Overview of Review Process

The purpose of this document is to provide a thorough description of how the REF (Renewable Energy Fund) Round VIII applications were evaluated. This document will be posted on the AEA (Alaska Energy Authority) REF Round VIII webpage http://www.akenergyauthority.org/Programs/Renewable-Energy-Fund/Rounds#Round8.

AEA received a total of 67 applications for REF Round VIII. These applications requested a total of $72 million in grant funding. For the second year, the RFA (Request for Applications) included the solicitation for standard renewable energy projects and a separate application for those related to offsetting heating fuel.

- AEA reviewed 36 applications requesting $48 million for heat related projects (biomass, heat recovery, heat pumps, and renewables to heat).
- AEA reviewed 31 applications requesting $25 million for standard renewable energy projects (hydro, transmission, wind, geothermal, storage, hydrokinetic, solar photovoltaic, and biofuel).

All applications were evaluated based on a four-stage process as in previous Rounds.

Stage 1 review: AEA staff evaluated each application for completeness, eligibility, and responsiveness to the RFA. Two applications did not pass Stage 1 review based on these threshold criteria. The applicants were notified. Following the 10-day appeal period, the applications were not advanced to the next stage of review.

Stage 2 review: AEA staff evaluated the technical and economic feasibility of the remaining 65 proposals. In addition, Alaska Department of Natural Resources staff and private economists, under contract to AEA, reviewed each application. Stage 2 review includes scoring the projects in a number of categories to provide a score for the overall technical, economic feasibility as well as the project plan and project team. In Round VIII, as was the case in Round VII, a minimum score of 40 out of 100 points was required for an application to advance to Stage 3 evaluation. Following Stage 2, 32 applicants were notified that they did not pass and were provided an opportunity to appeal the decision as outlined in regulations. 15 applicants appealed. Two missed the deadline to appeal and were not considered. The executive director upheld the staff decision for three applicants and requested that the review team re-evaluate ten applications. Of those re-evaluated, six were recommended for funding and four did not pass the minimum Stage 2 score and did not advance. Those who did not advance were notified of the reasons and were given an opportunity to respond. The deadline for response was January 13, 2015.

Stage 3 review: The purpose of Stage 3 is to rank the recommended projects for funding priority. The scoring is conducted by AEA staff and is based on a number of criteria outlined in statute, regulations and in the RFA. The weighting of the criteria is the same as has been applied since Round V, as follows:

1. Cost of Energy (35%)
2. Matching Funds (15%)
3. Economic and Technical Feasibility (20%): score from Stage 2
4. Project Readiness (5%)
5. Economic and Other Alaska Benefit (15%)
6. Sustainability (5%)
7. Local Support (5%)

After the appeal period, AEA staff prepared a list of electric (called “standard”) projects and a list of heat projects which were recommended for funding. These lists were presented to the REFAC at the January 9th, 2015 meeting for Stage 4 review.

**Stage 4 review:** This stage, also called “Regional Distribution”, is to ensure regional equity between the energy regions of the state. In rounds I through VII regional distribution was determined by a calculation that accounts for the population and cost of energy ($/kWh and $/gal), and a balance of statewide funding. Using this calculation AEA staff determined if a region was under-represented and in those cases had the option to recommend funding a recommended project which would not have been included in the governor’s proposed budget based on its Stage 3 statewide rank. If recommended, this was discussed with the REFAC and their recommendations sought. The process allows AEA to more evenly distribute funds across the state based upon relative energy costs.

At the REFAC meeting on January 9, 2015, the committee advised the AEA to consider a new approach to the regional distribution of REF projects. Below is the three-step approach developed by AEA to respond to the committee’s advice.

1. Use a regional population weighted “burden of energy cost” metric to establish regional funding bands. The burden of energy cost for a household is calculated based on:
   a. Residential electric costs assuming 500 kWh/month use
   b. Heating fuel cost for a community assuming regional consumption from CCHRC’s recent housing assessment. Consumption levels vary based on a number of factors, most importantly temperature and house size.
   c. Household income (Census: American Community Survey 3 year average)

   **Burden of energy cost = (HH cost of electric + heat energy) / HH income**

   This burden of energy cost is calculated for each community and then weighted by population to generate a regional burden of energy number. This burden of energy cost is used to calculate the range of funding that each region should receive, such that regions with high energy cost burden are eligible to receive more funding cumulatively across all years of the REF. The results in Round VIII indicate that Yukon-Koyukuk/Upper Tanana is considered “under-served”.

2. Cap all individual projects at $1.5 million (10% of Governor’s budget).
3. To achieve a better balance of funding across the state, regions that exceed the target funding band will be capped so their share of the overall fund cannot grow. This rule affects the Southeast region in this round. Therefore Southeast projects in the top funding tier are limited to recommended projects that are in communities with the highest burden of energy cost. Once the region’s funding equals 22.15% of recommended funding, the remaining projects will be identified as recommended projects, but in a group outside the top tier of $15M of Round VII projects.

The REFAC reconvened on January 28th and approved the new list of projects recommended for Round VIII funding. AEA considered that recommendation when finalizing its recommendation to the legislature, which was due by the 10th day of the legislative session.
**Roles of AEA Staff and the Renewable Energy Fund Advisory Committee**

AEA staff requests and receives input from the REFAC regarding the application and evaluation process and final funding recommendations. Following is a summary of Committee involvement.

AEA staff and the Committee met on May 13, 2014 and on September 22, 2014 to discuss issues including the schedule and details of the Round VIII RFA, progress on funded projects, possible changes to the program evaluation, community assistance efforts and the REF program relationship with regional and community energy planning efforts.

AEA staff and the Committee met on January 9, 2015 following AEA evaluation of all applications, to review the AEA recommendations for Stage 4. The REFAC requested development of a new regional spreading methodology. AEA staff and the Committee reconvened on January 28, 2015 to review the list of projects recommended for Round VIII funding using the newly developed regional spreading methodology.

In summary, 40 projects were recommended for full or partial funding in Round VIII, totaling approximately $18.2 million. Of these, $7.8 million are for 22 applications to displace heating fuels, and $10.3 million are for 18 standard (generally electrical) renewable energy projects. Within the governor’s $15 million budget there are 18 heat projects totaling $5.2 million in recommended funding and 16 standard projects totally $9.8 million.
Guidelines for Renewable Energy Fund Application Evaluation

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These are the Instructions and Guidelines for Evaluation of applications received in response to the Round VIII RFA of the REF.

- Applications that do not comply with AS 42.45.45 and all of the material and substantial terms, conditions, and requirements of the RFA may be rejected.
- If an application is rejected, the applicant will be notified in writing that their application has been rejected and the basis for rejection.
- AEA may waive minor requirements of the RFA that do not result in a material change in the requirements of the RFA and do not give an applicant an unfair advantage in the review process.
- Upon submission of the final recommendations to the Legislature, AEA will make all applications, economic analysis and AEA’s recommendations available for review on the Authority’s web site.

**General:**

- Communications with applicants during the evaluation process will include the Grant Administrator.
- The ED (Executive Director) is the ED of AEA; Directors are those management personnel at AEA who have program oversight for AEA programs; PMs (Project Managers) are the subject matter technical experts; and the Grant Administrator is the person responsible for overseeing the grant process for the Authority.
- All applications will be reviewed using the same process and criteria established in the RFA.
- Decisions made in each stage of the review process will be documented in writing and made a part of the grant file.
- If reviewers think they may have a potential conflict of interest, (financial or personal interest, such as friend or family members) they will inform their supervisor immediately of the potential nature of the conflict.
- If reviewers have questions about an application or process they should contact the Grant Administrator. If Reviewers have technical questions they should contact the Project Managers.
- Communications relating to the economic evaluations should go through or copy AEA staff economists.
- If an application is rejected or not recommended, the applicants will be sent a letter from the Grant Administrator explaining why their application has been rejected or not recommended. Reviewers will be required to provide to the Grant Administrator the reasons for the application being rejected.
- All written notes will be kept with the application file or in the active server files established for this purpose.
- All notes are considered public records and subject to Alaska public records act disclosure requirements.
- Any appeals from rejected applicants in Stage 1 or Stage 2 reviews will be directed to the Grant Administrator. The Executive Director will make the final determinations in accordance with regulations (3AAC 107.650).
Stage 1 Review Process:

All applications received by the deadline will be reviewed by AEA staff to assess if the application is complete, meets the minimum submission requirements, and has adequate information to proceed to Stage 2 – Technical and Economic Evaluation.

Reviewers

Grant Administrator and at least one Director

Criteria

All criteria are scored pass/fail. Failure to meet any of these criteria results in rejection of the application.

| 1.  | The application is submitted by an Eligible Applicant (sec 1.4 of RFA). |
| 2.  | The project meets the definition of an Eligible Project (sec 1.5).   |
| 3.  | A resolution or other formal authorization of the Applicant’s governing body is included with the application to demonstrate the Applicant’s commitment to the project and any proposed use of matching resources (sec 1.4). |
| 4.  | The application provides a detailed description of the phase(s) of project proposed, i.e. reconnaissance study, conceptual design/feasibility study, final design/permitting, and/or construction (sec 2.2 - 2.6). |
| 5.  | The 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 of evaluation. |
| 6.  | The Applicant demonstrates that they will take ownership of the project; own, lease, or otherwise control the site upon which the project is located; and upon completion of the project operate and maintain it for its economic life for the benefit of the public (sec 1.4). |

Process

- The Grant Administrator will evaluate criteria 1-3 & 6 above.
- The Director will evaluate criteria 4 & 5 above.
- If it appears that the application could be complete with a clarification or minor additional information the Director may make a recommendation to the Grant Administrator to request additional information. The Grant Administrator will request clarifying and/or additional information from the applicant. The applicant will have a specified amount of time to provide the requested information. Failure of the applicant to respond timely or provide information that completes their application will result in the application being rejected.
- Applications that fail to pass will be provided written notice as to why their application failed Stage 1.
- Any requests for reconsideration from rejected applicants in Stage 1 will be directed to the Grant Administrator. The Grant Administrator will provide the reconsideration requests to the Executive Director for a determination as provided in regulations 3AAC 107.650.

Stage 2 Review Process:

All applications that pass Stage 1 will be reviewed for technical and economic feasibility in accordance with the criteria below.
**Reviewers**

- PMs – the AEA staff providing technical subject matter expertise.
- Staff from Department of Natural Resources – technical experts providing specific review and comment on projects that may have issues related to permitting and natural resource development.
- Economists - contracted economist(s) who will review cost benefit and other cost and pricing information provided for each application for the purpose of providing the authority an independent assessment of the economics of the proposed project using a standardized economic evaluation across all projects.
- AEA staff economists – manage, oversee, and ensure equal evaluations between economists and perform a quality assurance review of economic analysis work for projects.
- Directors – oversee the work of the Project Managers.

**Criteria**

- Each of the numbered criteria below will be scored with a numerical score 1-10 and weighted per the percentages below.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Project Management, Development, and Operation</td>
<td>20%</td>
</tr>
<tr>
<td>a. The proposed schedule is clear, realistic, and described in adequate detail.</td>
<td></td>
</tr>
<tr>
<td>b. The cost estimates for project development, operation, maintenance, fuel, and other project items meet industry standards or are otherwise justified.</td>
<td></td>
</tr>
<tr>
<td>c. The Applicant’s communications plan, including monitoring and reporting, is described in adequate detail.</td>
<td></td>
</tr>
<tr>
<td>d. Logistical, business, and financial arrangements for operating and maintaining the project throughout its lifetime and selling energy from the completed project are reasonable and described in adequate detail.</td>
<td></td>
</tr>
<tr>
<td>2. Qualifications and Experience</td>
<td>20%</td>
</tr>
<tr>
<td>a. The Applicant, partners, and/or contractors have sufficient knowledge and experience to successfully complete and operate the project.</td>
<td></td>
</tr>
<tr>
<td>• If the applicant has not yet chosen a contractor to complete the work, qualifications and experience points will be based on the applicant’s capacity to successfully select contractors and manage complex contracts.</td>
<td></td>
</tr>
<tr>
<td>b. The project team has staffing, time, and other resources to successfully complete and operate the project.</td>
<td></td>
</tr>
<tr>
<td>c. The project team is able to understand and address technical, economic, and environmental barriers to successful project completion and operation.</td>
<td></td>
</tr>
<tr>
<td>d. The project team has positive past grant experience.</td>
<td></td>
</tr>
<tr>
<td>e. The project uses local labor and trains a local labor workforce.</td>
<td></td>
</tr>
<tr>
<td>3. Technical Feasibility (Subjectively Scored)</td>
<td>20%</td>
</tr>
</tbody>
</table>
a. The renewable energy resource is available on a sustainable basis, and project permits and other authorizations can reasonably be obtained.
b. A site is available and suitable for the proposed energy system.
c. Project technical and environmental risks are reasonable.
d. The proposed energy system can reliably produce and deliver energy as planned.

