

Renewable Energy Fund Round 16 Status Report

Alaska Energy Authority —
Renewable Energy Fund – Round XVI

Alaska State Legislature
January 2024



ALASKA ENERGY AUTHORITY



SAFE,
RELIABLE, &
AFFORDABLE
ENERGY
SOLUTIONS

REDUCING THE COST OF ENERGY IN ALASKA

Table of Contents



REF Overview	Page 3
REF Statutory Guidance	Page 4
Round XVI Request for Applications Schedule	Page 5
REF Evaluation Process	Page 6
REF Funding Limits	Page 10
Proposed REF Capitalization for Round 16 (FY2025)	Page 11
REF Received Applications Summary	Page 12
Non-Recommended Applications Summary	Page 14
REFAC Roles	Page 18
REFAC Current Members	Page 19
Recommended Applications Summary	Page 20
Applications Forwarded for Legislature's Decision on Funding	Page 22
Partial Funding Recommendations	Page 25



Renewable Energy Fund (REF) Overview

Established in 2008, the REF is a unique and robust competitive grant program, which provides critical financial assistance for statewide renewable energy projects. The REF's sunset date provision was repealed with House Bill 62, signed into law by Governor Dunleavy on May 25, 2023.

The REF funds projects across all development phases, serving as a catalyst for the continued pursuit of integrating proven and nascent technologies within Alaska's energy portfolio.



\$317 million in REF appropriations by the State.



100+ operational projects, 44 in development, and 18 projects funded for FY24.



The 33rd Alaska State Legislature appropriated \$17 million for 18 projects recommended by AEA and approved by the REF Advisory Committee.

REF Statutory Guidance (AS 42.45.045)

ELIGIBLE PROJECTS MUST:

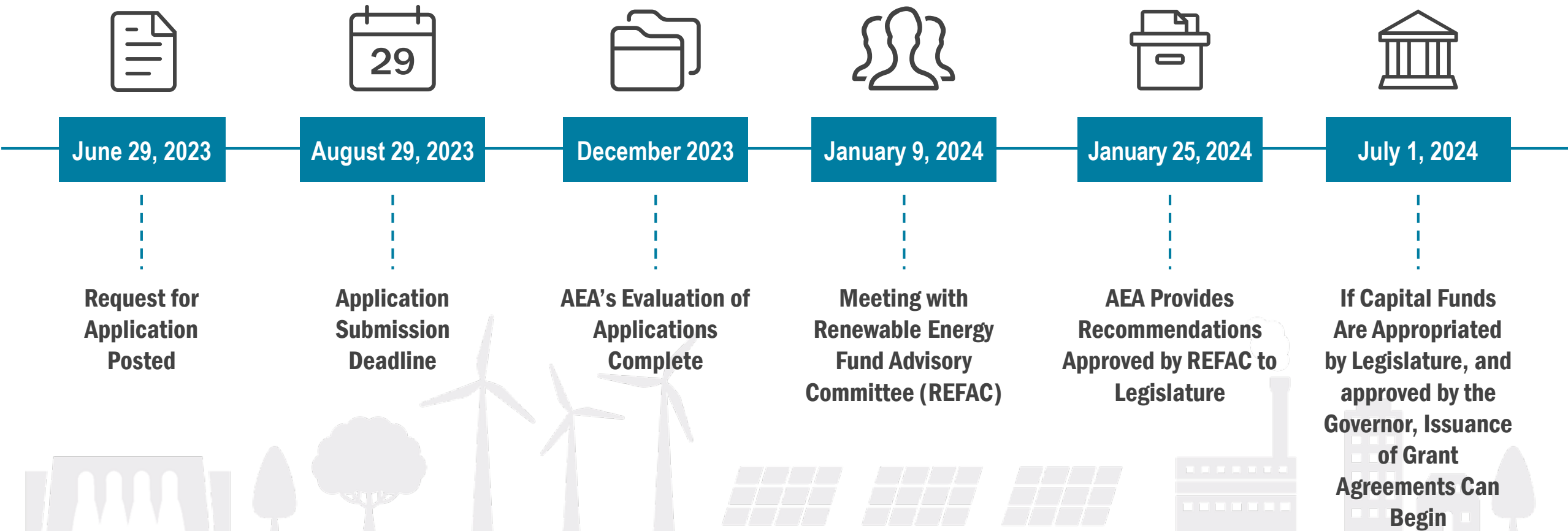
- Be a new project not in operation in 2008, and
 - be a hydroelectric facility;
 - direct use of renewable energy resources;
 - a facility that generates electricity from fuel cells that use hydrogen from renewable energy sources or natural gas (subject to additional conditions);
 - or be a facility that generates electricity using renewable energy.
 - natural gas applications must also benefit a community that:
 - Has a population of 10,000 or less, and
 - does not have economically viable renewable energy resources it can develop.

ELIGIBLE APPLICANTS INCLUDE:

- electric utility holding a certificate of public convenience and necessity (CPCN);
- independent power producer;
- local government;
- or, or other governmental utility, including a tribal council and housing authority.



REF Rounds 16 Timeline



REF Evaluation Process: Stage 1 Eligibility and Completeness

The REF evaluation process is comprised of four stages. Stage 1 is an evaluation of the applicant, project eligibility and, completeness of the application, as per 3 AAC 107.635. This portion of the evaluation process is conducted by AEA staff.

- Applicant eligibility is defined as per AS 42.45.045 (l).
 - *"electric utility holding a certificate of public convenience and necessity under AS 42.05, independent power producer, local government, or other governmental utility, including a tribal council and housing authority;"*
- Project eligibility is defined as per AS 42.45.045 (f)-(h) and is provided on the preceding page.
- Project completeness:
 - An application is complete in that the information provided is sufficiently responsive to the RFA to allow AEA to consider the application in the next stage (Stage 2) of the evaluation.
 - The application must provide a detailed description of the phase(s) of project proposed.

STAGE 1 CRITERIA	PASS/FAIL
Applicant eligibility, including formal authorization and ownership, site control, and operation	PASS/FAIL
Project Eligibility	PASS/FAIL
Complete application, including Phase description(s)	PASS/FAIL

Applications that fail to meet the requirements of Stage 1 are rejected by the Authority. Each applicant whose application is rejected is notified of the Authority's decision.



