direct reduction due to not running diesel generators, Indirect by supporting electrification.</td><td>When: Immediately after project completion.</td><td colspan="2">CBO: Bering Straits Native Corporation, NJUS & the City of Nome.</td></tr>
</table>

Nome and in the surrounding Native Villages.			
Benefit 2.1 Reduce emissions associated with generating electricity with diesel generators within the City of Unalaska and continue to encourage beneficial electrification: Reducing reliance on fossil fuels can improve air quality, benefiting the health and well-being of DAC residents that may be disproportionately affected by pollution. American Indians/Alaska Natives are 20% more likely to have asthma and the death rate from asthma is 41% higher than white Americans. The proposed project aims to eliminate 10.1 million gallons/yr of diesel fuel, 7.4 MT/yr of NOx, 0.4 MT/yr of PM10, and 10.1 kMT/yr of CO2 from the environment every year through 2050.			
(3) An increase in resilience and continuous power generation	**Metrics:** City of Nome operations and residential electricity costs.	**Milestones:** Project Completion.	
DAC: Low income households in City of Nome and in the surrounding Native Villages.	**How:** Direct via rates.	**When:** Immediately after project completion.	**CBO:** Bering Straits Native Corporation, Alaska Energy Authority
Benefit 3.1 Maintain dependable and affordable energy access and availability: This project is critical to long-term reliability and availability of low-cost, renewable energy for the City of Nome and especially vulnerable energy insecure community members. The project is about generation resilience and affordability (which enable community resilience). Affordable electricity is essential to making electrification truly beneficial and accessible to our community. Renewable wind, supported by a battery energy storage system, can provide a consistent and reliable source of energy for communities in Alaska for decades or even centuries with proper management, contributing to sustained GHG emission reductions over time.			
(4) Increased Job Creation and Economic Development	**Metrics:** Percentage of Nome-area labor costs performed by Nome residents.	**Milestones:** Partner with local organizations to offer clean energy training and apprenticeship opportunities.	
DAC: Low income households in City of Nome and in the surrounding Native Villages.	**How:** The addition of high quality jobs available to community members.	**When:** During and after project completion.	**CBO:** Bering Straits Native Corporation.
Benefit 4.1 Job creation in the renewable energy sector: The development and operation of renewable energy projects contribute to the creation of high-quality jobs across a range of disciplines and sectors, offering competitive wages, career stability, and opportunities for advancement in a growing industry focused on sustainable energy production. The City of Nome and surrounding communities are home to 20 Federally recognized Tribes. Investing in local staff (Alaska-based and community-based) as			

<table>
<tr><td colspan="4">employees and as independent contractors will enable a local, qualified, and fully staffed construction and operations and maintenance effort for the proposed project. City of Nome commits to implementing a plan to reduce barriers and improve access to jobs for local and underrepresented workers, including DAC residents. The estimated number of jobs created in identified communities resulting from the proposed project is: 1 line crew, 2 wind farm maintenance techs, 3 home heating installers. There is also a possibility for a resident to start a small business for home heating maintenance.</td></tr>
<tr><td colspan="2">(5) Increase parity in clean energy technology access and adoption</td><td colspan="2">Metrics: Delivered energy cost per kWh (overall) for area residents.</td><td>Milestones: Project Completion.</td></tr>
<tr><td>DAC: Low income households in City of Nome and in the surrounding Native Villages.</td><td>How: Indirect, access and adoption will be easier with reliably low-cost electricity.</td><td>When: Immediately after project completion.</td><td>CBO: NJUS & City of Nome.</td></tr>
<tr><td colspan="4">Benefit 5.1 Keeping electricity affordable, making beneficial electrification accessible to our entire community, including those with limited financial resources: The City of Nomestruction of the line extension needed to bring wind energy from Cape Nome will also serve to distribute electrical energy to homes, subsistence gathering camps along the route, and quarry operations at Cape Nome operated by Bering Straits Native Corporation. Also, installing electric heaters for water and space heating that will only be used during periods of low-cost energy availability will result in financial savings for all as expensive home heating oil is displaced.</td></tr>
</table>

Potential Negative Project Impacts to Low-Income and Disadvantaged Communities and Strategies for Mitigating those Risks:

Displacement and Land Use: The project is not expected to cause any displacement or land use issues.

Health and Safety: The completion of the renewable energy project is expected to result in beneficial health and safety outcomes.