Or, if a reconnaissance project is being proposed:

a. The renewable energy resource is present and can potentially be used for energy generation.
b. The proposed technology is suitable for the resources and demands of the community.
c. The proposed technology has reached a level of maturity necessary for the proposed application.

4. Economic Feasibility

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. The project is shown to be economically feasible (net positive savings in fuel, operation and maintenance, and capital costs over the life of the proposed project).</td>
<td>25%</td>
</tr>
<tr>
<td>b. The project has an adequate financing plan for completion of the grant-funded phase and has considered options for financing subsequent phases of the project.</td>
<td>5%</td>
</tr>
<tr>
<td>c. Other benefits to the Alaska public are demonstrated. Avoided costs alone will not be presumed to be in the best interest of the public.</td>
<td>10%</td>
</tr>
</tbody>
</table>

**Process**

- PMs will carefully review proposals for their assigned technology group and provide an initial feasibility score on all criteria, a funding recommendation, and draft statement regarding AEA’s funding recommendation.
- PMs will provide AEP (Annual Energy Production) estimates to the evaluation team for applications that significantly underestimate or overestimate possible production.
- An economist hired by AEA will review the economic information and provide an independent analysis of cost and benefits of each project. The reviewers will consider the independent analysis when scoring the economic feasibility and benefits criteria.
- Reviewers will use the formula and criteria in the attached Scoring Matrix Guide - for designated criteria in Stage 2.
- If the PM believes they need additional information from the applicant, they will request the information either through or copying the Grant Administrator in their request.
- Any requests for additional information will be made to the applicant by e-mail, requesting a response in 7 days or fewer.
- Applicants that fail to respond to requests for information or to adequately address the criteria in the technical review may be rejected in Stage 2.
- The Directors or their designee will meet with the PMs to review the applications and discuss final Stage 2 scoring. Scoring per the Stage 2 criteria may be adjusted based on final discussions between the Directors, PMs, Economists, and ED.
- Applications may be not recommended prior to generating scores for Stage 2 if the application does not meet the program requirements outlined in the RFA.
• A final weighted Stage 2 technical and economic feasibility score will be given for each application reviewed and will be used to calculate the Stage 3 ranking score.
• Applications that fail to adequately address the criteria in the technical review may not be recommended for funding or further review.
• A minimum score of 40 is required for Stage 2 in order to pass to Stage 3.
• Project specific recommendations for full, partial, or no funding, as well as recommendations for special provisions are applied during Stage 2. Projects may be recommended for partial funding, funding of fewer phases than requested, or funding for a phase different than requested if they are viable but:
  o Documentation submitted with the application is not sufficient to justify full funding for more than one phase of a project, or the project is not ready for the requested phase and AEA recommends funding for a prior phase.
  o Funding for proposed project development phases will not be used until late FY 2016 or later. That is, funds will be tied up unreasonably.
  o AEA believes that proposed costs are excessive for the proposed scope of work.
  o The applicant requests AEA to manage the project and the AEA Project Manager can confidently estimate a lower cost.
  o The proposal includes operating costs, ineligible costs, unreasonably high costs, or other costs not recommended for funding.
• Applications that fail to pass will be provided written notice as to why their application failed Stage 2.
• Any requests for reconsideration from rejected applicants in Stage 2 will be directed to the Grant Administrator. The Grant Administrator will provide the reconsideration requests to the Executive Director for a determination as provided in regulations 3AAC 107.650.
• AEA will develop a preliminary list of feasible applications based on the Stage 2 review. All projects that pass Stage 2 will be recommended for funding and will advance to Stage 3 to rank the projects according to the ranking criteria.

**Stage 3 Review Process:**

All applications that pass the technical review will be evaluated for the purpose of ranking applications and making recommendations to the Legislature based on the following criteria which include criteria required by 3 AAC 107.655 and AS 42.45.045.

The technical and economic feasibility score from Stage 2 will be automatically weighted and scored in Stage 3.

The weighted average of the Economic and Public Benefit score of Stage 2 will be used for initial scoring of Economic and Other Public Benefit Score. This score will be reviewed by the Directors.

The Grant Administrator, with staff assistance, will score the cost of energy, type and amount of matching funds, and local support, using the formulas and methods outlined in this document.

Two Directors or their designees and the PMs will provide scores for readiness, previous success, and sustainability.

AEA will develop a regional ranking of applications and a draft ranking of all projects for the REFAC to review.
The REFAC will review AEA’s final Stage 3 scores and regional ranking recommendations. The REFAC may make recommendations to assist in achieving a statewide balance but will not be rescoring based on the criteria.

**Reviewers**
- Grant Administrator (Local Support and Match Criteria)
- Two Directors
- Project Managers
- Renewable Energy Fund Advisory Committee (Review of Regional Ranking and Funding Recommendations)

**Criteria**
- Criteria noted below will be scored and weighted as noted. Additional details regarding the criterion are in the Stage 3 criterion section below.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Round VIII Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of energy in the affected project area relative to other areas</td>
<td>35%</td>
</tr>
<tr>
<td>The type and amount of matching funds and other resources an applicant will commit to the project</td>
<td>15%</td>
</tr>
<tr>
<td>Project feasibility (Score from Stage 2 weighted as described below)</td>
<td>20%</td>
</tr>
<tr>
<td>Project readiness. How quickly the proposed work can begin and be accomplished and/or success in previous phases of project development.</td>
<td>5%</td>
</tr>
<tr>
<td>Public benefits including economic benefit to the Alaska Public.</td>
<td>15%</td>
</tr>
<tr>
<td>Sustainability. The ability of the applicant to finance, operate and maintain the project for the life of the project.</td>
<td>5%</td>
</tr>
<tr>
<td>Local Support</td>
<td>5%</td>
</tr>
<tr>
<td>Region balance. (Evaluated as pass fail.)</td>
<td>P/F</td>
</tr>
<tr>
<td>Compliance with previous grant awards and progress in previous phases of project development. (Evaluated as pass fail.)</td>
<td>P/F</td>
</tr>
</tbody>
</table>

**Process**
- Reviewers will use the Scoring Matrix Guides for designated criteria in Stage 3.
- Each application will be given a single weighted score.
- Where more than one evaluator is scoring a given criteria the scores of all evaluators for that criteria will be averaged.
- Any requests for additional information will include the Grant Administrator by e-mail, with a response time of 7 days or less.
- The evaluation team may conduct interviews of applicants to determine a more complete understanding of the technical or financial aspects of their application.


**Funding Limitations on Recommendations (Sec 1.15 of RFA)**

Evaluators should take these limits into account when making recommendations as the applicants were instructed that they would be responsible for any project costs beyond the grant funds available to complete the project.

<table>
<thead>
<tr>
<th>Project Type/Phase</th>
<th>Grant Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction projects on the Railbelt and SE Alaska communities that have a low cost of power.</td>
<td>$4 Million per project</td>
</tr>
<tr>
<td>Construction in all other areas of the state not mentioned above.</td>
<td>$8 Million per project</td>
</tr>
</tbody>
</table>

Low energy cost areas are defined as communities with a residential retail electric rate of below $0.20 per kWh, before Power Cost Equalization (PCE) program funding 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 is expected by the time the proposed project is constructed.

**Recommendation Guidelines**

- The final recommendations will be one of the following:
  - Recommend – Full funding per application
  - Recommend – Partial funding with a recommended funding amount
    - (Special Provisions may be applied to any recommended project)
  - Not recommended for grant funding – (basis for not recommending to be explained)
  - Did not pass Stage 2 (minimum score)
  - Did not pass Stage 1

- Final AEA recommendations may also suggest specific terms or conditions be imposed on the grantee to assure the project is successful and the public receives value for the funds to be expended.

- In its final decision on an application AEA may recommend funding for fewer phases or earlier phases than the applicant requested. For example, if an application asks for construction funding but a feasibility study is still needed, AEA can give the applicant the opportunity to accept a recommendation for feasibility funding. If the applicant does not accept an earlier phase of funding the project may be considered premature and not recommended for funding.

- Multi-phase funding guidelines
  - Fund multiple phases: Multiple phases can be completed in 2015/16, and project is well-defined, relatively inexpensive, and low-risk.
  - Fund limited phases: Later phases would not occur until 2016 or later, not well-defined, expensive, higher risk, or there are competing projects for which planning is desirable.

- Competing or interactive projects guidelines
  - If AEA is aware of the potential for substantial interaction among proposed and/or other known projects, then recommend planning with appropriate level of analysis and public input before committing substantial funding to one or more alternatives.

- Partial funding guidelines
  - Partial funding levels will correspond to amount proposed in phases that are recommended.
Exception 1: If AEA believes the project can be built for less, then a lower figure can be recommended. AEA will provide justification for the lower figure in its recommendations.

Exception 2: Proposal requests funding for operating expenses (labor, fuel) or non-renewable energy components (e.g., a diesel generator) not eligible for funding.

Exception 3: If limiting funding to a maximum dollar limit for specific areas, groups, or types of projects would provide the best statewide balance of funds, AEA may do that.

- Guidelines for recommendations for bio-fuels projects (RFA 1.14)
  - Bio-fuel projects where the applicant does not intend to generate electricity or heat for sale to the public will be limited to reconnaissance and feasibility phases only.

- Consideration of resource assessment projects
  - Resource assessment associated with one or more site-specific projects is eligible for phase 2 funding. General regional or statewide assessment, not tied to particular proposed projects, is not eligible, and more appropriately done through other programs.

- Recommendation guidelines will be documented and a part of the grant file.

Stage 4 Ranking of Applications for Funding Recommendations

All applications recommended for grants as a result of the Stage 3 evaluation will be ranked in accordance with 3 AAC 107.660.

To establish a statewide balance of recommended projects, AEA provides to the REFAC a statewide and regional ranking of all applications recommended for funding in Stage 3.

In consultation with the REFAC, AEA makes a final prioritized list of all recommended projects giving significant weight to providing a statewide balance for grant money, and taking into consideration the amount of money that may be available, the number and types of project within each region, regional rank, and statewide rank of each application.

Reviewers

- Grant Administrator
- Directors
- Executive Director of AEA.
- Renewable Energy Fund Advisory Committee (Review of Regional Ranking and Funding Recommendations)

Process

- Upon completion of scoring and specific project recommendations by AEA, all applications will be grouped within geographical regions.
- Each group of applications will be ranked within their geographical region based on the final Stage 3 score.
- Each application will have a Stage 3 score and regional rank.
- A draft recommendation of projects for funding will be presented to the REFAC for review along with the complete list of projects.
- AEA will prepare a summary of the draft recommendations by energy region that will compare potential allocations of funding based on the proposed budget for the following fiscal year. This summary will compare the grant funding allocations to each region by the regional cost of energy burden weighted according to the populations of each community in the region.
The cost of energy burden for a region is estimated using community based cost of electricity, space heat and household income and then population weighting community results.

- A region is considered under-served if they have received less than 50% of their target funding allocation. Each region’s target funding allocation is based on cumulative REF funding and the regions’ population weighted cost of energy burden. In order to attain this goal AEA will refer to the Stage 3 statewide ranking list and:
  - limit regions of the state that have received more than twice their regional funding target; these regions will not be allowed to grow their current share of REF cumulative funding; and
  - cap individual project funding at 10% of proposed governor’s budget, for Round VIII the cap was $1.5 million.