REF Evaluation Process: Stage 2 Technical and Economic Feasibility

Stage 2 is an evaluation concerning technical and economic feasibility. This portion of the evaluation process is conducted by AEA staff, Alaska Department of Natural Resources, and contracted third-party economists.

The following items are evaluated as part of the Stage 2 evaluation, as required per 3 AAC 107.645:

- Project management, development, and operations;
- Qualifications and experience of project management team, including on-going maintenance and operation;
- Technical feasibility – including but not limited to sustainable current and future availability of renewable resource, site availability and suitability, technical and environmental risks, and reasonableness of proposed energy system; and,
- Economic feasibility and benefits – including but not limited to project benefit-cost ratio, project financing plan, and other public benefits owing to the project.

All Stage 2 criteria are weighted as follows as part of the evaluation process. Applications that score below 40 points in this stage are automatically rejected by the Authority, however, those projects scoring above 40 may also be rejected as under 3 AAC 107.645(b) has the Authority to reject applications that it determines to be not technically and economically feasible, or do not provide sufficient public benefit.

CRITERIA	CRITERIA DESCRIPTION	WEIGHT
1	Project management, development, and operation	25%
2	Qualifications and experience	20%
3	Technical feasibility	20%
4.a	Economic benefit-cost ratio	25%
4.b	Financing plan	5%
4.c	Other public benefit	5%

REF Evaluation Process: Stage 3 Project Ranking

Stage 3 is an evaluation concerning the ranking of eligible projects. This portion of the evaluation process is conducted by AEA staff in conjunction with solicitation from the Renewable Energy Fund Advisory Committee (REFAC) .

The following items are evaluated as part of the stage three evaluation, as required per 3 AAC 107.655-660:

- Cost of energy
- Applicant matching funds
- Project feasibility (levelized score from stage 2)
- Project readiness
- Public benefits (evaluated through stage 2 benefits)
- Sustainability
- Local Support
- Regional Balance
- Compliance

All Stage 3 criteria are weighted as follows as part of the evaluation process. The Stage 3 scoring is used to determine the ranking score.

CRITERIA	CRITERIA DESCRIPTION	WEIGHT
1	Cost of Energy	30%
2	Matching Funds	15%
3	Project Feasibility (levelized score from Stage 2)	25%
4	Project Readiness	5%
5	Public Benefits	10%
6	Sustainability	10%
7	Local Support	5%
8	Regional Balance	Pass/Fail
9	Compliance	Pass/Fail



REF Evaluation Process: Stage 4 Regional Spreading

Stage 4 is a final ranking of eligible projects, as required per 3 AAC 107.660, which gives “significant weight to providing a statewide balance of grant money, taking into consideration the amount of money available, number and types of projects within each region, regional rank, and statewide rank.” This portion of the evaluation process is conducted by AEA staff in conjunction with solicitation of advice from the Renewable Energy Fund Advisory Committee (REFAC). As statutorily required per AS 42.45.045 and set forth in 3 AAC 107.660, the authority is to solicit advice from the REFAC concerning making a final list / ranking of eligible projects.

The following items are evaluated as part of the stage four evaluation, as required per 3 AAC 107.660:

- Cost of energy burden = [HH cost of electric + HH heat cost] ÷ [HH income]

Cumulative through Round 15									
Energy Region	Total Round 1-15 Funds		Cost burden (HH cost/HH income)	Cost of Power Allocation			Population		Even Split
	Grant Funding	% Total		Allocation cost of energy basis	Additional funding needed to reach 50%	% of target allocation	% Total	Allocation per capita basis	Allocation per region basis
Aleutians	\$18,383,998	6%	13.50%	\$27,352,549	(\$4,707,724)	67%	1%	\$3,225,814	\$26,416,303
Bering Straits	\$23,486,724	8%	16.18%	\$32,769,215	(\$7,102,116)	72%	1%	\$3,938,859	\$26,416,303
Bristol Bay	\$15,866,614	5%	15.99%	\$32,386,656	\$326,714	49%	1%	\$2,763,603	\$26,416,303
Copper River/Chugach	\$28,163,273	10%	10.23%	\$20,723,627	(\$17,801,460)	136%	1%	\$3,198,033	\$26,416,303
Kodiak	\$16,659,519	6%	6.96%	\$14,095,649	(\$9,611,694)	118%	2%	\$5,116,531	\$26,416,303
Lower Yukon-Kuskokwim	\$39,888,116	14%	21.01%	\$42,550,198	(\$18,613,017)	94%	4%	\$10,428,334	\$26,416,303
North Slope	\$2,069,151	1%	2.56%	\$5,191,136	\$526,417	40%	1%	\$3,913,896	\$26,416,303
Northwest Arctic	\$29,166,133	10%	16.94%	\$34,315,088	(\$12,008,589)	85%	1%	\$3,033,763	\$26,416,303
Railbelt	\$31,253,205	11%	5.72%	\$11,594,529	(\$25,455,941)	270%	77%	\$224,530,668	\$26,416,303
Southeast	\$65,672,877	23%	8.23%	\$16,669,020	(\$57,338,367)	394%	10%	\$28,490,396	\$26,416,303
Yukon-Koyukuk/Upper Tanana	\$18,933,832	7%	26.13%	\$52,931,665	\$7,532,000	36%	1%	\$1,939,434	\$26,416,303
Statewide	\$1,035,888	0%	0.00%						
TOTAL	\$290,579,331	100%		\$290,579,331			100%	\$290,579,331	\$290,579,331