Economic Impacts: The proposed project is expected to bring numerous benefits to the community including job creation. City of Nome prioritizes local hiring and training programs to maximize job creation opportunities for local residents. City of Nome commits to develop local procurement policies to encourage the use of local goods and services, benefiting local businesses. City of Nome commits to establish community benefit agreements to ensure a portion of project revenues is invested in local infrastructure, services, or community development programs.

Cultural and Social Impacts: Cultural considerations related to land use, subsistence activities, and cultural practices with local community stakeholders have been taken into account to ensure that the project respects and aligns with community values and priorities. The proposed project will not introduce conflicts with cultural practices or resources. The indigenous communities within and around

Nome support the project and desire to have lower energy costs. The City of Nome will continue to respect indigenous rights and engage in meaningful consultation and collaboration with indigenous communities throughout the project lifecycle and thereafter.

Environmental Impacts: City of Nome commits to implementing sustainable land use and management practices. City of Nome commits to monitoring and mitigating air and water pollution through emissions controls and treatment systems.

Equitable Workforce Development

NJUS, a component unit of the City of Nome, is responsible for electric generation, electrical distribution, water and wastewater utilities in Nome. 56% of NJUS workforce is Alaska Native. As a comparison, 51% of the Nome population is indigenous.

Alaska boasts a network of vocational and technical education institutions, including the University of Alaska system, community colleges, and trade schools, which provide tailored training programs aligned with the state's workforce needs. NJUS partners with the University of Alaska for summer engineering intern placements for Alaska Native students.

NJUS has coordinated with Kawerak Inc., a nonprofit tribal consortium that provides over 40 different programs to the Inupiaq, St. Lawrence Island Yupik and Yup'ik people who reside in 16 communities of western Alaska and represent the 20 federally recognized tribes in the Bering Strait Region. Kawerak has funded CDL training and testing for NJUS Alaska Native employees to obtain their commercial drivers license.

Norton Sound Health Corporation, a tribally owned and operated, independent, not-for-profit organization committed to providing the Norton Sound region with the highest quality health, funds workforce training for regional water and sewer related activities in the areas of safety, back-flow preventer maintenance, etc.

Bering Straits Native Corporation is headquartered in Nome. For the proposed project, NJUS would partner with BSNC and utilize their talent pool for construction and support services.

City of Nome annually reviews and renews its commitment to Equal Employment Opportunity and Affirmative Action to "create an environment of acceptance and inclusion of all employees that values diversity and mutual respect and is free from harassment or discrimination against employees, customers, suppliers, and other contacts in all aspects of daily operations." All personnel actions – recruitment, hiring, training, promotion, compensation, benefits, transfers, layoffs and recall from layoffs, access to training, education, tuition assistance, and social recreation programs – are enacted without regard to race, color, religion, national origin, citizenship, sex (including pregnancy), sexual orientation, gender identity or expression, marital status, veteran's status, age, disability, or any other classification protected by non-discrimination law. In accordance with the Anti-Harassment and

Non-Discrimination policy, any form of discrimination or harassment of one individual by another will not be tolerated.

Community Partnerships
City of Nome commits to implementing a plan to reduce barriers and improve access to jobs for local and underrepresented workers, including DAC residents, those with disabilities, returning citizens, opportunity youth, and veterans. City of Nome will provide targeted opportunities and resources to Alaska Native and other disadvantaged and local job seekers and contractors by leveraging our relationships with Tribal Governments, local contractors, local utilities, and regional organizations. City of Nome in collaboration with local tribes and native corporations and consortiums is creating a robust recruiting action plan that includes a strong focus on building diverse recruitment pipelines into craft positions and engineering roles. In support of this plan, we will continue to partner with:

- Partnership with IBEW Local 1547 for Line Distribution, IUOE Local 302 for Power Generation, and APEA Local 6138 for Water/Sewer and Administrative functions. Two-thirds of the utility's Foreman are Alaska Native.
- Partnership with Bering Straits Native Corporation and Sitnasuak Native Corporation as well as Kawerak Inc., a nonprofit tribal consortium that provides over 40 different programs to the Inupiaq, St. Lawrence Island Yupik and Yup'ik people who reside in 16 communities of western Alaska and represent the 20 federally recognized tribes in the Bering Strait Region.
- Partnership with the University of Alaska system, community colleges, and trade schools, which provide tailored training programs aligned with the state's workforce needs. NJUS partners with the University of Alaska's Native Science and Engineering Program for summer engineering intern placements for Alaska Native students. NJUS has a returning summer intern that is an Alaska Native who was hired based on his qualifications and may become a full time utility engineer at NJUS after his program completion.