- A top tier of applications will be defined that fit within the Governor’s budget and the remaining recommended applications will fall into a second tier.
- The REFAC may provide additional recommendations to AEA as to the funding level of individual projects, the final ranking of projects, and the total amount of funding and number of projects AEA recommends to the legislature.
- The final list of recommended projects for funding will provide a reasonable statewide balance of funds taking into consideration the overall score, the cost of energy burden, and the rank of projects within a region.

**Recommendations to the Legislature**

The final recommendation to the legislature will include for both heat and electric projects:

- A list of recommended applications for FY 2016 funding.
- A list of applications not recommended for funding.
- A list of applications rejected as ineligible.

The final recommendation to the legislature will also contain specific information for each project as requested by the legislature and a summary of each project.

Applicants may be required to provide additional information to the Legislature upon request.

**Scoring Criteria**

**General Scoring Criteria**

- Pass/Fail scoring means either the criteria are met or they are not.
- A weighted score for each of the criteria will be calculated and each complete application will be given a total score at the end of the Stage 2 and Stage 3 review process unless the application is determined not to meet the requirements of the RFA.
- Reviewers should use the following weighted scoring of criteria as a guide in addition to the specific formula scoring matrices for some criteria defined in sections below.

<table>
<thead>
<tr>
<th>Score</th>
<th>Guidelines (Intent is to provide a range)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>The application demonstrates a thorough understanding of the criteria requirements and completely addresses them in a thoughtful manner. There is no need for additional follow-up with the applicant to understand how they meet the requirements of the criteria</td>
</tr>
<tr>
<td>7</td>
<td>The application provides information that is generally complete and well-</td>
</tr>
</tbody>
</table>
supported. Evaluators may still have a few questions regarding how the applicant meets the criterion but it is clear the applicant understands what is required.

<p>| | |</p>
<table>
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<tr>
<th></th>
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<tbody>
<tr>
<td>5</td>
<td>The application addresses the criteria in an adequate way and meets minimum requirements under each of the criteria. Some issues may still need to be clarified prior to awarding a grant.</td>
</tr>
<tr>
<td>3</td>
<td>The application information is incomplete or fails to fully address what is needed for the project or information has errors. AEA may need more info to be able to complete the evaluation or need to resolve issues before recommending or awarding a grant.</td>
</tr>
<tr>
<td>0</td>
<td>The application fails to demonstrate understanding of the criteria requirements or project proposed. Required information is poor or absent in the proposal.</td>
</tr>
</tbody>
</table>

**Stage 2 Criterion 4 (a) Economic Benefit Cost Ratio**  
(Maximum Stage 2 Points: 25)

AEA staff will consider the economist evaluation when scoring this criterion. They will compare the economist’s and any applicant supplied B/C and determine which of the B/C values may be most appropriate. If there is wide discrepancy between the two B/C ratios they will use their best judgment based on their understanding of the technical aspects of the proposal to assign a score. A project will be scored at 0 if the Benefit Cost ratio value is < 0.90 or if no, or insufficient, information is provided by the applicant to do an economic analysis.

<table>
<thead>
<tr>
<th>Benefit / Cost (B/C) Ratio Value</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 0.90 (This indicates that there is relatively low economic benefit or economic analysis cannot be conducted.)</td>
<td>0</td>
</tr>
<tr>
<td>&gt;0.90 – &lt;=1.00</td>
<td>1</td>
</tr>
<tr>
<td>&gt;1.00 – &lt;=1.10</td>
<td>3</td>
</tr>
<tr>
<td>&gt;1.10 – &lt;=1.20</td>
<td>4</td>
</tr>
<tr>
<td>&gt;1.20 – &lt;=1.30</td>
<td>5</td>
</tr>
<tr>
<td>&gt;1.30 – &lt;=1.40</td>
<td>6</td>
</tr>
<tr>
<td>&gt;1.40 - &lt;= 1.50</td>
<td>7</td>
</tr>
<tr>
<td>&gt;1.50 - &lt;= 1.60</td>
<td>8</td>
</tr>
<tr>
<td>&gt;1.60 - &lt;= 1.70</td>
<td>9</td>
</tr>
<tr>
<td>&gt;=1.7</td>
<td>10</td>
</tr>
</tbody>
</table>

**Stage 2 Criterion 4 (b) Financing Plan**  
(Maximum Stage 2 Points: 5)

The Financing Plan score will be subjectively scored based on the applicant’s intent and the level of detail described in the application on how the applicant proposes to fund the project.

Questions to be considered under these criteria:
- If recommended, are funds needed to complete the work identified in the application available and adequate to complete all the work in the grant?
• If additional funds are needed does the applicant specifically identify where they will come from?
• Are these additional funds secured, or are they pending future approvals?
• Is there a reasonable plan for covering potential cost increases or shortfalls in funding?
• What impact, if any, would the timing of availability of additional funds have on the ability to proceed with the grant?

For construction projects, if the above questions are addressed in the application and there is an adequate plan, the project will be given 10 points. For all other applications, if the above questions are addressed in the application and there is an adequate plan, this will be given a point score of 7. If the plan is not adequate it will be scored lower based on the likelihood of funding being available to complete the project, or additional commitments that may need to be made by the applicant prior to award of a grant.

For example, an applicant may request construction funding above the RFA cap but does not indicate how the additional funding will be obtained. They may receive a lower score than an applicant who can demonstrate they have all the financial resources in place to complete the grant work proposed in the application.

If future stages of work will be needed beyond the scope of the application (non-construction projects), consideration should be given as to the likelihood of funding for the future stages. Three of the available points should be scored based upon the applicant’s financing plan for future stages of the project. To receive all 3 points the applicant must identify sources to complete the project, to cover cost overruns, have the ability to raise revenue and outline a reasonable financing plan.

**Stage 2 Criterion 4 (c) Other Public Benefit Review Guidelines**
(Maximum Stage 2 points: 10)

For the purpose of evaluating this criterion, public benefits are those benefits that would be considered unique to a given project and not generic to any renewable resource. For example, decreased greenhouse gas emission, stable pricing of fuel source, won’t be considered under this category.

Economists will provide a qualitative assessment of potential public benefits in their project review summary for each project they review. Economists will not provide scores for the criteria.

Each category may be scored 0-2 with the maximum total public benefit weight of no more than 10 points.

<table>
<thead>
<tr>
<th>Other Public Benefits</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Will the project result in developing infrastructure (roads, trails, etc.) that can be used for other purposes?</td>
<td>0 – 2</td>
</tr>
<tr>
<td>Will the project result in a direct long-term increase in jobs (operating, supplying fuel, etc.)?</td>
<td>0 – 2</td>
</tr>
<tr>
<td>Will the project solve other problems for the community (waste disposal, food security, etc.)?</td>
<td>0 – 2</td>
</tr>
<tr>
<td>Will the project generate useful information that could be used by the public in other parts of the state?</td>
<td>0 – 2</td>
</tr>
</tbody>
</table>
**Stage 3 Criterion 1 Cost of Energy**

(Maximum Stage 3 points: 35)

In Round VII, heat applications were separated from the rest of the renewable energy grant fund applications for the first time and a different methodology was employed for scoring the cost of energy. This scoring criteria is unchanged in Round VIII.

For standard applications, the same methodology used in previous rounds is applied. This score is based on the 2013 residential cost of power for each community using available data.

Scores are assigned for each community using the following formula:

\[ \text{Score} = \frac{\text{cost of power}}{0.80 \times 10}, \text{Score cannot be greater than 10}. \]

Communities with a residential electric power cost above $0.80/kWh are assigned a score of 10.

For heat applications, the score is based on the cost of heating fuel for each community using available data, primarily the 2014 heating fuel #1 retail price per gallon (adjusted to 2013 dollars).

Scores are assigned for each community using the following formula:

\[ \text{Score} = \frac{\text{cost of heat}}{8.00 \times 10}, \text{Score cannot be greater than 10}. \]

Communities with a residential heating fuel cost above $8.00/gallon are assigned a score of 10.

In some instances, a standard application is displacing heating fuel and/or a heat application is displaying electricity. Under such circumstances, the cost of the displaced electricity is used.

In some instances, an application may address multiple communities. In such cases, the weighted average residential rate or price of heating fuel is used.

The specific cost of energy score for Renewable Energy Fund Round VIII applications follows:

<table>
<thead>
<tr>
<th>Energy Region</th>
<th>App#</th>
<th>Standard Application Name</th>
<th>REF8 Residential Rate $/kWh</th>
<th>S3 Criteria 1 COE</th>
<th>S3 Criteria 1 COE Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bristol Bay</td>
<td>1101</td>
<td>Manokotak Renewable Energy Feasibility Project</td>
<td>$0.55</td>
<td>6.88</td>
<td>24.06</td>
</tr>
<tr>
<td>Kodiak</td>
<td>1102</td>
<td>Upper Hidden Basin Diversion</td>
<td>$0.16</td>
<td>2.01</td>
<td>7.04</td>
</tr>
<tr>
<td>Southeast</td>
<td>1104</td>
<td>SEAPA Wind Resource Assessment</td>
<td>$0.12</td>
<td>1.50</td>
<td>5.25</td>
</tr>
<tr>
<td>Yukon-Koyuk/Upper Tanana</td>
<td>1105</td>
<td>Clearwater Creek Hydropower Project</td>
<td>$0.50</td>
<td>6.19</td>
<td>21.68</td>
</tr>
<tr>
<td>Southeast</td>
<td>1106</td>
<td>Mahoney Lake Hydropower Project</td>
<td>$0.12</td>
<td>1.50</td>
<td>5.25</td>
</tr>
<tr>
<td>Southeast</td>
<td>1107</td>
<td>Swan Lake Reservoir Expansion Project</td>
<td>$0.12</td>
<td>1.50</td>
<td>5.25</td>
</tr>
<tr>
<td>Southeast</td>
<td>1108</td>
<td>Neck Lake Hydropower Project</td>
<td>$0.59</td>
<td>7.32</td>
<td>25.61</td>
</tr>
<tr>
<td>Copper River/Chugach</td>
<td>1111</td>
<td>Crater Lake Power and Water Project</td>
<td>$0.39</td>
<td>4.86</td>
<td>17.01</td>
</tr>
<tr>
<td>Northwest Artic</td>
<td>1112</td>
<td>100 Kilowatt Solar Array for Kotzebue</td>
<td>$0.40</td>
<td>5.01</td>
<td>17.53</td>
</tr>
<tr>
<td>Lower Yukon-Kuskokwim</td>
<td>1115</td>
<td>St. Mary's Pitka's Point Wind Energy Construction Project</td>
<td>$0.59</td>
<td>7.31</td>
<td>25.59</td>
</tr>
<tr>
<td>Energy Region</td>
<td>App#</td>
<td>Heat Application Name</td>
<td>REF8 Heat Price $/gal</td>
<td>S3 Criteria Heat Score</td>
<td>S3 Criteria Heat Price Weight</td>
</tr>
<tr>
<td>-----------------</td>
<td>------</td>
<td>-----------------------------------------------------------------</td>
<td>-----------------------</td>
<td>------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>Southeast</td>
<td>1103</td>
<td>Sitka: Wastewater Treatment Plant Effluent Heat Pump</td>
<td>$4.08</td>
<td>5.10</td>
<td>17.87</td>
</tr>
<tr>
<td>Southeast</td>
<td>1109</td>
<td>Craig High School Wood Heat Conversion</td>
<td>$4.10</td>
<td>5.13</td>
<td>17.95</td>
</tr>
<tr>
<td>Copper River/Chugach</td>
<td>1110</td>
<td>Wood Boiler for The Native Village of Tazlina</td>
<td>$3.83</td>
<td>4.79</td>
<td>16.76</td>
</tr>
<tr>
<td>Southeast</td>
<td>1113</td>
<td>Angoon Low Income Housing Pellet District Heat</td>
<td>$5.20</td>
<td>6.50</td>
<td>22.75</td>
</tr>
<tr>
<td>Region</td>
<td>Project Description</td>
<td>Match</td>
<td>Percentage</td>
<td>Total Grant Request</td>
<td></td>
</tr>
<tr>
<td>---------------------</td>
<td>--------------------------------------------------------------------------------------</td>
<td>-------</td>
<td>------------</td>
<td>---------------------</td>
<td></td>
</tr>
<tr>
<td>Southeast</td>
<td>Klawock Low Income Housing Pellet Heat</td>
<td>$4.12</td>
<td>5.15</td>
<td>18.04</td>
<td></td>
</tr>
<tr>
<td>Lower Yukon-Kuskokwim</td>
<td>Bethel Power Plant Heat Recovery System Assessment and Conceptual Design</td>
<td>$6.99</td>
<td>8.74</td>
<td>30.60</td>
<td></td>
</tr>
<tr>
<td>Yukon-Koyuk/Upper Tanana</td>
<td>Biomass for Akiachak Native Community Electric Company</td>
<td>$6.77</td>
<td>8.46</td>
<td>29.62</td>
<td></td>
</tr>
<tr>
<td>Bering Straits</td>
<td>Koyuk Water System Heat Recovery</td>
<td>$6.20</td>
<td>7.75</td>
<td>27.12</td>
<td></td>
</tr>
<tr>
<td>Northwest Artic</td>
<td>Ambler Washeteria and City Office Biomass Heating System</td>
<td>$10.67</td>
<td>10.00</td>
<td>35.00</td>
<td></td>
</tr>
<tr>
<td>Yukon-Koyuk/Upper Tanana</td>
<td>Huslia Water System and Clinic Biomass Boiler Project</td>
<td>$6.79</td>
<td>8.49</td>
<td>29.71</td>
<td></td>
</tr>
<tr>
<td>Yukon-Koyuk/Upper Tanana</td>
<td>Nikolai Community Biomass Heating System</td>
<td>$7.76</td>
<td>9.70</td>
<td>33.95</td>
<td></td>
</tr>
<tr>
<td>Yukon-Koyuk/Upper Tanana</td>
<td>Holy Cross Power Plant Heat Recovery for Water Distribution System</td>
<td>$6.94</td>
<td>8.67</td>
<td>30.34</td>
<td></td>
</tr>
<tr>
<td>Southeast</td>
<td>Hydaburg Schools Wood Fired Boiler Project</td>
<td>$4.06</td>
<td>5.08</td>
<td>17.78</td>
<td></td>
</tr>
<tr>
<td>Bering Straits</td>
<td>Wales Water System Heat Recovery</td>
<td>$6.29</td>
<td>7.87</td>
<td>27.53</td>
<td></td>
</tr>
<tr>
<td>Northwest Artic</td>
<td>Kotzebue Paper and Wood Waste to Energy Project</td>
<td>$5.97</td>
<td>7.46</td>
<td>26.10</td>
<td></td>
</tr>
<tr>
<td>Lower Yukon-Kuskokwim</td>
<td>Kwigillingok Wind Heat System - Electric Thermal Storage</td>
<td>$5.84</td>
<td>7.30</td>
<td>25.55</td>
<td></td>
</tr>
<tr>
<td>Southeast</td>
<td>Lepquinum Wellness Center Ground Source Heat Pump</td>
<td>$4.66</td>
<td>5.82</td>
<td>20.37</td>
<td></td>
</tr>
<tr>
<td>Southeast</td>
<td>Ketchikan Gateway Borough - Ketchikan High School Biomass Boiler Construction</td>
<td>$4.10</td>
<td>5.13</td>
<td>17.95</td>
<td></td>
</tr>
<tr>
<td>Northwest Artic</td>
<td>Selawik Water System Heat Recovery</td>
<td>$7.64</td>
<td>9.55</td>
<td>33.44</td>
<td></td>
</tr>
<tr>
<td>Southeast</td>
<td>Gateway Borough Recreation and Schools Central Heating Plant Design</td>
<td>$4.10</td>
<td>5.13</td>
<td>17.95</td>
<td></td>
</tr>
<tr>
<td>Lower Yukon-Kuskokwim</td>
<td>Scammon Bay Community Facilities Heat Recovery</td>
<td>$7.18</td>
<td>8.97</td>
<td>31.40</td>
<td></td>
</tr>
<tr>
<td>Railbelt</td>
<td>IRHA Facility Biomass Feasibility Study</td>
<td>$4.11</td>
<td>5.14</td>
<td>17.98</td>
<td></td>
</tr>
<tr>
<td>Southeast</td>
<td>Southeast Island School District Wood Boilers</td>
<td>$4.17</td>
<td>5.21</td>
<td>18.25</td>
<td></td>
</tr>
<tr>
<td>Bristol Bay</td>
<td>Lake and Peninsula Borough Wood Boilers</td>
<td>$6.03</td>
<td>7.54</td>
<td>26.38</td>
<td></td>
</tr>
<tr>
<td>Lower Yukon-Kuskokwim</td>
<td>Eek Water System Heat Recovery</td>
<td>$6.37</td>
<td>7.97</td>
<td>27.88</td>
<td></td>
</tr>
<tr>
<td>North Slope</td>
<td>Deadhorse Waste Heat to Energy Plant</td>
<td>$4.37</td>
<td>5.46</td>
<td>19.10</td>
<td></td>
</tr>
<tr>
<td>Southeast</td>
<td>Hoonah Biomass District Heating Loop</td>
<td>$4.30</td>
<td>5.37</td>
<td>18.80</td>
<td></td>
</tr>
<tr>
<td>Aleutians</td>
<td>Sand Point Excess Wind Utilization</td>
<td>$5.00</td>
<td>6.24</td>
<td>21.86</td>
<td></td>
</tr>
<tr>
<td>Railbelt</td>
<td>Port Graham Community Building Biomass Heat Distribution Project</td>
<td>$5.74</td>
<td>7.18</td>
<td>25.12</td>
<td></td>
</tr>
</tbody>
</table>

**Stage 3 Criterion 2 Match**  
(Maximum Stage 3 points: 15)**

<table>
<thead>
<tr>
<th>Type of Match</th>
<th>5 Pts</th>
<th>+ Percentage of Total Match to Total Grant Request</th>
<th>10 Pts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support of any kind referenced but not given a specific value i.e. housing offered to</td>
<td>1</td>
<td>.01% - &lt;5% of Grant =</td>
<td>1</td>
</tr>
</tbody>
</table>
outside workers, administration of project without compensation

| Previous investment towards project completion including investments in building efficiency completed in the last 5 years if applying for a heat project | 2 | >=5% - <=10% of Grant | 2 |
| Another grant [state] as match | 3 | >10% - <=15% of Grant | 4 |
| Another grant [fed or private] | 4 | >15% - <=30% of Grant | 6 |
| Loan or local cash or any documented in-kind match (including energy efficiency improvements directly related to the project) | 5 | >30% - <=49% of Grant | 8 |
| | | > 49% of Grant | 10 |

If there are multiple types of match, an average score will be generated. This average will be weighted according to the amount of each type of match. Scoring for the percentage of match will be based upon the sum of all types of match.

**Stage 3 Criterion 4 Project Readiness**  
(Maximum Stage 3 points: 5)

Up to ten points are available and may be assigned as follows. If evaluators believe there are other readiness criteria that should be considered they may adjust the score when awarding points for this criteria.

For reconnaissance and feasibility projects evaluators should consider the bullets below and assign 0 to 10 points:

- Proposed work is reconnaissance level and is consistent with specific recommendations under the Alaska Energy Pathway or Regional Energy Plan.
- Project is currently underway with feasibility or reconnaissance work, design work related to the project, or actual construction of the project and the applicant is using their own funds, or funds from another eligible source, to finance the activity.
- Applicant has completed previous phase(s) of proposed project and desires additional funding to complete the next phase.
- The proposed work and timeline is reasonable and the project team has been identified and is qualified to complete the work.
- Land access and use issues have been identified and resolved, or there is a reasonable plan to address potential land access and use issues.

For design and construction projects evaluators should consider the bullets below and assign 0 to 10 points:

- Project is currently underway with feasibility or reconnaissance work, design work related to the project, or actual construction of the project and the applicant is using their own funds, or funds from another eligible source, to finance the activity.
- Applicant has completed previous phase(s) of proposed project and desires additional funding to complete the next phase.
- Applicant has completed required feasibility and/or design work for project and is prepared to place an order for necessary equipment for the project, such as an item with a ‘long lead time’ to procure.
- Applicant has obtained all necessary permits, met all permit requirements, and addressed all regulatory agency stipulations.
- Applicants for heat projects have provided evidence of investment in and commitment to thermal energy efficiency in the building(s) to be served by the heat project.

**Stage 3 Criterion 5 Public Benefit**
(Maximum Stage 3 points: 15)
This criteria will be scored using a weighted calculation from the Stage 2 Criterion 4 Economic (a) and Public Benefit (c) scores. Stage 3 scores are assigned using the following formulas:

\[
Preliminary\ Score = (Stage\ 2\ Economic\ Benefit \times .75) + (Stage\ 2\ Other\ Public\ Benefit \times .25)
\]

\[
Levelized\ Final\ Score = (Preliminary\ Score – 40) \times (5/3)
\]

The impact of the second part of the equation, the levelized final score, is to assign a minimum score of 0 to projects that receive a preliminary score of 40 or less and a maximum score of 100 to projects that receive a preliminary score of 100.

**Stage 3 Criterion 6 Sustainability**
(Maximum Stage 3 points: 5)
This criteria will be scored from 0 to 10 with a total weighting of 5% based on the evaluators’ assessment of the 1) capability of the grantee to demonstrate the capacity, both administratively and financially, to provide for the long-term operation and maintenance of the proposed project, 2) likelihood of the resource being available over the life of the project, 3) likelihood of market for energy produced over the life of the project.

For heat projects the criteria will be scored from 0 to 10 based on the variables 1 through 3 listed above plus 4) the condition of the building(s) to be served by the heat project, in particular how well the applicant has demonstrated an investment in and commitment to thermal energy efficiency.

**Stage 3 Criterion 7 Local Support**
(Maximum Stage 3 points: 5)

| Documented unresolved issues concerning the application: no points will be given if these exist regardless of demonstrated support | 0 points |
| Resolution from City, Village Council, or other local government entity or listed in Regional Energy Plan | 2 points each |
| Support demonstrated by local entity other than applicant | 1 point each up to 6 points |
| Opposition demonstrated by local entity. | -1 point each |

Letters of support from legislators do not count toward this criterion. No more than 5 points may be given for this criterion and negative points may not be assigned regardless of the number of demonstrated opposition by local entities.
**Stage 3 Criterion Regional Balance**
Rated as Pass, Fail, or Not Applicable (NA)

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Legislative Grant</th>
<th>Alternative Energy Solicitation (Round 0)</th>
<th>Round I-VII</th>
</tr>
</thead>
<tbody>
<tr>
<td>If there is more than one project from the same community or area, the project that has received an overall higher score during the review and/or has demonstrated that local residents are in favor of the project. Exceptions may be made for non-construction projects.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Stage 3 Criterion Compliance with Other Awards**
Rated as Pass, Fail, or Not Applicable (NA)

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Legislative Grant</th>
<th>Alternative Energy Solicitation (Round 0)</th>
<th>Round I-VII</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has grantee provided all necessary information for grant preparation for grants awarded from previous solicitations?</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Is grantee making verifiable and adequate progress using previous grant funds; for this or another project?</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Has grantee provided all required financial and progress reports, per the terms of any previous grants?</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

**Stage 4 Regional Distribution**
The Stage 4 process ensures regional equity in the distribution of funds cumulatively across all rounds of funding.

At the Renewable Energy Fund Advisory Committee (REFAC) meeting on January 9, 2015, the committee advised the Alaska Energy Authority (AEA) to consider a new approach to the regional distribution of Renewable Energy Fund (REF) projects. Below is the three-step approach developed by AEA and approved by the committee at the January 29, 2015 meeting to respond to the committee’s advice.

1. Use a regional population weighted “burden of energy cost” metric to establish regional funding bands. The burden of energy cost for a household is calculated based on:
   a. Residential electric costs assuming 500 kWh/month use
   b. Heating fuel cost for a community assuming regional consumption from CCHRC’s recent housing assessment. Consumption levels vary based on a number of factors, most importantly temperature and house size.
   c. Household income (Census: American Community Survey 5 year average)

   **Burden of energy cost = (HH cost of electric + heat energy) / HH income**

   This burden of energy cost is calculated for each community and then weighted by population to generate a regional burden of energy number. This burden of energy cost is used to calculate the range of funding that each region should receive, such that regions with high energy cost burden are eligible to receive more funding cumulatively across all years of the REF. The results
of this exercise in Round VIII indicate that Yukon-Koyukuk/Upper Tanana is considered “underserved”.