REF Funding Limits

REF Round XVI Grant Funding Limits

Phase	Low Energy Cost Areas*	High Energy Cost Areas**
Total Project Grant Limit	\$2 Million	\$4 Million
Phase I: Reconnaissance Phase II: Feasibility and Conceptual Design	The per <u>project</u> total of Phase I and II is limited to 20% of anticipated construction cost (Phase IV), not to exceed \$2 Million.	
Phase III: Final Design and Permitting	20% of anticipated construction cost (Phase IV), and counting against the total construction grant limit below.	
Phase IV: Construction and Commissioning	<u>\$2 Million per project</u> , including final design and permitting (Phase III) costs, above.	<u>\$4 Million per project</u> , including final design and permitting (Phase III) costs, above.
Exceptions		
Biofuel projects	Biofuel projects where the applicant does not intend to generate electricity or heat for sale to the public are limited to reconnaissance and feasibility phases only at the limits expressed above. Biofuel is a solid, liquid or gaseous fuel produced from biomass, excluding fossil fuels.	
Geothermal projects	The per-project total of Phase I and II for geothermal projects is limited to 20% of anticipated construction costs (Phase IV), not to exceed \$2 million /\$4 million (low/high cost areas). Any amount above the usual \$2 million cap spent on these two phases combined shall reduce the total Phase III and IV grant limit by the same amount, thereby keeping the same total grant dollar cap as all other projects. This exception recognizes the typically increased cost of the feasibility stage due to test well drilling.	

REF Round XVI funding limits are governed by the requested phase(s) in the application and the technology type applied.

Low vs High Cost Energy Areas:

- ***Low Energy Cost Areas** are defined as communities connected to the Railbelt electrical grid or with a residential retail electric rate of below \$0.20 per kWh, before Power Cost Equalization (PCE) reimbursement is applied. For heat projects, low energy cost areas are communities with natural gas available as a heating fuel to at least 50% of residences, or availability expected by the time the proposed project is constructed.
- ****High Energy Cost Areas** are defined as communities with a residential retail electric rate of \$0.20 per kWh or higher, before PCE funding is applied. For heat projects, high energy cost areas are communities that do not have natural gas available as a heating fuel.



Proposed REF Capitalization for FY2025 / Round XVI

The State of Alaska FY2025 proposed capital budget allocates \$5 million for REF Round 16 grant funding of recommended projects.

The current list of 24 recommended applications yields a total grant request of \$32,006,012. With the proposed REF budget of \$5 million, there would be insufficient funding to cover the current Round 16 recommendations. Additional funding of \$27.06 million would need to be allocated to fund all of the current Round 16 recommendations or some of the Round 16 recommendations will not be funded.

The table to the right indicates historical REF program funding from the inception of the REF program to the FY2024 appropriation.

\$17M was approved in the FY2024 capital budget for REF Round 15, the largest REF capitalization since FY2014.

Legislative Appropriation	Fiscal Year
\$ 100,001,000	FY2008
\$ 25,000,000	FY2009
\$ 25,000,000	FY2010
\$ 36,620,231	FY2011
\$ 25,870,659	FY2012
\$ 25,000,000	FY2013
\$ 22,843,900	FY2014
\$ 11,512,659	FY2015
\$ -	FY2016
\$ -	FY2017
\$ (3,156,000)	FY2018 - RPSU Reappropriation
\$ 11,000,000	FY2019
\$ -	FY2020
\$ -	FY2021
\$ 4,750,973	FY2022
\$ 15,000,000	FY2023
\$ 17,052,000	FY2024

Total (excl. operating appropriation)	
\$ 316,495,422	

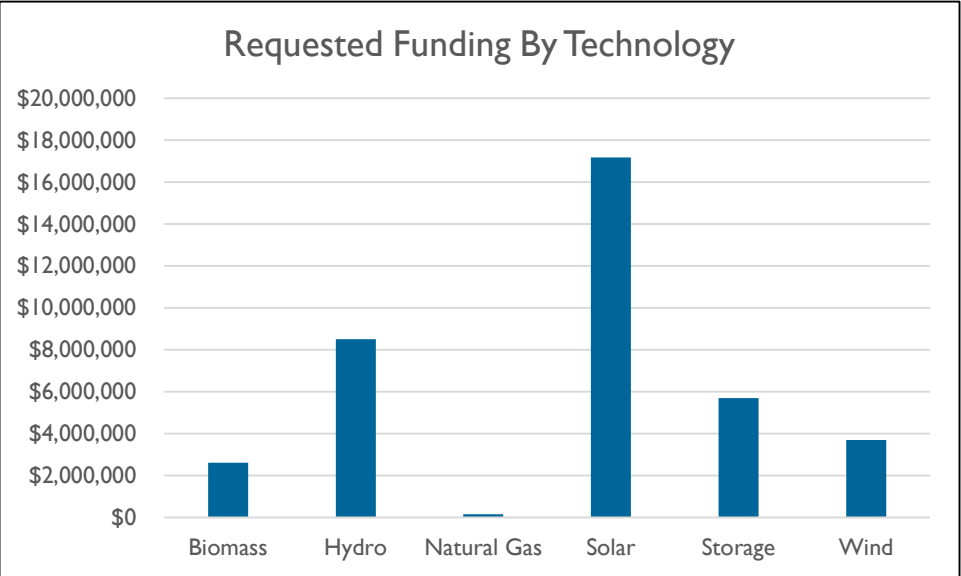
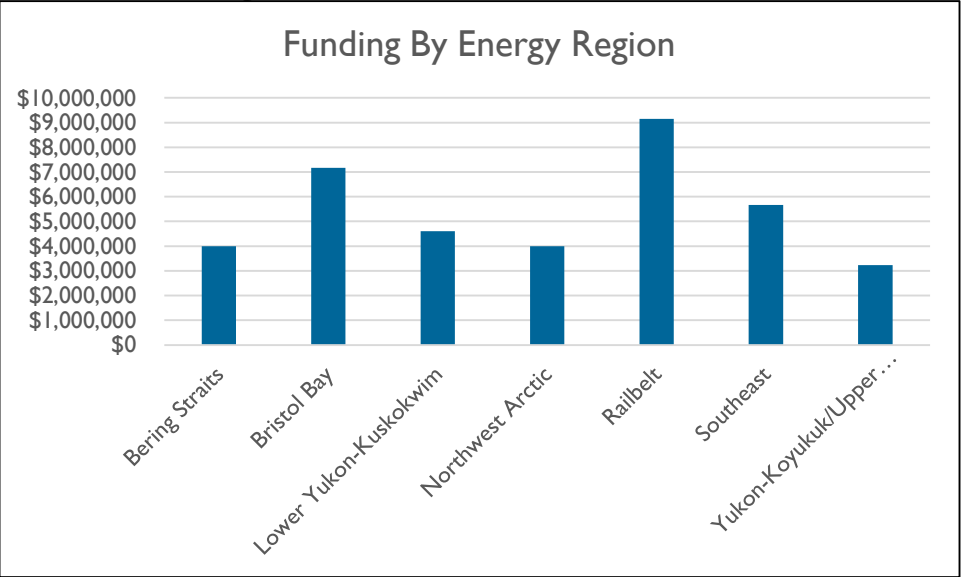


Round XVI – Received Applications Summary

AEA received 29 applications with a total grant request of \$39.5 million. One application was submitted past the deadline and deemed ineligible, reducing the total grant request to \$37.8 million for the remaining 28 applications.