b. <u>Community Engagement</u>

Community and Labor Engagement
To understand the perspectives and needs of community members and labor, City of Nome proactively engages with stakeholders through various communication methods, partnerships, committees and recurring meetings, research and surveys, employees who are directly responsible for stakeholder engagements, and by monitoring emerging initiatives and regulatory proceedings. Stakeholders include residential, commercial, and industrial customers, residents of City of Nome, Alaska Native Tribes and Tribal organizations, non-profit and low-income advocates, environmental groups, federal, state, and local regulators, elected officials, and more. The proposed project also aligns with multiple goals and objectives in local and regional plans that are based on multi-year stakeholder engagement. These include the Tribal PCAP for the Village of Solomon, Nome Eskimo Community, Native Village of Council, and King Island Native Community under the measure on Energy Generation. Renewable generation projects are supported in the 2024 State of Alaska Priority Sustainable Energy Action Plan (PSEAP), https://akfederalfunding.org/cprg/, Community Electric Generation and Transmission Projects, measure

for Remote, Islanded Electric Grids, pg. 44-46. In addition, the project will support Goal 1, “Tackle the Climate Crisis” Objective 1.1, “Reduce Emissions that Cause Climate Change,” of EPA’s Strategic Plan.

On August 5, 2022, Governor Dunleavy and Senator Click Bishop visited Nome to attend a community energy discussion and toured the utility power plant, fuel docks, tank farm, and wind farm. A meeting was held with energy stakeholders that included the Governor, Senator, Nome Mayor, Utility Manager, City Manager, Port Director, Members of City Council and the Port Commission, Vice Chancellor of Alaska Center for Energy and Power at University of Alaska Fairbanks and Campus Director of the Northwest Campus, Nome School Superintendent, CEO for Norton Sound Health Corporation and Norton Sound Economic Development Corporation, VP of Bering Straits Native Corporation, Board President of Sitnasuak Native Corporation, and Executive Director of Nome Eskimo Community.

Community and Labor Stakeholders Engaged to Date
Through Community Engagement with the stakeholders below, the City of Nome has heard concerns and interest in the project. The most significant input has been from the Village of Solomon, Nome Eskimo Community, Native Village of Council, and King Island Native Community who, as a tribal partnership, have prepared a 2024 Tribal Priority Climate Action Plan and supports the proposed renewable energy project in the tribal plan. The Tribal PCAP states, “Having the ability to collaborate and partner with the local utility is one of the only ways to support decreased reliance upon greenhouse gas emissions within the boundaries of Nome.” Bering Straits Native Corporation and Sitnasuak Native Corporation are interested in land leases at Cape Nome and the possibility of a powerline extension will serve their communities. NJUS is already partnering with Village of Solomon and King Island Native Corporation to advance water and sewer initiatives that will help address a critical housing shortage for their members. City of Nome has collective bargaining agreements with IBEW Local 1547 for Line Distribution, IUOE Local 302 for Power Generation, and APEA Local 6138 for Water/Sewer and Administrative functions. City of Nome plans to contract with union and non-union contractors and will start that engagement once project specifications are finalized and requests for bids are formalized and released.

Organization/ Community Interest	Type of Engagement	Date of Engagement	Outcome of Engagement
Village of Solomon	Community Input	February 2024	Letter of Support. Project included in Tribal Consortia PCAP.
Nome Eskimo Community	Community Input	February 2024	Letter of Support
Bering Straits Native Corporation	Community Input	February 2024	Letter of Support
Sitnasuak Native Corporation	Community Input	February 2024	Letter of Support

Native Village of Council	Community Input	February 2024	Letter of Support

Community and Labor Stakeholders to be Engaged

City of Nome will continue engagement with the organizations identified above and begin intensive engagement with the labor community, primarily with construction contractors. Project updates and engagement will occur throughout the life of the project to ensure that project impacts are tracked and addressed quickly for any and all impacted communities.