2. Cap all individual projects at $1.5 million (10% of Governor’s budget).
3. To achieve a better balance of funding across the state, regions that exceed the target funding band will be capped so their share of the overall fund cannot grow. This rule affects the Southeast region in this round. Therefore Southeast projects in the top funding tier are limited to recommended projects that are in communities with the highest burden of energy cost. Once the region’s funding equals 22.15% of recommended funding, the remaining projects will be identified as recommended projects, but in a group outside the top tier of $15M of Round VIII projects.

The following table identifies by energy region: REF funding to date, the regional burden of energy cost, and Round VIII funding after the REFAC-advised criteria were applied.

<table>
<thead>
<tr>
<th>Energy Region</th>
<th>Total Rounds I-VII Funding</th>
<th>% of Total Funding Rounds I-VII</th>
<th>Burden of Energy Cost (HH energy cost / HH income)</th>
<th>Round VIII Funding Following Stage 4 Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aleutians</td>
<td>$17,491,232</td>
<td>7%</td>
<td>12.12%</td>
<td>$2,197,120</td>
</tr>
<tr>
<td>Bering Straits</td>
<td>$21,429,215</td>
<td>9%</td>
<td>34.98%</td>
<td>$100,000</td>
</tr>
<tr>
<td>Bristol Bay</td>
<td>$13,647,042</td>
<td>6%</td>
<td>22.88%</td>
<td>$1,305,000</td>
</tr>
<tr>
<td>Copper River/Chugach</td>
<td>$21,630,131</td>
<td>9%</td>
<td>15.73%</td>
<td>$770,807</td>
</tr>
<tr>
<td>Kodiak</td>
<td>$19,499,319</td>
<td>8%</td>
<td>15.58%</td>
<td>$488,400</td>
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<tr>
<td>Lower Yukon-Kuskokwim</td>
<td>$27,822,831</td>
<td>11%</td>
<td>26.51%</td>
<td>$2,148,500</td>
</tr>
<tr>
<td>North Slope</td>
<td>$2,185,342</td>
<td>1%</td>
<td>2.44%</td>
<td>$1,916,584</td>
</tr>
<tr>
<td>Northwest Arctic</td>
<td>$23,203,362</td>
<td>9%</td>
<td>24.57%</td>
<td>$694,583</td>
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<tr>
<td>Railbelt</td>
<td>$30,106,142</td>
<td>12%</td>
<td>7.03%</td>
<td>$408,000</td>
</tr>
<tr>
<td>Southeast</td>
<td>$54,830,472</td>
<td>22%</td>
<td>10.64%</td>
<td>$3,323,006</td>
</tr>
<tr>
<td>Yukon-Koyukuk/Upper Tanana</td>
<td>$15,093,379</td>
<td>6%</td>
<td>32.96%</td>
<td>$1,648,000</td>
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<tr>
<td>Statewide</td>
<td>$565,439</td>
<td>0%</td>
<td>9.36%</td>
<td>$0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$247,503,905</strong></td>
<td><strong>100%</strong></td>
<td><strong>215%</strong></td>
<td><strong>$15,000,000</strong></td>
</tr>
</tbody>
</table>

The following table shows the community calculations for the cost of energy burden that are population weighted to arrive at the regional burden of energy cost numbers. For the overserved area of Southeast, the community-level cost of energy burden percentages were used to determine the priority of projects within the top $15 million tier of recommended projects.
<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
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<tbody>
<tr>
<td><strong>Aleutians</strong></td>
<td></td>
<td></td>
<td>Annual Household Cost of Energy (based on typical use)</td>
<td>Median Household Income</td>
<td>Cost of Energy Burden (C/D)</td>
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<tr>
<td>Adak city</td>
<td>$0.81</td>
<td>$7.65</td>
<td>$14,671</td>
<td>$76,250</td>
<td>19.2%</td>
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<tr>
<td>Akutan city</td>
<td>$0.32</td>
<td>$4.00</td>
<td>$7,063</td>
<td>$45,000</td>
<td>15.7%</td>
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<tr>
<td>Atka city</td>
<td>$0.70</td>
<td>$7.65</td>
<td>$14,012</td>
<td>$69,375</td>
<td>20.2%</td>
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<tr>
<td>Cold Bay city</td>
<td>$0.72</td>
<td>$5.34</td>
<td>$11,133</td>
<td>$86,250</td>
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</tr>
<tr>
<td>False Pass city</td>
<td>$0.51</td>
<td>$4.01</td>
<td>$8,211</td>
<td>$86,250</td>
<td>9.5%</td>
</tr>
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<td>King Cove city</td>
<td>$0.28</td>
<td>$4.32</td>
<td>$7,216</td>
<td>$70,000</td>
<td>10.3%</td>
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<tr>
<td>Nelson Lagoon CDP</td>
<td>$0.77</td>
<td>$6.25</td>
<td>$12,598</td>
<td>$43,750</td>
<td>28.8%</td>
</tr>
<tr>
<td>Nikolski CDP</td>
<td>$0.60</td>
<td>$7.65</td>
<td>$13,402</td>
<td>$24,375</td>
<td>55.0%</td>
</tr>
<tr>
<td>Sand Point city</td>
<td>$0.58</td>
<td>$5.19</td>
<td>$10,154</td>
<td>$68,750</td>
<td>14.8%</td>
</tr>
<tr>
<td>St George city</td>
<td>$0.83</td>
<td>$7.74</td>
<td>$14,912</td>
<td>$51,875</td>
<td>28.7%</td>
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<tr>
<td>St. Paul city</td>
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<td>$5.15</td>
<td>$9,713</td>
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<td>24.5%</td>
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<tr>
<td>Unalaska city</td>
<td>$0.45</td>
<td>$4.47</td>
<td>$8,402</td>
<td>$99,286</td>
<td>8.5%</td>
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<tr>
<td><strong>Population weighted regional cost of energy burden</strong></td>
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<td></td>
<td></td>
<td></td>
<td>12.1%</td>
</tr>
<tr>
<td><strong>Bering Strait</strong></td>
<td></td>
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<tr>
<td>Brevig Mission city</td>
<td>$0.54</td>
<td>$5.35</td>
<td>$13,949</td>
<td>$30,375</td>
<td>45.9%</td>
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<td>Diomede city</td>
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<td>$8.94</td>
<td>$21,538</td>
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<td>Elim city</td>
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<td>$5.36</td>
<td>$14,280</td>
<td>$38,125</td>
<td>37.5%</td>
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<td>Gambell city</td>
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<td>$6.35</td>
<td>$15,863</td>
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<tr>
<td>Golovin city</td>
<td>$0.58</td>
<td>$6.00</td>
<td>$15,504</td>
<td>$33,750</td>
<td>45.9%</td>
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<tr>
<td>Koyuk city</td>
<td>$0.55</td>
<td>$6.46</td>
<td>$16,256</td>
<td>$28,750</td>
<td>56.5%</td>
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<tr>
<td>Nome city</td>
<td>$0.36</td>
<td>$6.28</td>
<td>$14,774</td>
<td>$77,768</td>
<td>19.0%</td>
</tr>
<tr>
<td>St. Michael city</td>
<td>$0.55</td>
<td>$6.76</td>
<td>$16,884</td>
<td>$33,594</td>
<td>50.3%</td>
</tr>
<tr>
<td>Savoonga city</td>
<td>$0.49</td>
<td>$6.00</td>
<td>$15,984</td>
<td>$32,083</td>
<td>46.7%</td>
</tr>
<tr>
<td>Shaktoolik city</td>
<td>$0.58</td>
<td>$5.82</td>
<td>$15,129</td>
<td>$53,750</td>
<td>28.1%</td>
</tr>
<tr>
<td>Shishmaref city</td>
<td>$0.59</td>
<td>$6.41</td>
<td>$16,409</td>
<td>$36,000</td>
<td>45.6%</td>
</tr>
<tr>
<td>Stebbins city</td>
<td>$0.56</td>
<td>$7.22</td>
<td>$17,837</td>
<td>$35,250</td>
<td>50.6%</td>
</tr>
<tr>
<td>Teller city</td>
<td>$0.62</td>
<td>$5.49</td>
<td>$14,745</td>
<td>$26,500</td>
<td>55.6%</td>
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<tr>
<td>Unalakleet city</td>
<td>$0.39</td>
<td>$6.46</td>
<td>$15,300</td>
<td>$54,375</td>
<td>28.1%</td>
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<tr>
<td>Wales city</td>
<td>$0.64</td>
<td>$6.40</td>
<td>$16,696</td>
<td>$36,250</td>
<td>46.1%</td>
</tr>
<tr>
<td>White Mountain city</td>
<td>$0.69</td>
<td>$4.85</td>
<td>$13,852</td>
<td>$31,250</td>
<td>44.3%</td>
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<tr>
<td><strong>Population weighted regional cost of energy burden</strong></td>
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<td></td>
<td></td>
<td></td>
<td>35.0%</td>
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<tr>
<td><strong>Bristol Bay Area</strong></td>
<td></td>
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<td></td>
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<tr>
<td>Aleknagik city</td>
<td>$0.40</td>
<td>$6.17</td>
<td>$11,758</td>
<td>$55,313</td>
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<td>$0.48</td>
<td>$4.51</td>
<td>$9,698</td>
<td>$107,500</td>
<td>9.0%</td>
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<tr>
<td>Chignik Lagoon CDP</td>
<td>$0.69</td>
<td>$4.51</td>
<td>$10,995</td>
<td>$138,750</td>
<td>7.9%</td>
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<tr>
<td>Chignik Lake CDP</td>
<td>$0.67</td>
<td>$4.51</td>
<td>$10,883</td>
<td>$81,250</td>
<td>13.4%</td>
</tr>
<tr>
<td>Clark's Point city</td>
<td>$0.40</td>
<td>$6.00</td>
<td>$11,507</td>
<td>$26,875</td>
<td>42.8%</td>
</tr>
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</table>
### Population weighted regional cost of energy burden