Applications by Energy Region	No. of Applications	REF Funds Requested
Bering Straits	1	\$ 4,000,000
Bristol Bay	5	\$ 7,166,471
Lower Yukon-Kuskokwim	6	\$ 4,609,666
Northwest Arctic	1	\$ 4,000,000
Railbelt	9	\$ 9,147,514
Southeast	4	\$ 5,661,724
Yukon-Koyukuk Tanana	2	\$ 3,231,113
Total	28	\$ 37,816,488

Applications by Technology	No. of Applications	REF Funds Requested
Biomass	3	\$ 2,607,514
Hydro	8	\$ 8,505,236
Natural Gas	1	\$ 150,000
Solar	9	\$ 17,166,182
Storage	4	\$ 5,698,827
Wind	3	\$ 3,688,729
Total	28	\$ 37,816,488



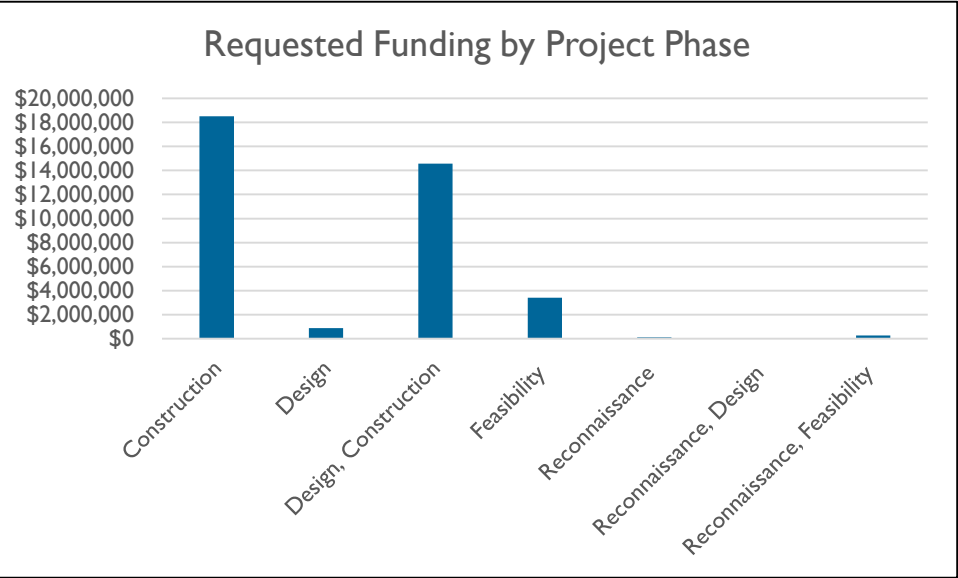
Round XVI – Received Applications Summary

The table to the right indicates the number of applications received by requested phase, along with the corresponding grant request totals. Per the current RFA, there are four phases, listed below in chronological order, for which an applicant may request funding:

- (1) Reconnaissance
- (2) Feasibility and Conceptual Design
- (3) Final Design and Permitting
- (4) Construction

Several applications received in Round 16 requested funding for more than one phase.

Applications by Project Phase	No. of Applications	REF Funds Requested
Construction	13	\$ 18,505,570
Design	1	\$ 883,012
Design, Construction	8	\$ 14,554,156
Feasibility	3	\$ 3,430,500
Reconnaissance	1	\$ 121,250
Reconnaissance, Design	1	\$ 52,500
Reconnaissance, Feasibility	1	\$ 269,500
Total	28	\$ 37,816,488



Stages 1 and 2 Review: Non-Recommended Applications Summary

In AEA's Stage 1 evaluation, as per 3 AAC 107.635, it was determined that one application was ineligible and was rejected. This application was submitted after the published deadline. The applicant was notified of the rejection and did not appeal.

In AEA's Stage 2 evaluation of technical and economic feasibility, as per 3 AAC 107.645, four applications received scores below 40 points and were not recommended by the Authority. Two applicants appealed their rejections as per 3 AAC 107.650 – "Requests for reconsideration". Upon AEA's due consideration and review of the appeals, both rejections were upheld, and final written notices were issued to those applicants.

With an initial receipt of 29 applications and five applications rejected during Stages 1 and 2, there are 24 remaining applications that are recommended in REF Round 16.

In terms of grant funding requests, \$1.7 million was rejected in Stage 1 and a total of \$2 million rejected in Stage 2. The total grant funds request is further reduced by \$3.8 million owing to five of the remaining 24 applications receiving recommendations for partial funding due to various reasons discussed later in the presentation, yielding a total of \$32 million in grant funds requested. Partial funding recommendations, which are discussed further along in the presentation, were made in full consideration of project phases applied for, application scoring, project scope eligibility, and household cost of energy.

With the current proposed REF fund allocation of \$5 million for FY2025, there are insufficient REF funds to cover one-hundred percent of the applications recommended in Round 16.



Stage 1 Non-Recommended Applications

Below is the 1 application rejected during the Stage 1 evaluation:

Application Number	Applicant	Application Name	Technology	Phase	Community	Funds Requested	Election District	Rejection Reason
16029	Chugach Electric Association	Godwin Creek Hydroelectric Project	Hydro	Feasibility and Conceptual Design	Railbelt	\$1,729,000	various	Application was submitted after the published deadline.