Organization/ Community Interest	Type of Engagement	Date of Engagement	Outcome of Engagement
Residents of Nome	Bimonthly Presentations at Nome Common Council, Monthly NJUS Board Meeting	Continuous, as needed	Project decision making, community input, & reporting back
Residents of Nome & Planning Commission	Project Kick off Meeting for the Water/Sewer Master Plan Update	12/13/23 & 3/5/24	Project decision making, community input, & reporting back
Residents of Nome	Assembly presentations, newsletter, website, relevant information shared with monthly utility invoicing	Monthly, as needed	Community input & reporting back
Labor- contractors & union	Direct outreach in Phase 1, formal communication via procurement process	Continuous, as needed	Project Decision Making, Community Input, & Reporting Back

Outreach Strategy

City of Nome has identified and engaged a diverse range of stakeholders representing linguistic, cultural, institutional, geographic, and other perspectives from the outset of the project, leading to more equitable and sustainable project outcomes that reflect the diverse needs and priorities of the community. This includes representatives of Kawerak, Bering Straits Development Corporation, Nome Eskimo Community, Norton Sound Economic Development Corporation, Members of the City Council and the Port Commission, and other relevant parties. City of Nome commits to an outreach strategy to create early, frequent, and continuing opportunities for community engagement. This outreach strategy will maintain transparent communication channels to keep stakeholders informed about project

developments, decisions, and outcomes. This will involve regular updates through newsletters, websites, social media, and other communication platforms, as well as opportunities for open dialogue and feedback. City of Nome commits to fostering a culture of continuous learning and improvement by soliciting feedback, conducting evaluations, and reflecting on lessons learned throughout the project lifecycle. This involves actively seeking input from key stakeholders (community members, local organizations, government agencies, businesses, indigenous groups, and other relevant parties), sharing knowledge and best practices, ensuring that project activities are culturally appropriate and sensitive to the needs of diverse communities, and adapting project approaches based on feedback and emerging insights.

NJUS is governed by its elected board of directors, one of which (Larry Pederson) is also a leader of the Native Village of Council. Through its native leaders, local knowledge, traditional practices, and indigenous wisdom are incorporated into project planning and implementation processes.

Section 5: Job Quality

For the Project, City of Nome plans to attract and retain a skilled, local, and diverse workforce for design, engineering, and construction and ongoing operations to the greatest extent possible. Investing in local staff (Alaska-based and community-based) as employees and as independent contractors will enable a local, qualified, and fully staffed construction and operations and maintenance effort for the proposed project. If awarded, City of Nome will complete this project using policies and standards for employees and contractors that ensure participation of quality, skilled workers and minimize disruptive and costly delays. For all employment contracts and procurements associated with this program, City of Nome will comply with applicable federal procurement guidelines and follow its human resources (HR) and procurement guidelines.

City of Nome will ensure that quality jobs are created and includes the following commitments to wages and benefits, education and training, and worker involvement in health and safety:

Empowerment and Representation: City of Nome has active agreements with three unions: IBEW, Local 302, and APEA. City of Nome commits to the rights of workers to join together to improve their wages and working conditions, with or without a union, per the National Labor Relations Act, and will ensure compliance with labor and employment laws by appropriate use of personnel and procurement policies. This commitment extends to the entire project workforce. In addition, City of Nome will establish goals to track and adjust practices that lead to negative impacts, including those in the workforce.

Wages and Benefits: Wages and Benefits. City of Nome commits to require contract(s) pay competitive wage and benefit rates benchmarked against local Davis-Bacon prevailing wages as follows: Per the Davis-Bacon Act wages (in accordance with subchapter IV of chapter 31 of title 40, United States Code) for construction, City of Nome fully intends to follow federal guidelines by including clauses in construction contracts that require construction contractors and subcontractors to pay wages at rates not less than those prevailing, as determined by the Davis-Bacon Act wages and submit certified payroll

when necessary. Applicable wage scales and overtime payment practices for all union employees expected to be directly involved in construction will follow union standards. For contractors, this information will be established upon hiring. City of Nome employs three unions: IBEW, Local 302, and APEA. Contracts are generally negotiated every 3 years with defined increases each year. For the last two years however, the Unions and Utility agreed to evaluate compensation annually due to the extreme inflation of the last few years. Non-represented employees are few and are limited to the executive positions (that negotiate with the unions). These employees have individual contracts with the utility that largely mirror the CBA's.