| Population weighted regional cost of energy burden | 22.9% |

### Bristol Bay (cont'd)

<table>
<thead>
<tr>
<th>Bristol Bay (cont'd)</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clark's Point city</td>
<td>$0.40</td>
<td>$6.00</td>
<td>$11,507</td>
<td>$26,875</td>
<td>42.8%</td>
</tr>
<tr>
<td>Dillingham city</td>
<td>$0.40</td>
<td>$5.92</td>
<td>$11,378</td>
<td>$78,125</td>
<td>14.6%</td>
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<td>Egegik city</td>
<td>$0.86</td>
<td>$4.95</td>
<td>$12,673</td>
<td>$80,417</td>
<td>15.8%</td>
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<tr>
<td>Ekwok city</td>
<td>$0.74</td>
<td>$6.75</td>
<td>$14,689</td>
<td>$55,625</td>
<td>26.4%</td>
</tr>
<tr>
<td>Igiugig CDP</td>
<td>$0.80</td>
<td>$8.06</td>
<td>$17,051</td>
<td>$36,250</td>
<td>47.0%</td>
</tr>
<tr>
<td>Iliamna CDP</td>
<td>$0.59</td>
<td>$6.27</td>
<td>$13,080</td>
<td>$69,375</td>
<td>18.9%</td>
</tr>
<tr>
<td>King Salmon CDP</td>
<td>$0.50</td>
<td>$5.91</td>
<td>$11,997</td>
<td>$97,500</td>
<td>12.3%</td>
</tr>
<tr>
<td>Kokhanok CDP</td>
<td>$0.90</td>
<td>$8.21</td>
<td>$17,860</td>
<td>$30,750</td>
<td>58.1%</td>
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<tr>
<td>Koliganek CDP</td>
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<td>$6.00</td>
<td>$12,136</td>
<td>$68,750</td>
<td>17.7%</td>
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<tr>
<td>Levelock CDP</td>
<td>$0.70</td>
<td>$6.08</td>
<td>$13,420</td>
<td>$36,500</td>
<td>36.8%</td>
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<tr>
<td>Manokotak city</td>
<td>$0.55</td>
<td>$6.78</td>
<td>$13,590</td>
<td>$37,813</td>
<td>35.9%</td>
</tr>
<tr>
<td>Naknek CDP</td>
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<td>$5.91</td>
<td>$11,997</td>
<td>$93,750</td>
<td>12.8%</td>
</tr>
<tr>
<td>New Stuyahok city</td>
<td>$0.62</td>
<td>$6.77</td>
<td>$14,000</td>
<td>$46,000</td>
<td>30.4%</td>
</tr>
<tr>
<td>Newhalen city</td>
<td>$0.59</td>
<td>$6.52</td>
<td>$13,459</td>
<td>$53,750</td>
<td>25.0%</td>
</tr>
<tr>
<td>Nondalton city</td>
<td>$0.59</td>
<td>$6.18</td>
<td>$12,943</td>
<td>$24,688</td>
<td>52.4%</td>
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<tr>
<td>Pedro Bay CDP</td>
<td>$0.91</td>
<td>$5.59</td>
<td>$13,944</td>
<td>$55,313</td>
<td>25.2%</td>
</tr>
<tr>
<td>Perryville CDP</td>
<td>$0.95</td>
<td>$5.42</td>
<td>$13,926</td>
<td>$28,750</td>
<td>48.4%</td>
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<tr>
<td>Pilot Point city</td>
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<td>$5.00</td>
<td>$10,588</td>
<td>$29,375</td>
<td>36.0%</td>
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<tr>
<td>Port Alssworth CDP</td>
<td>$0.68</td>
<td>$5.80</td>
<td>$12,899</td>
<td>$64,375</td>
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<tr>
<td>Port Heiden city</td>
<td>$0.75</td>
<td>$5.80</td>
<td>$13,303</td>
<td>$57,500</td>
<td>23.1%</td>
</tr>
<tr>
<td>South Naknek CDP</td>
<td>$0.50</td>
<td>$5.96</td>
<td>$12,073</td>
<td>$81,875</td>
<td>14.7%</td>
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<tr>
<td>Togiak city</td>
<td>$0.57</td>
<td>$6.25</td>
<td>$12,888</td>
<td>$46,250</td>
<td>27.9%</td>
</tr>
<tr>
<td>Twin Hills CDP</td>
<td>$0.55</td>
<td>$8.00</td>
<td>$15,469</td>
<td>$32,500</td>
<td>47.6%</td>
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</table>

### Copper Valley

<table>
<thead>
<tr>
<th>Copper Valley</th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chenega CDP</td>
<td>$0.44</td>
<td>$7.22</td>
</tr>
<tr>
<td>Chistochina CDP</td>
<td>$0.67</td>
<td>$3.88</td>
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<tr>
<td>Chitina CDP</td>
<td>$0.63</td>
<td>$3.98</td>
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<tr>
<td>Copper Center CDP</td>
<td>$0.28</td>
<td>$3.94</td>
</tr>
<tr>
<td>Cordova city</td>
<td>$0.42</td>
<td>$4.35</td>
</tr>
<tr>
<td>Gakona CDP</td>
<td>$0.28</td>
<td>$3.89</td>
</tr>
<tr>
<td>Glennallen CDP</td>
<td>$0.28</td>
<td>$3.93</td>
</tr>
<tr>
<td>Gulkana CDP</td>
<td>$0.28</td>
<td>$3.89</td>
</tr>
<tr>
<td>Kenny Lake CDP</td>
<td>$0.28</td>
<td>$3.89</td>
</tr>
<tr>
<td>Mendelta CDP</td>
<td>$0.28</td>
<td>$3.93</td>
</tr>
<tr>
<td>Mentasta Lake CDP</td>
<td>$0.67</td>
<td>$4.18</td>
</tr>
<tr>
<td>Copper Valley (cont'd)</td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>-----------------------</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Nabesna CDP</td>
<td>$0.28</td>
<td>$3.93</td>
</tr>
<tr>
<td>Nelchina CDP</td>
<td>$0.28</td>
<td>$3.93</td>
</tr>
<tr>
<td>Silver Springs CDP</td>
<td>$0.28</td>
<td>$3.93</td>
</tr>
<tr>
<td>Slana CDP</td>
<td>$0.67</td>
<td>$4.01</td>
</tr>
<tr>
<td>Tatitlek CDP</td>
<td>$0.62</td>
<td>$4.35</td>
</tr>
<tr>
<td>Tazlina CDP</td>
<td>$0.28</td>
<td>$3.89</td>
</tr>
<tr>
<td>Tolsona CDP</td>
<td>$0.28</td>
<td>$3.93</td>
</tr>
<tr>
<td>Tonsina CDP</td>
<td>$0.28</td>
<td>$4.01</td>
</tr>
<tr>
<td>Valdez city</td>
<td>$0.28</td>
<td>$4.16</td>
</tr>
<tr>
<td>Willow Creek CDP</td>
<td>$0.28</td>
<td>$3.93</td>
</tr>
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</table>

**Population weighted regional cost of energy burden** 15.7%

<table>
<thead>
<tr>
<th>Kodiak</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akhiok city</td>
<td>$0.33</td>
<td>$5.61</td>
<td>$12,075</td>
<td>$30,833</td>
<td>39.2%</td>
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<tr>
<td>Aleneva CDP</td>
<td>$0.33</td>
<td>$5.61</td>
<td>$12,084</td>
<td>$63,406</td>
<td>19.1%</td>
</tr>
<tr>
<td>Chiniak CDP</td>
<td>$0.19</td>
<td>$4.55</td>
<td>$9,344</td>
<td>$63,406</td>
<td>14.7%</td>
</tr>
<tr>
<td>Karluk CDP</td>
<td>$0.60</td>
<td>$4.92</td>
<td>$12,469</td>
<td>$19,688</td>
<td>63.3%</td>
</tr>
<tr>
<td>Kodiak city</td>
<td>$0.19</td>
<td>$4.13</td>
<td>$8,578</td>
<td>$57,260</td>
<td>15.0%</td>
</tr>
<tr>
<td>Kodiak Station CDP</td>
<td>$0.19</td>
<td>$4.13</td>
<td>$8,578</td>
<td>$63,036</td>
<td>13.6%</td>
</tr>
<tr>
<td>Larsen Bay city</td>
<td>$0.42</td>
<td>$5.61</td>
<td>$12,594</td>
<td>$83,438</td>
<td>15.1%</td>
</tr>
<tr>
<td>Old Harbor city</td>
<td>$0.58</td>
<td>$5.70</td>
<td>$13,733</td>
<td>$61,000</td>
<td>22.5%</td>
</tr>
<tr>
<td>Ouzinkie city</td>
<td>$0.41</td>
<td>$4.47</td>
<td>$10,534</td>
<td>$55,625</td>
<td>18.9%</td>
</tr>
<tr>
<td>Port Lions city</td>
<td>$0.19</td>
<td>$4.95</td>
<td>$10,065</td>
<td>$81,964</td>
<td>12.3%</td>
</tr>
<tr>
<td>Womens Bay CDP</td>
<td>$0.19</td>
<td>$4.13</td>
<td>$8,578</td>
<td>$115,417</td>
<td>7.4%</td>
</tr>
</tbody>
</table>

**Population weighted regional cost of energy burden** 15.6%

<table>
<thead>
<tr>
<th>Lower Yukon-Kuskokwim</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akiachak CDP</td>
<td>$0.61</td>
<td>$6.94</td>
<td>$12,809</td>
<td>$50,625</td>
<td>25.3%</td>
</tr>
<tr>
<td>Akiak city</td>
<td>$0.63</td>
<td>$6.85</td>
<td>$12,847</td>
<td>$39,167</td>
<td>32.8%</td>
</tr>
<tr>
<td>Alakanuk city</td>
<td>$0.59</td>
<td>$7.08</td>
<td>$12,929</td>
<td>$33,281</td>
<td>38.8%</td>
</tr>
<tr>
<td>Aniak city</td>
<td>$0.72</td>
<td>$7.42</td>
<td>$14,133</td>
<td>$62,614</td>
<td>22.6%</td>
</tr>
<tr>
<td>Atmautluak CDP</td>
<td>$0.70</td>
<td>$6.73</td>
<td>$13,093</td>
<td>$44,306</td>
<td>29.6%</td>
</tr>
<tr>
<td>Bethel city</td>
<td>$0.51</td>
<td>$7.00</td>
<td>$12,339</td>
<td>$77,857</td>
<td>15.8%</td>
</tr>
<tr>
<td>Chefnornak city</td>
<td>$0.58</td>
<td>$6.78</td>
<td>$12,444</td>
<td>$53,750</td>
<td>23.2%</td>
</tr>
<tr>
<td>Chevak city</td>
<td>$0.48</td>
<td>$6.33</td>
<td>$11,285</td>
<td>$37,500</td>
<td>30.1%</td>
</tr>
<tr>
<td>Chuathbaluk city</td>
<td>$0.85</td>
<td>$7.49</td>
<td>$15,011</td>
<td>$60,417</td>
<td>24.8%</td>
</tr>
<tr>
<td>Crooked Creek CDP</td>
<td>$0.85</td>
<td>$7.80</td>
<td>$15,421</td>
<td>$39,000</td>
<td>39.5%</td>
</tr>
<tr>
<td>Lower Yukon-Kuskokwim (cont'd)</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>---------</td>
<td>---------</td>
<td>---------------------</td>
<td>-----------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>Eek city</td>
<td>$0.60</td>
<td>$6.57</td>
<td>$12,317</td>
<td>$43,750</td>
<td>28.2%</td>
</tr>
<tr>
<td>Emmonak city</td>
<td>$0.55</td>
<td>$6.17</td>
<td>$11,472</td>
<td>$49,375</td>
<td>23.2%</td>
</tr>
<tr>
<td>Goodnews Bay city</td>
<td>$0.59</td>
<td>$5.36</td>
<td>$10,633</td>
<td>$29,792</td>
<td>35.7%</td>
</tr>
<tr>
<td>Hooper Bay city</td>
<td>$0.52</td>
<td>$6.90</td>
<td>$12,232</td>
<td>$38,594</td>
<td>31.7%</td>
</tr>
<tr>
<td>Kasigluk CDP</td>
<td>$0.53</td>
<td>$7.22</td>
<td>$12,744</td>
<td>$42,639</td>
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</tr>
<tr>
<td>Kipnuk CDP</td>
<td>$0.57</td>
<td>$6.31</td>
<td>$11,795</td>
<td>$45,000</td>
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</tr>
<tr>
<td>Kongiganak CDP</td>
<td>$0.56</td>
<td>$5.46</td>
<td>$10,577</td>
<td>$38,750</td>
<td>27.3%</td>
</tr>
<tr>
<td>Kotlik city</td>
<td>$0.59</td>
<td>$5.40</td>
<td>$10,662</td>
<td>$37,500</td>
<td>28.4%</td>
</tr>
<tr>
<td>Kwethluk city</td>
<td>$0.52</td>
<td>$7.19</td>
<td>$12,637</td>
<td>$45,500</td>
<td>27.8%</td>
</tr>
<tr>
<td>Kwirillingok CDP</td>
<td>$0.60</td>
<td>$6.02</td>
<td>$11,553</td>
<td>$51,250</td>
<td>22.5%</td>
</tr>
<tr>
<td>Lime Village CDP</td>
<td>$1.77</td>
<td>$9.08</td>
<td>$22,632</td>
<td>$41,205</td>
<td>54.9%</td>
</tr>
<tr>
<td>Lower Kalskag city</td>
<td>$0.58</td>
<td>$6.25</td>
<td>$11,752</td>
<td>$27,917</td>
<td>42.1%</td>
</tr>
<tr>
<td>Marshall city</td>
<td>$0.50</td>
<td>$6.65</td>
<td>$11,826</td>
<td>$37,292</td>
<td>31.7%</td>
</tr>
<tr>
<td>Mekoryuk city</td>
<td>$0.55</td>
<td>$6.98</td>
<td>$12,520</td>
<td>$71,000</td>
<td>17.6%</td>
</tr>
<tr>
<td>Mountain Village city</td>
<td>$0.54</td>
<td>$6.98</td>
<td>$12,503</td>
<td>$47,500</td>
<td>26.3%</td>
</tr>
<tr>
<td>Napakiak city</td>
<td>$0.83</td>
<td>$7.09</td>
<td>$14,330</td>
<td>$38,750</td>
<td>37.0%</td>
</tr>
<tr>
<td>Napaskiak city</td>
<td>$0.64</td>
<td>$6.23</td>
<td>$12,071</td>
<td>$38,750</td>
<td>31.2%</td>
</tr>
<tr>
<td>Newton CDP</td>
<td>$0.80</td>
<td>$6.72</td>
<td>$13,688</td>
<td>$43,611</td>
<td>31.4%</td>
</tr>
<tr>
<td>Nightmute city</td>
<td>$0.52</td>
<td>$8.57</td>
<td>$14,451</td>
<td>$58,125</td>
<td>24.9%</td>
</tr>
<tr>
<td>Nunam Iqua city</td>
<td>$0.53</td>
<td>$6.76</td>
<td>$12,128</td>
<td>$50,417</td>
<td>24.1%</td>
</tr>
<tr>
<td>Nunapitchuk city</td>
<td>$0.53</td>
<td>$7.16</td>
<td>$12,685</td>
<td>$42,500</td>
<td>29.8%</td>
</tr>
<tr>
<td>Oscarville CDP</td>
<td>$0.51</td>
<td>$6.40</td>
<td>$11,551</td>
<td>$34,583</td>
<td>33.4%</td>
</tr>
<tr>
<td>Pilot Station city</td>
<td>$0.54</td>
<td>$7.32</td>
<td>$12,903</td>
<td>$42,679</td>
<td>30.2%</td>
</tr>
<tr>
<td>Pitkas Point CDP</td>
<td>$0.50</td>
<td>$6.96</td>
<td>$12,191</td>
<td>$43,750</td>
<td>27.9%</td>
</tr>
<tr>
<td>Platinum city</td>
<td>$0.50</td>
<td>$5.55</td>
<td>$10,346</td>
<td>$41,875</td>
<td>24.7%</td>
</tr>
<tr>
<td>Quinhagak city</td>
<td>$0.54</td>
<td>$6.60</td>
<td>$11,956</td>
<td>$41,964</td>
<td>28.5%</td>
</tr>
<tr>
<td>Red Devil CDP</td>
<td>$0.85</td>
<td>$6.93</td>
<td>$14,262</td>
<td>$31,875</td>
<td>44.7%</td>
</tr>
<tr>
<td>Russian Mission city</td>
<td>$0.55</td>
<td>$5.80</td>
<td>$10,955</td>
<td>$39,375</td>
<td>27.8%</td>
</tr>
<tr>
<td>St. Mary's city/Andreatsky</td>
<td>$0.49</td>
<td>$7.17</td>
<td>$12,452</td>
<td>$57,708</td>
<td>21.6%</td>
</tr>
<tr>
<td>Scammon Bay city</td>
<td>$0.57</td>
<td>$7.09</td>
<td>$12,783</td>
<td>$32,917</td>
<td>38.8%</td>
</tr>
<tr>
<td>Sleetmute CDP</td>
<td>$0.85</td>
<td>$6.93</td>
<td>$14,263</td>
<td>$32,500</td>
<td>43.9%</td>
</tr>
<tr>
<td>Stony River CDP</td>
<td>$0.85</td>
<td>$9.08</td>
<td>$17,109</td>
<td>$16,875</td>
<td>101.4%</td>
</tr>
<tr>
<td>Toksook Bay city</td>
<td>$0.52</td>
<td>$7.10</td>
<td>$12,500</td>
<td>$65,481</td>
<td>19.1%</td>
</tr>
<tr>
<td>Tuluksak CDP</td>
<td>$0.60</td>
<td>$6.85</td>
<td>$12,667</td>
<td>$22,500</td>
<td>56.3%</td>
</tr>
<tr>
<td>Tuntutuliak CDP</td>
<td>$0.65</td>
<td>$5.97</td>
<td>$11,802</td>
<td>$36,023</td>
<td>32.8%</td>
</tr>
</tbody>
</table>
### Lower Yukon-Kuskokwim (cont’d)