Stage 2 Non-Recommended Applications

Below are the 4 applications that were rejected during the Stage 2 evaluation:

Application Number	Applicant	Application Name	Technology	Phase	Community	Funds Requested	Election District	Rejection Reason
16002	City of North Pole, Alaska	North Pole CHP Conceptual Design Project	Natural Gas	Feasibility	North Pole	\$150,000	33-Q	Insufficient information to complete the technical and financial evaluations.
16011	Mark K. Johnson dba Beric Alaska Energy	Beric Alaska Energy Solar One	Solar, Storage	Recon, Design	Railbelt	\$52,500	various	Insufficient information to complete the technical and financial evaluations.
16017	Native Village of Port Heiden	Port Heiden Turbine, Battery, ETS Construction	Wind, Other	Construction	Port Heiden	\$949,750	37-S	Application did not meet the minimum score of 40 in Stage 2.
16027	City of Tenakee Springs dba Tenakee Springs Electric Department	Indian River Construction Project Matching Funds	Hydro	Construction	Tenakee Springs	\$890,000	2-A	Application did not meet the minimum score of 40 in Stage 2.



Stage 2 – Non-Recommended Application Reasoning

App. #	Project	Funds	Requested Partial Funding Reasoning
16002	North Pole CHP Conceptual Design Project	\$150,000	Project did not achieve the required 40 points, as per Section 4 of the REF Round 16 RFA to advance onto stage 3. AEA staff identified several issues with the application including: • Application was for a natural gas project but did not include support for why renewable resources were not viable; • Insufficient information was included in the application to complete economic and technical evaluations; • Estimated total cost of final project is vague, between \$40 and \$80 million; • No commentary provided as to how applicant would go about securing funding for future phases; and, • The site is known to be contaminated. The application states that the site will be cleaned per ADEC requirements but specific requirements are not stated.
16011	Beric Alaska Energy Solar One	\$52,500	Project did not achieve the required 40 points, as per Section 4 of the REF Round 16 RFA to advance onto stage 3. AEA staff identified several issues with the application including: • Insufficient information was included in the application to complete economic and technical evaluations; • No information provided regarding the qualifications and experience of contractors; • No discussion on the project benefit or fuel displacement; • Scope of project is unclear; and, • No commentary provided as to how applicant would go about securing funding for future phases.
16017	Port Heiden Turbine, Battery, ETS Construction	\$949,750	Project did not achieve the required 40 points, as per Section 4 of the REF Round 16 RFA to advance onto stage 3. AEA staff identified several issues with the application including: • Project has poor economics resulting in a benefit/cost ratio below 1; • Requested phase is for construction but the applicant has not secured funding to complete needed upgrades to its distribution system; and, • The distribution upgrades should be completed before adding renewables to the system.
16027	Indian River Construction Project Matching Funds	\$890,000	Project did not achieve the required 40 points, as per Section 4 of the REF Round 16 RFA to advance onto stage 3. AEA staff identified several issues with the application including: • Project has poor economics resulting in a benefit/cost ratio below 1; • Requested phase is for construction but the applicant has not secured funding to complete the phase and grants applied for and pending decisions would not cover the full cost; and, • Required FEMA repairs should be completed prior to moving forward with the rest of the construction.



REFAC Roles

Statutes (AS 42.45.045)

- AEA “in consultation with the advisory committee...develop a methodology for determining the order of projects that may receive assistance....”
- AEA “shall, at least once each year, solicit from the advisory committee funding recommendations for all grants.”

Regulations (3 AAC 107.660)

- (a) To establish a statewide balance of recommended projects, the authority will provide to the advisory committee established in AS 42.45.045 (i) a statewide and regional ranking of all applications recommended for grants.
- (b) In consultation with the advisory committee established in AS 42.45.045 (i), the authority will
- (1) make a final prioritized list of all recommended projects, giving significant weight to providing a statewide balance of grant money, and taking into consideration the amount of money that may be available, number and types of projects within each region, regional rank, and statewide rank



REFAC Advisory Committee

NAME	TITLE	SECTOR	APPOINTED BY
Clay Koplin	Chief Executive Officer, Cordova Electric Cooperative	Small rural electric utility	Governor
Rose, Chris	Founder / Executive Director, Renewable Energy Alaska Project (REAP)	Business/organization involved in renewable energy	Governor
Iliodor Philemonof III	Government Relations Administrator, Calista Corporation	Representative of an Alaska Native Organization	Governor
Amberg, Alicia	Executive Director, Associated General Contractors of Alaska	Denali Commission	Governor
Janorschke, Bradley	General Manager, Homer Electric Association	Large urban electric utility	Governor
Stedman, Bert	Senator	Senate Member 2	Senate President
Wilson, David	Senator	Senate Member 1	Senate President
Carpenter, Ben	Representative	House Member 2	Speaker of the House
Cronk, Mike	Representative	House Member 1	Speaker of the House