Skills and Career Advancement: Workers have access to quality employer or labor management provided training and education and are provided opportunities to progress to future, long-term jobs within their organization or outside them. City of Nome provides workforce education and training by maintaining the salaries of its IBEW apprentices while they are engaged in school (as opposed to the apprentices working for contractors that receive no pay). City of Nome is a member of the Alaska Rural Water Association which provides training for water and sewer operators. As part of the proposed Project, a portion of the funding requested will be utilized to develop a plan for the training, recruitment, and retention of workers living in Nome to increase the number of skilled and properly credentialed Public Utilities employees. City of Nome plans to use registered and non-registered apprenticeship labor for the proposed project. NJUS self-performs most construction projects and relies upon its Unions and On-the-Job Training (OTJ). For the proposed project, NJUS plans to utilize IBEW: 2 registered apprentices and 2 journey employees, IUOE: OTJ (non-registered) apprenticeship documented in the CBA, and ABEA: water/sewer operators-in-training (non-registered apprenticeship. In alignment with Equal Employment Opportunity and Affirmative Action, City of Nome is creating a robust recruiting plan that includes a strong focus on building diverse recruitment pipelines into craft positions and engineering roles, among others. By engaging with community development and Alaska Native programs and building partnerships with local organizations serving people of color, women, LGBTQ+, and persons with disabilities, we are purposeful in our approach to recruit in new and diverse ways to access all members of our community.

Job Security, Working Conditions, and Culture: City of Nome will ensure the highest standards of construction site health and safety, including site free of harassment and discrimination to include compliance with 41 CFR §§ 60-1.4(a), 60- 300.5(a) and 60-741.5(a). These regulations prohibit discrimination against qualified individuals based on their status as protected veterans or individuals with disabilities and prohibit discrimination against all individuals based on their race, color, religion, sex, sexual orientation, gender identity, national origin, or for inquiring about, discussing, or disclosing information about compensation. Moreover, these regulations require that covered prime contractors and subcontractors do the same. City of Nome employs second chance hiring policies and has hired people re-entering the workforce after time spent in the justice system. The Seaside Center is the local reentry organization. In terms of childcare, employees are informally allowed to bring children into the workplace provided their presence does not conflict with their duties or safety. This is generally limited to office staff due to the nature of the field work. City of Nome requires professional licensure and training for specific areas of work. All workers that are hired as part of this project will need to have at least an OSHA 10 card for safety training. These requirements will be clearly stated in any procurement

documents and be included in all construction contracts for this proposed project. In addition, City of Nome will hold anti-harassment and Diversity, Equity, and Inclusion training for new employees. City of Nome makes their best effort to promote stable, predictable employment through minimizing the use of temporary or contract workers. For the Project, City of Nome plans to attract and retain a skilled, local, and diverse workforce for design, engineering, and construction and ongoing operations to the greatest extent possible. Investing in local staff (Alaska-based and community-based) as employees and independent contractors will enable a local, qualified, and fully staffed construction and operations and maintenance effort for the proposed project.

Ensuring Compliance with Build America Buy America: Named contractors (including individual consultants and equipment vendors) will be selected in compliance with the competitive requirements of the Procurement Standards in 2 CFR Part 200 as interpreted in EPA best practice guidance. City of Nome commits to providing training to staff involved in procurement and project management to ensure awareness of BABA requirements and procedures as well as maintaining accurate documentation throughout the procurement process. This includes documenting the origin of materials and components used in the project. Ensure that all suppliers and contractors certify compliance with BABA requirements. Moreover, the City of Nome will verify the compliance of suppliers and subcontractors with BABA requirements. This will involve conducting audits, requesting certifications, or obtaining other forms of documentation.

Section 6: Programmatic Capability and Past Performance

Both the City of Nome and NJUS, its component business unit, have independent audits performed annually. Both organizations have staff qualified and experienced in developing solicitations for Requests for Proposals (RFP's) and negotiating contracts for completion of project components. Each Finance Department provides financial management and accounting functions for all City/NJUS funds. Past and current grant awards have successfully met federal and state audit standards and have followed all regulatory requirements. The Management Team meets weekly to review grant-funded projects. Project management software is used to track assignment and completion of tasks, due dates of reports and deliverables, project scheduling, and completion of grant requirements. Progress and financial reports are completed regardless of whether expenditures or progress on the project were made during the reporting period. Both the City of Nome and NJUS have successfully managed multiple Federal, State, foundation, corporate, and private grants. Due to Nome's short summer construction season, many projects are multi-year projects.

a. Past Performance

1) Project Title & Description: Renewable Energy Fund Round 14 (REF14) Nome Battery Energy Storage System Project (2MW, 2MWh), $2M grant + $700k utility match. Project will integrate a battery system that will help NJUS greater utilize its renewable wind energy.
Funding Agency, Agreement Number, & CFDA Listing Number: Alaska Energy Authority, Agreement Number 7014026, CFDA Listing Number N/A.