<table>
<thead>
<tr>
<th>City</th>
<th>Electricity rate $/kWh</th>
<th>Heat $ / gallon fuel</th>
<th>Annual Household Cost of Energy (based on typical use)</th>
<th>Median Household Income</th>
<th>Cost of Energy Burden (C/D)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tununak CDP</td>
<td>$0.52</td>
<td>$6.95</td>
<td>$12,307</td>
<td>$27,500</td>
<td>44.8%</td>
</tr>
<tr>
<td>Upper Kalskag city</td>
<td>$0.58</td>
<td>$6.25</td>
<td>$11,752</td>
<td>$38,750</td>
<td>30.3%</td>
</tr>
</tbody>
</table>

**Population weighted regional cost of energy burden**

26.5%

### North Slope

<table>
<thead>
<tr>
<th>City</th>
<th>Electricity rate $/kWh</th>
<th>Heat $ / gallon fuel</th>
<th>Annual Household Cost of Energy (based on typical use)</th>
<th>Median Household Income</th>
<th>Cost of Energy Burden (C/D)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anaktuvuk Pass city</td>
<td>$0.15</td>
<td>$1.55</td>
<td>$3,686</td>
<td>$70,000</td>
<td>5.3%</td>
</tr>
<tr>
<td>Atqasuk city</td>
<td>$0.15</td>
<td>$1.40</td>
<td>$3,417</td>
<td>$44,167</td>
<td>7.7%</td>
</tr>
<tr>
<td>Barrow city</td>
<td>$0.12</td>
<td>$695</td>
<td>$95,000</td>
<td></td>
<td>0.7%</td>
</tr>
<tr>
<td>Kaktovik city</td>
<td>$0.15</td>
<td>$2.25</td>
<td>$4,944</td>
<td>$77,500</td>
<td>6.4%</td>
</tr>
<tr>
<td>Nuiqsut city</td>
<td>$0.08</td>
<td>$480</td>
<td>$82,500</td>
<td></td>
<td>0.6%</td>
</tr>
<tr>
<td>Point Hope city</td>
<td>$0.15</td>
<td>$1.99</td>
<td>$4,477</td>
<td>$88,125</td>
<td>5.1%</td>
</tr>
<tr>
<td>Point Lay CDP</td>
<td>$0.15</td>
<td>$1.45</td>
<td>$3,506</td>
<td>$69,375</td>
<td>5.1%</td>
</tr>
<tr>
<td>Wainwright city</td>
<td>$0.15</td>
<td>$1.50</td>
<td>$3,596</td>
<td>$66,250</td>
<td>5.4%</td>
</tr>
</tbody>
</table>

**Population weighted regional cost of energy burden**

2.4%

### Northwest Arctic Borough

<table>
<thead>
<tr>
<th>City</th>
<th>Electricity rate $/kWh</th>
<th>Heat $ / gallon fuel</th>
<th>Annual Household Cost of Energy (based on typical use)</th>
<th>Median Household Income</th>
<th>Cost of Energy Burden (C/D)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambler city</td>
<td>$0.63</td>
<td>$9.99</td>
<td>$17,859</td>
<td>$38,750</td>
<td>46.1%</td>
</tr>
<tr>
<td>Buckland city</td>
<td>$0.47</td>
<td>$6.89</td>
<td>$12,548</td>
<td>$48,125</td>
<td>26.1%</td>
</tr>
<tr>
<td>Deering city</td>
<td>$0.70</td>
<td>$6.60</td>
<td>$13,495</td>
<td>$57,813</td>
<td>23.3%</td>
</tr>
<tr>
<td>Kiana city</td>
<td>$0.65</td>
<td>$6.70</td>
<td>$13,346</td>
<td>$41,667</td>
<td>32.0%</td>
</tr>
<tr>
<td>Kivalina city</td>
<td>$0.64</td>
<td>$6.58</td>
<td>$13,100</td>
<td>$58,125</td>
<td>22.5%</td>
</tr>
<tr>
<td>Kobuk city</td>
<td>$0.87</td>
<td>$9.65</td>
<td>$18,810</td>
<td>$36,250</td>
<td>51.9%</td>
</tr>
<tr>
<td>Kotzebue city</td>
<td>$0.42</td>
<td>$6.15</td>
<td>$11,162</td>
<td>$80,938</td>
<td>13.8%</td>
</tr>
<tr>
<td>Noatak CDP</td>
<td>$0.74</td>
<td>$9.49</td>
<td>$17,805</td>
<td>$58,571</td>
<td>30.4%</td>
</tr>
<tr>
<td>Noorvik city</td>
<td>$0.61</td>
<td>$6.44</td>
<td>$12,747</td>
<td>$53,750</td>
<td>23.7%</td>
</tr>
<tr>
<td>Selawik city</td>
<td>$0.57</td>
<td>$7.88</td>
<td>$14,544</td>
<td>$34,712</td>
<td>41.9%</td>
</tr>
<tr>
<td>Shungnak city</td>
<td>$0.73</td>
<td>$9.99</td>
<td>$18,433</td>
<td>$50,000</td>
<td>36.9%</td>
</tr>
</tbody>
</table>