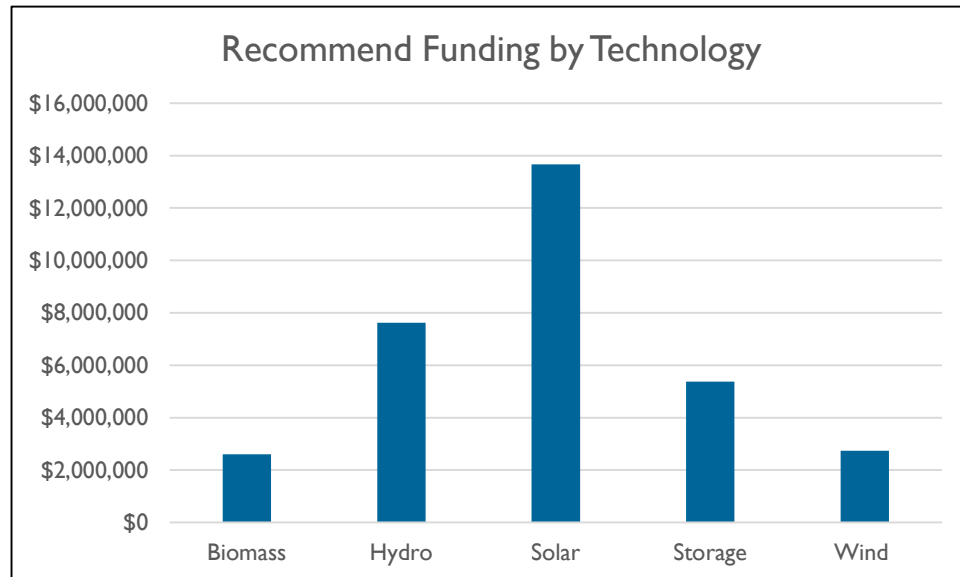
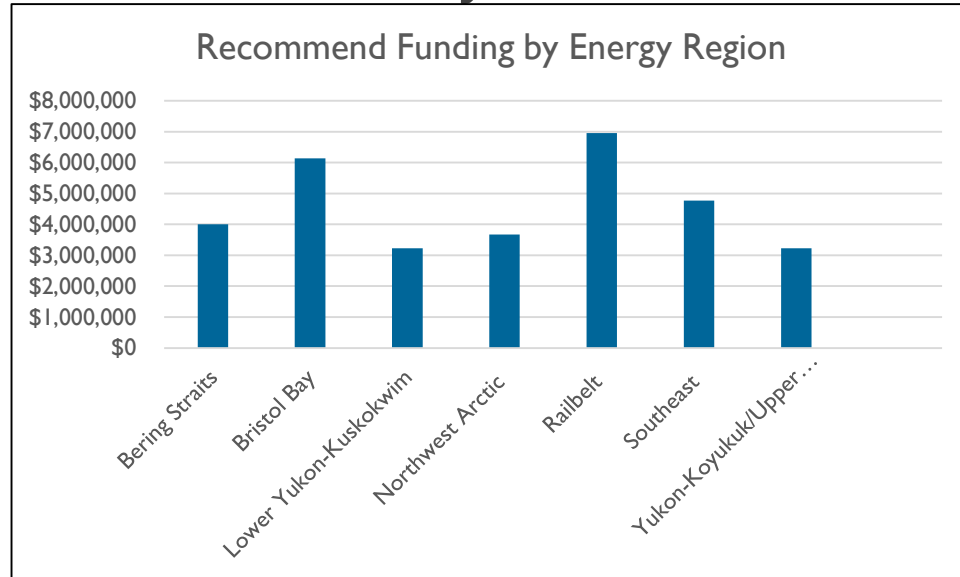


Round XVI – Recommended Applications Summary

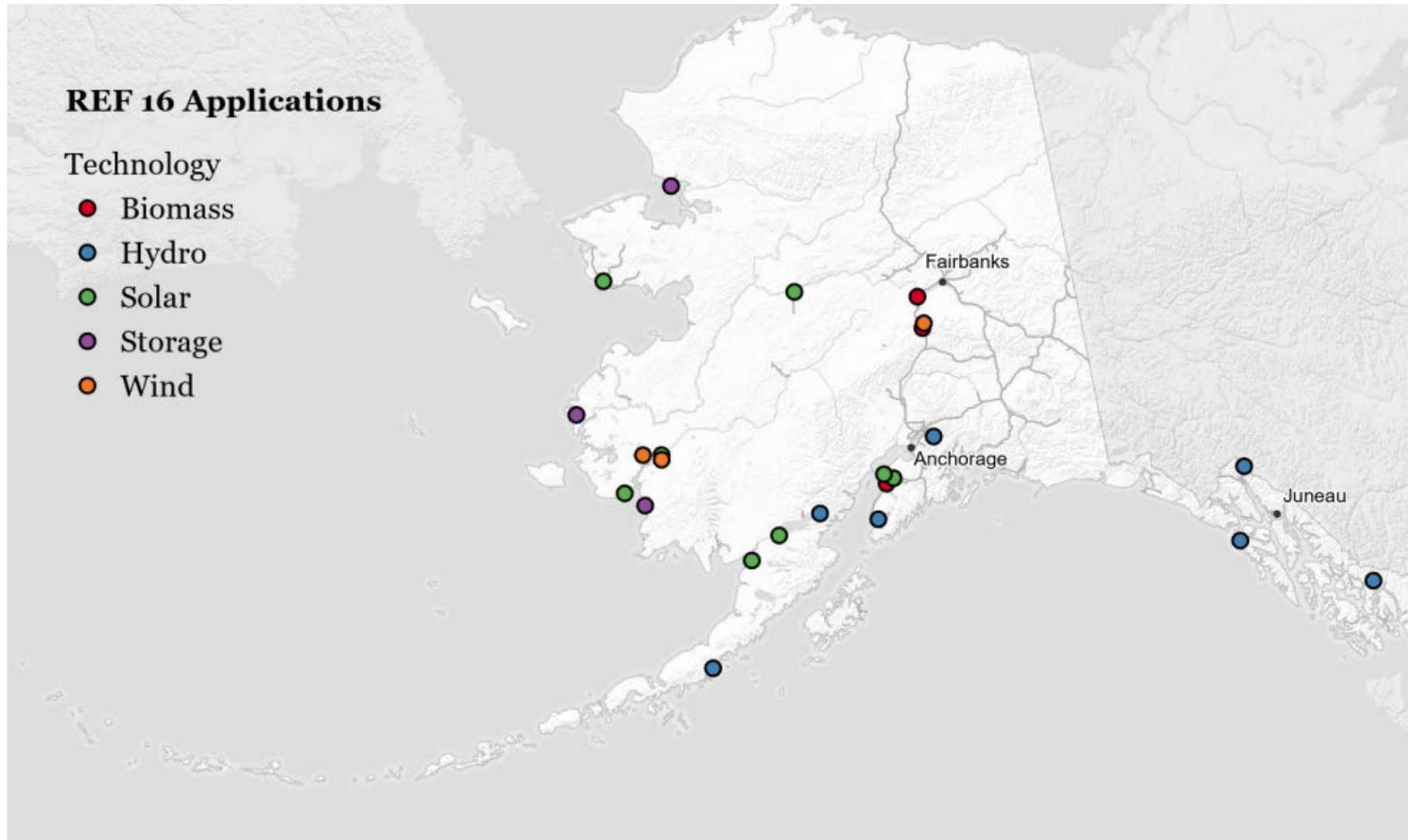
There are 24 recommended applications, totaling a request of \$32 million.