Contact: Sean Arcilla, SArcilla@akenergyauthority.org

2) Project Title & Description: EPA STAG Grant funded by the FY23 Consolidated Appropriations Act for $1.6M with $400k community match provided by Village of Solomon (VOS) & King Island Native Community (KINC). NJUS is partnering with VOS and KINC to advance a Water and Sewer Initiative that will help address a critical housing shortage for their members.
Funding Agency, Agreement Number, & CFDA Listing Number: EPA, Agreement Number & CFDA has not been assigned yet.
Contact: Jack Brown, Brown.Jack@epa.gov

3) Project Title & Description: Norton Sound Economic Development Corporation (NSEDC) 2023 $711k grant with $100k NJUS match. Nome Water and Sewer Initiative Project Scope: a) Pressurize the water transmission main into the community to realize energy savings, add resiliency to the water distribution system and enhance opportunities for development along the pipeline corridor. b) Expand NJUS supervisory control and data acquisition (SCADA) system to incorporate the utility's wastewater lift stations. Having information available at the office and avoiding the necessity of visiting each lift station each day preserves resources (staff and costs). c) Rehabilitating the aeration units at the sewer lagoon. Benefits include odor reductions and cost savings as less energy is now needed to achieve oxygen levels in the lagoon.
Funding Agency, Agreement Number & CFDA Listing Number: Norton Sound Economic Development Corporation (NSEDC), Agreement Number & CFDA N/A.
Contact: Amanda Patrick, amandap@nsedc.com

4) Project Title & Description: Nome Bering St Water System Replacement Project, $1M loan with $582k grant, funds used to replace water main under Bering Street in Nome Alaska in conjunction with an Alaska Department of Transportation road project.
Funding Agency, Agreement Number, & CFDA Listing Number: Alaska Department of Environmental Conservation (ADEC), Agreement Number 627241, CFDA 66-468.
Contact: Susan Start, susan.start@alaska.gov

5) Project Title & Description: Norton Sound Economic Development Corporation (NSEDC) 2020. $182k for River Street Lift Station Rehabilitation Project. The project replaced the control system for the community's largest wastewater lift station. Benefits include reduced electrical consumption and greater reliability.
Funding Agency, Agreement Number & CFDA Listing Number: Norton Sound Economic Development Corporation (NSEDC), Agreement Number & CFDA N/A.
Contact: Amanda Patrick, amandap@nsedc.com

b. Reporting Requirements

City of Nome has received 1 Federal grant and 4 state grants/loans in the past three years and submitted all required reports by the original submission deadlines or by extended deadlines granted because of the impact of the COVID pandemic for all grants during the rating period.

c. Staff Expertise

City of Nome currently has 60 full time employees and NJUS has 23 employees who fulfill the obligations of a local government, which include public safety, public works utilities functions, and services. The City owns and operates all public utilities including electric, water, wastewater, refuse and fuel utilities and services. City of Nome owns and operates the Port of Nome, the first strategic deep draft port in the U.S. Arctic. City staff have both the technical and operational capacity to complete the project and fulfill all funding obligations. Since the City owns and operates the electric utility, NJUS staff have the capacity to maintain the renewable systems once installed. The City receives revenue from selling electrical services to the community, and the City's annual budget includes Enterprise Funds used to account for the operations of these services. The City's public utilities infrastructure has been funded (with grant/loan support), built, and maintained by the City. As part of its emergency management program, the City trains and exercises for natural hazards events and disasters. Both City administrative staff and City force account labor will be necessary for the completion of this project.

NJUS Manager, Ken Morton, PE, will fulfill the overarching project and administration of the proposed project. Ken will be responsible for developing Requests for Proposals, contracts, and agreements; participating in biweekly meetings with Project Manager, contractors, and engineers; and monitoring project tasks and task scheduling. The City Finance Director will be responsible for financial management (invoicing, accounting, financial reporting) of the project. The Finance Accounting Clerk will assist with procurement and processing orders. The Grants & Projects Specialist will manage grant requirements, implementation, grant reporting and other administrative functions to ensure successful execution of the grant process. The Public Utilities Administrative Assistant will assist with management of vehicle and heavy equipment rentals and tracking of public utilities laborers working on the project. The Power Plant Operator, Equipment Operators, and Laborers are all Public Utilities force labor that will be assisting on-site with the implementation of the project.

Section 7: Budget

See Attachment Budget_CityofNome.pdf