Applications by Energy Region	No. of Applications	REF Funds Requested
Bering Straits	1	\$ 4,000,000
Bristol Bay	4	\$ 6,144,569
Lower Yukon-Kuskokwim	6	\$ 3,226,092
Northwest Arctic	1	\$ 3,675,000
Railbelt	7	\$ 6,957,514
Southeast	3	\$ 4,771,724
Yukon-Koyukuk Tanana	2	\$ 3,231,113
Total	24	\$ 32,006,012

Applications by Technology	No. of Applications	REF Funds Requested
Biomass	3	\$ 2,607,514
Hydro	7	\$ 7,615,236
Solar	8	\$ 13,670,456
Storage	4	\$ 5,373,827
Wind	2	\$ 2,738,979
Total	24	\$ 32,006,012



Round XVI Geographical Distribution of Recommended Applications



Applications Forwarded to the Legislature for a Decision on Funding

Recommended Projects										Recommendation						
App. #	Applicant	Project Title	Phase	Energy Region	Election District	Technology	Community	Grant Funds Requested	Matching Funds	Stage 3 Score	Benefit / Cost Ratio	HEC	Region Rank	State Rank	Funding Level	Funding Amount
16028	Tanana Chiefs Conference	Ruby Community Solar PV and Battery Storage	Design, Construction	Yukon-Koyukuk/Upper Tanana	36-R	Solar, Storage	Ruby HEA service area	\$2,008,113	\$874,906	90	1.23	\$12,913	1	1	Full w/ Special Provision	\$2,008,113
16005	Solstice Energy LLC	Kenai Peninsula Solar Farm	Design, Construction	Railbelt	various	Solar		\$2,000,000	\$48,027,664	88	1.77	\$7,120	1	2	Full	\$2,000,000
16022	Kotzebue Electric Association	Kotzebue Community Scale Energy Storage and Inertia	Construction	Northwest Arctic	40-T	Storage	Kotzebue	\$4,000,000	\$3,500,000	85	1.73	\$7,920	1	3	Partial	\$3,675,000
16015	Alaska Electric & Energy Coop	AEEC / KPB CPL Landfill Gas CHP Project	Construction	Railbelt	6-C	Biomass	Homer	\$1,115,014	\$875,000	84	1.61	\$7,120	2	4	Full	\$1,115,014
16013	Igiugig Village Council	Igiugig Tribal Utility Solar PV	Design, Construction	Bristol Bay	37-S	Solar	Igiugig	\$1,723,709	\$20,933	77	1.03	\$13,627	1	5	Full	\$1,723,709
16008	City of Pelican, Utilities	Pelican Hydro Relicensing Project, Design, Restoration, Repair	Construction	Southeast	2-A	Hydro	Pelican	\$650,474	\$50,000	76	1.63	\$6,374	1	6	Full	\$650,474
16020	Naknek Electric Association	Naknek Solar PV on Cape Suwarof	Construction	Bristol Bay	37-S	Solar	Naknek	\$3,210,000	\$900,000	74	0.57	\$9,551	2	7	Partial	\$3,137,848
16014	Goat Lake Hydro, Inc.	Goat Lake Storage Expansion Study	Reconnaissance	Southeast	3-B	Hydro	Skagway	\$121,250	\$52,250	71	0	\$6,371	2	8	Full	\$121,250

*If appropriated by the Legislature and approved the Governor, this funding would become effective July 1, 2024 for inclusion in the Fiscal Year 2025 budget. Orange line indicates the limit of recommended projects able to be funded with a \$5 million appropriation; funding additional projects will require an increased appropriation to the total recommended funding amount. The Kotzebue Community Scale Energy Storage and Inertia Project would only be funded up to \$991,887.



Please see related summary report for details concerning the evaluation and description of the individual applications.

Applications Forwarded to the Legislature for a Decision on Funding

Recommended Projects										Recommendation						
App. #	Applicant	Project Title	Phase	Energy Region	Election District	Technology	Community	Grant Funds Requested	Matching Funds	Stage 3 Score	Benefit / Cost Ratio	HEC	Region Rank	State Rank	Funding Level	Funding Amount
16003	Nuvista Light & Electric Coop	Nuvista Kwethluk Wind and Battery Project Completion	Construction	Lower Yukon-Kuskokwim	38-S	Wind, Transmission, Storage	Kwethluk	\$738,979	\$0	71	0.67	\$7,869	1	9	Full w/ Special Provision	\$738,979
16007	Alaska Village Electric Cooperative	Quinhagak Battery Energy Storage System Project	Construction	Lower Yukon-Kuskokwim	38-S	Storage	Quinhagak	\$443,956	\$707,625	70	0.88	\$6,962	2	10	Full	\$443,956
16018	City of Nenana	Nenana Biomass District Heat System, Final Phase	Construction	Yukon-Koyukuk/Upper Tanana	36-R	Biomass	Nenana	\$1,223,000	\$168,322	69	1.14	\$6,864	2	11	Full	\$1,223,000
16025	Puvurna Power	Kongiganak 100 kW Solar Energy	Design, Construction	Lower Yukon-Kuskokwim	38-S	Solar	Kongiganak	\$728,603	\$674,330	69	0.6	\$9,427	3	12	Partial	\$720,453
16009	Alaska Renewables	Railbelt Wind Diversification Alaska Renewables	Feasibility	Railbelt	various	Wind, Transmission, Storage	Railbelt	\$2,000,000	\$2,187,000	69	1.22	\$5,458	4	13	Full	\$2,000,000
16001	City of Homer	Homer Energy Recovery Project	Construction	Railbelt	6-C	Hydro	Homer	\$280,000	\$90,000	68	0.01	\$7,120	5	14	Full	\$280,000
16026	Atmautluak Tribal Utilities	Atmautluak ETS Installation, Integration and Commissioning	Construction	Lower Yukon-Kuskokwim	38-S	Wind, Other	Atmautluak	\$286,227	\$188,160	68	0.29	\$8,538	4	15	Full	\$286,227
16021	Southeast Alaska Power Agency	Southeast Alaska Grid Resiliency (SEAGR)	Design, Construction	Southeast	1-A, 2A	Hydro	Ketchikan, Petersburg, Wrangell	\$4,000,000	\$18,592,510	68	0	\$6,730	3	16	Full	\$4,000,000

Please see related summary report for details concerning the evaluation and description of the individual applications.



Applications Forwarded to the Legislature for a Decision on Funding

Recommended Projects										Recommendation						
App. #	Applicant	Project Title	Phase	Energy Region	Election District	Technology	Community	Grant Funds Requested	Matching Funds	Stage 3 Score	Benefit / Cost Ratio	HEC	Region Rank	State Rank	Funding Level	Funding Amount
16006	Alaska Village Electric Cooperative	Chevak Battery Energy Storage System Project	Construction	Lower Yukon-Kuskokwim	38-S	Storage	Chevak	\$968,644	\$0	66	0.62	\$6,902	5	17	Full	\$968,644
16023	Pedro Bay Village Council	Knutson Creek Hydro Project Construction	Construction	Bristol Bay	37-S	Hydro	Pedro Bay	\$400,000	\$7,200,000	65	0.08	\$9,390	3	18	Full w/ Special Provision	\$400,000
16016	Akiachak, Ltd	Akiachak Native Community 200 kW Solar Energy Project	Design, Construction	Lower Yukon-Kuskokwim	38-S	Solar	Akiachak	\$1,443,257	\$2,265,809	64	0.33	\$8,870	6	19	Partial w/ Special Provision	\$67,833
16019	Nome Joint Utility System	NJUS Solar Nome Banner Ridge Solar Farm	Construction	Bering Straits	39-T	Solar	Nome	\$4,000,000	\$50,000	60	0.57	\$9,139	1	20	Full	\$4,000,000
16012	Matanuska Electric Association	Hunter Creek Hydroelectric Feasibility Study Project	Feasibility	Railbelt	various	Hydro, Transmission, Storage	MEA service area	\$1,280,500	\$384,500	58	0.67	\$5,920	6	21	Full	\$1,280,500
16010	City of Chignik	Chignik Hydroelectric Power System	Design	Bristol Bay	37-S	Hydro	Chignik	\$883,012	\$44,346	57	1.06	\$7,701	4	22	Full	\$883,012
**16024	Golden Valley Electric	Healy Unit 2 Coal to Biomass Fuel Conversion	Recon, Feasibility	Railbelt	various	Biomass	GVEA service area	\$269,500	\$58,500	70	0	\$8,420	3	23	Full	\$269,500
16004	Utopian Power LLC	Sterling Solar Project	Design, Construction	Railbelt	8-D	Solar	Sterling	\$2,000,000	\$2,000,000	37	0.7	\$7,120	7	24	Partial w/ Special Provision	\$12,500

** Note: On Jan. 9, 2024, the REFAC voted to change the rank for application #16024 from a rank of 11 to a rank of 23 due to potential technical risks associated with fuel supply commitments.



Round XVI – Partial Funding Reasoning

As part of the evaluation process and pursuant to 3 AAC 170.655(b), 5 applications, as provided below, have been recommended for partial funding. Partial funding recommendations were made in full consideration of project phases applied for, application scoring, project scope eligibility, and household cost of energy.

App. #	Project	Requested Funding	Recommended Funding	Partial Funding Reasoning
16022	Kotzebue Community Scale Energy Storage and Inertia	\$4,000,000	\$3,675,000	Maximum award amount per project is currently \$4 million for high energy cost areas as per section 1.15 of the Round 16 RFA. In Round 13, KEA was awarded a REF grant (#7013018) in the amount of \$325,000 for the study and design of the now proposed BESS system. As such, the requested amount of \$4 million is reduced correspondingly by \$325,000 to provide a revised funding recommendation of \$3,675,000.
16020	Naknek Solar PV on Cape Suwarof	\$3,210,000	\$3,137,848	Partial Funding adjustment is owing to exclusion of funding for final design cost of \$71,152 which is currently ongoing and already funded. Only costs incurred after July 1, 2024, and which are within the scope of the grant agreement are eligible for funding under the REF program. Revised funding recommendation: \$3,137,848
16025	Kongiganak 100 kW Solar Energy	\$728,603	\$720,453	Costs associated with the applicant's administration of the REF grant are not eligible uses of REF funds. The line item for "AEA Grant and NTP" for \$8,150 is therefore removed from the funding recommendation, yielding a revised funding recommendation of \$720,453.
16016	Akiachak Native Community 200 kW Solar Energy	\$1,443,257	\$67,833	Funding for final design only in Round 16 is recommended prior to recommendation for funding the construction phase, which will better inform the additional solar capacity integration. AEA requested a copy of the USDA award, solar resource study, and updated HOMER model from the applicant. Applicant provided the USDA grant agreement, but neither the solar resource study, or the updated HOMER model. The applicant may re-apply in a future REF round for the construction phase once the final design is completed. In addition, funding for grant administration is not allowable under the REF program. The \$8,150 for the line item entitled "AEA award and NTP" under the final design budget is removed from the funding recommendation, for a recommendation of \$67,833 in Round 16.
16004	Sterling Solar Project	\$2,000,000	\$12,500	Funding for final design and permitting recommended prior to recommendation for funding the construction phase. Many aspects of the project at this juncture are unclear and need to be revised. The applicant may re-apply in a future REF round for the construction phase once the final design is completed. AEA staff identified several issues with the application including: lack of detail on proposed system design, no letters of support included, not specific in stating required permits, lack of discussion of model results and no technical analysis of proposed system was provided.





ALASKA ENERGY AUTHORITY

813 West Northern Lights Blvd.

Anchorage, Alaska 99503

Phone: (907) 771-3000

Fax: (907) 771-3044

Toll Free (Alaska Only) 888-300-8534