**Population weighted regional cost of energy burden**

24.6%

### Railbelt

<table>
<thead>
<tr>
<th>City</th>
<th>Electricity rate $/kWh</th>
<th>Heat $ / gallon fuel</th>
<th>Annual Household Cost of Energy (based on typical use)</th>
<th>Median Household Income</th>
<th>Cost of Energy Burden (C/D)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anchor Point CDP</td>
<td>$0.20</td>
<td>$3.95</td>
<td>$10,455</td>
<td>$61,875</td>
<td>16.9%</td>
</tr>
<tr>
<td>Anchorage municipality</td>
<td>$0.14</td>
<td>$1.31</td>
<td>$3,908</td>
<td>$90,466</td>
<td>4.3%</td>
</tr>
<tr>
<td>Anderson city</td>
<td>$0.22</td>
<td>$4.41</td>
<td>$11,710</td>
<td>$84,250</td>
<td>13.9%</td>
</tr>
<tr>
<td>Badger CDP</td>
<td>$0.22</td>
<td>$3.95</td>
<td>$10,628</td>
<td>$91,018</td>
<td>11.7%</td>
</tr>
<tr>
<td>Railbelt (cont’d)</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----</td>
<td>-----</td>
<td>-----------------</td>
<td>-----------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Bear Creek CDP</td>
<td>$0.19</td>
<td>$3.95</td>
<td>$10,425</td>
<td>$79,444</td>
<td>13.1%</td>
</tr>
<tr>
<td>Beluga CDP</td>
<td>$0.14</td>
<td>$5.80</td>
<td>$14,485</td>
<td>$30,938</td>
<td>46.8%</td>
</tr>
<tr>
<td>Big Delta CDP</td>
<td>$0.22</td>
<td>$4.13</td>
<td>$11,052</td>
<td>$56,923</td>
<td>19.4%</td>
</tr>
<tr>
<td>Big Lake CDP</td>
<td>$0.15</td>
<td>$3.95</td>
<td>$10,190</td>
<td>$70,903</td>
<td>14.4%</td>
</tr>
<tr>
<td>Buffalo Soapstone CDP</td>
<td>$0.15</td>
<td>$3.95</td>
<td>$10,190</td>
<td>$82,813</td>
<td>12.3%</td>
</tr>
<tr>
<td>Butte CDP</td>
<td>$0.15</td>
<td>$3.95</td>
<td>$10,190</td>
<td>$86,250</td>
<td>11.8%</td>
</tr>
<tr>
<td>Cantwell CDP</td>
<td>$0.22</td>
<td>$4.18</td>
<td>$11,157</td>
<td>$64,063</td>
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<tr>
<td>Chase CDP</td>
<td>$0.15</td>
<td>$3.95</td>
<td>$10,190</td>
<td>$75,972</td>
<td>13.4%</td>
</tr>
<tr>
<td>Chena Ridge CDP</td>
<td>$0.22</td>
<td>$3.95</td>
<td>$10,628</td>
<td>$106,625</td>
<td>10.0%</td>
</tr>
<tr>
<td>Chickaloon CDP</td>
<td>$0.15</td>
<td>$3.95</td>
<td>$10,190</td>
<td>$84,107</td>
<td>12.1%</td>
</tr>
<tr>
<td>Clam Gulch CDP</td>
<td>$0.20</td>
<td>$3.95</td>
<td>$10,455</td>
<td>$95,500</td>
<td>10.9%</td>
</tr>
<tr>
<td>Cohoe CDP</td>
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<td>$10,455</td>
<td>$73,563</td>
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</tr>
<tr>
<td>College CDP</td>
<td>$0.22</td>
<td>$3.95</td>
<td>$10,628</td>
<td>$100,938</td>
<td>10.5%</td>
</tr>
<tr>
<td>Cooper Landing CDP</td>
<td>$0.14</td>
<td>$3.95</td>
<td>$10,126</td>
<td>$62,321</td>
<td>16.2%</td>
</tr>
<tr>
<td>Crown Point CDP</td>
<td>$0.19</td>
<td>$3.95</td>
<td>$10,425</td>
<td>$93,239</td>
<td>11.2%</td>
</tr>
<tr>
<td>Delta Junction city</td>
<td>$0.22</td>
<td>$4.13</td>
<td>$11,052</td>
<td>$93,438</td>
<td>11.8%</td>
</tr>
<tr>
<td>Deltana CDP</td>
<td>$0.22</td>
<td>$4.13</td>
<td>$11,052</td>
<td>$58,750</td>
<td>18.8%</td>
</tr>
<tr>
<td>Diamond Ridge CDP</td>
<td>$0.20</td>
<td>$1.31</td>
<td>$4,274</td>
<td>$75,208</td>
<td>5.7%</td>
</tr>
<tr>
<td>Ester CDP</td>
<td>$0.22</td>
<td>$3.95</td>
<td>$10,628</td>
<td>$105,739</td>
<td>10.1%</td>
</tr>
<tr>
<td>Fairbanks city</td>
<td>$0.22</td>
<td>$3.95</td>
<td>$10,628</td>
<td>$63,558</td>
<td>16.7%</td>
</tr>
<tr>
<td>Farm Loop CDP</td>
<td>$0.15</td>
<td>$1.31</td>
<td>$3,997</td>
<td>$89,583</td>
<td>4.5%</td>
</tr>
<tr>
<td>Farmers Loop CDP</td>
<td>$0.22</td>
<td>$3.95</td>
<td>$10,628</td>
<td>$115,850</td>
<td>9.2%</td>
</tr>
<tr>
<td>Fishhook CDP</td>
<td>$0.15</td>
<td>$3.95</td>
<td>$10,190</td>
<td>$91,250</td>
<td>11.2%</td>
</tr>
<tr>
<td>Four Mile Road CDP</td>
<td>$0.22</td>
<td>$4.56</td>
<td>$12,062</td>
<td>$63,000</td>
<td>19.1%</td>
</tr>
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<td>Fox CDP</td>
<td>$0.22</td>
<td>$3.95</td>
<td>$10,628</td>
<td>$72,052</td>
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<td>Fox River CDP</td>
<td>$0.20</td>
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<td>$10,455</td>
<td>$43,750</td>
<td>23.9%</td>
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<td>$1.31</td>
<td>$4,274</td>
<td>$77,232</td>
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<td>$5,578</td>
<td>$67,944</td>
<td>8.2%</td>
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<td>$3,997</td>
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<td>$3.93</td>
<td>$10,143</td>
<td>$53,304</td>
<td>19.0%</td>
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<tr>
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<td>$0.22</td>
<td>$3.95</td>
<td>$10,628</td>
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<tr>
<td>Halibut Cove CDP</td>
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<td>$74,583</td>
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<tr>
<td>Railbelt (cont’d)</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
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<td>$1.87</td>
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<td>$76,815</td>
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<td>Knik city</td>
<td>$0.15</td>
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<td>Knik-Fairview CDP</td>
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<td>$10,425</td>
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<td>$3,997</td>
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<td>$68,622</td>
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<tr>
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<td>$10,719</td>
<td>$114,167</td>
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<td>$10,628</td>
<td>$99,044</td>
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<td>Moose Pass CDP</td>
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<td>$93,239</td>
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<td>Ninilchik CDP</td>
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<td>$10,126</td>
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<tr>
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<td>$10,628</td>
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<td>$3,997</td>
<td>$74,301</td>
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<tr>
<td>Petersville CDP</td>
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<td>$3.95</td>
<td>$10,190</td>
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</tr>
<tr>
<td>Point MacKenzie CDP</td>
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<td>$10,190</td>
<td>$54,306</td>
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<td>Point Possession CDP</td>
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<td>$3.95</td>
<td>$10,126</td>
<td>$86,810</td>
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<td>Port Graham CDP</td>
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<td>$5.80</td>
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<td>$83,542</td>
<td>6.7%</td>
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<td>Salcha CDP</td>
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<td>$10,628</td>
<td>$93,393</td>
<td>11.4%</td>
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<tr>
<td>Seldovia city</td>
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<td>$5.80</td>
<td>$14,815</td>
<td>$65,000</td>
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<tr>
<td>Seward city</td>
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<td>$3.95</td>
<td>$10,425</td>
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<td>Soldotna city</td>
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<td>South Van Horn CDP</td>
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<td>$10,628</td>
<td>$56,016</td>
<td>19.0%</td>
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<td>Steele Creek CDP</td>
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<td>$3.95</td>
<td>$10,617</td>
<td>$95,493</td>
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<tr>
<td>Sterling CDP</td>
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<td>$5,578</td>
<td>$86,667</td>
<td>6.4%</td>
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### Railbelt (cont’d)

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<th>Community</th>
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<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunrise CDP</td>
<td>$0.14</td>
<td>$3.95</td>
<td>$10,137</td>
<td>$86,810</td>
<td>11.7%</td>
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<tr>
<td>Susitna North CDP</td>
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<td>$10,190</td>
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</tr>
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<td>$3,997</td>
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</tr>
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<td>$10,719</td>
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</tr>
<tr>
<td>Two Rivers CDP</td>
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<td>$10,628</td>
<td>$79,239</td>
<td>13.4%</td>
</tr>
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<td>Tyonek CDP</td>
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<td>$14,485</td>
<td>$30,938</td>
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<td>$3,997</td>
<td>$79,177</td>
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</tr>
<tr>
<td>Whitestone CDP</td>
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<td>$56,923</td>
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<td>$10,137</td>
<td>$51,806</td>
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<td>$3.95</td>
<td>$10,190</td>
<td>$75,583</td>
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</tbody>
</table>

| **Population weighted regional cost of energy burden** | **7.0%** |

### Southeast

<table>
<thead>
<tr>
<th>Community</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angoon city</td>
<td>$0.63</td>
<td>$5.15</td>
<td>$12,574</td>
<td>$45,208</td>
<td>27.8%</td>
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<tr>
<td>Coffman Cove city</td>
<td>$0.47</td>
<td>$4.12</td>
<td>$9,849</td>
<td>$76,250</td>
<td>12.9%</td>
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<tr>
<td>Covenant Life CDP</td>
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<td>$4.32</td>
<td>$8,540</td>
<td>$64,063</td>
<td>13.3%</td>
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<td>Craig city</td>
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<td>$8,414</td>
<td>$62,174</td>
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<td>Elfin Cove CDP</td>
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<td>$73,542</td>
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<td>$8,600</td>
<td>$66,750</td>
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<tr>
<td>Gustavus city</td>
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<td>$11,080</td>
<td>$67,708</td>
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<td>Hollis CDP</td>
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<td>$11,190</td>
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<td>$8,679</td>
<td>$43,393</td>
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<td>$12,074</td>
<td>$42,188</td>
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<td>$8,533</td>
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<tr>
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<tr>
<td></td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
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<td>$10,689</td>
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<td><strong>Population weighted regional cost of energy burden</strong></td>
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<td>10.6%</td>
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<td><strong>Yukon-Koyukuk Census Area</strong></td>
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<td>Atalna CDP</td>
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<tr>
<td>Allakaket city</td>
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<td>55.8%</td>
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<td>Anvik city</td>
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<td>$5.01</td>
<td>$10,745</td>
<td>$45,196</td>
<td>23.8%</td>
</tr>
<tr>
<td>Central CDP</td>
<td>$0.78</td>
<td>$4.34</td>
<td>$11,413</td>
<td>$72,857</td>
<td>15.7%</td>
</tr>
<tr>
<td>Chalkyitsik CDP</td>
<td>$0.95</td>
<td>$7.00</td>
<td>$16,601</td>
<td>$32,500</td>
<td>51.1%</td>
</tr>
<tr>
<td>Circle CDP</td>
<td>$0.77</td>
<td>$4.17</td>
<td>$11,141</td>
<td>$21,250</td>
<td>52.4%</td>
</tr>
<tr>
<td>Coldfoot CDP</td>
<td>$0.49</td>
<td>$4.50</td>
<td>$9,951</td>
<td>$45,196</td>
<td>22.0%</td>
</tr>
<tr>
<td>Dot Lake CDP</td>
<td>$0.49</td>
<td>$4.50</td>
<td>$9,951</td>
<td>$32,500</td>
<td>30.6%</td>
</tr>
<tr>
<td>Dot Lake Village CDP</td>
<td>$0.49</td>
<td>$4.50</td>
<td>$9,951</td>
<td>$32,500</td>
<td>30.6%</td>
</tr>
<tr>
<td>Eagle city</td>
<td>$0.59</td>
<td>$4.65</td>
<td>$10,809</td>
<td>$38,125</td>
<td>28.4%</td>
</tr>
<tr>
<td>Eagle Village CDP</td>
<td>$0.59</td>
<td>$4.65</td>
<td>$10,809</td>
<td>$38,125</td>
<td>28.4%</td>
</tr>
<tr>
<td>Evansville CDP</td>
<td>$0.64</td>
<td>$0.64</td>
<td>$15,413</td>
<td>$45,196</td>
<td>34.1%</td>
</tr>
<tr>
<td>Fort Yukon city</td>
<td>$0.60</td>
<td>$6.57</td>
<td>$13,817</td>
<td>$44,167</td>
<td>31.3%</td>
</tr>
<tr>
<td>Galena city</td>
<td>$0.67</td>
<td>$6.27</td>
<td>$13,785</td>
<td>$62,917</td>
<td>21.9%</td>
</tr>
<tr>
<td>Grayling city</td>
<td>$0.56</td>
<td>$5.75</td>
<td>$12,285</td>
<td>$25,000</td>
<td>49.1%</td>
</tr>
<tr>
<td>Holy Cross city</td>
<td>$0.53</td>
<td>$7.15</td>
<td>$14,335</td>
<td>$40,000</td>
<td>35.8%</td>
</tr>
<tr>
<td>Hughes city</td>
<td>$0.71</td>
<td>$9.00</td>
<td>$18,276</td>
<td>$45,417</td>
<td>40.2%</td>
</tr>
<tr>
<td>Huslia city</td>
<td>$0.54</td>
<td>$7.00</td>
<td>$14,165</td>
<td>$33,125</td>
<td>42.8%</td>
</tr>
<tr>
<td>Kaltag city</td>
<td>$0.52</td>
<td>$5.75</td>
<td>$12,074</td>
<td>$40,000</td>
<td>30.2%</td>
</tr>
<tr>
<td>Koyukuk city</td>
<td>$0.49</td>
<td>$6.50</td>
<td>$13,073</td>
<td>$21,667</td>
<td>60.3%</td>
</tr>
<tr>
<td>Lake Minchumina CDP</td>
<td>$0.49</td>
<td>$4.10</td>
<td>$9,328</td>
<td>$45,196</td>
<td>20.6%</td>
</tr>
<tr>
<td>Livengood CDP</td>
<td>$0.49</td>
<td>$5.05</td>
<td>$10,807</td>
<td>$45,196</td>
<td>23.9%</td>
</tr>
<tr>
<td>McGrath city</td>
<td>$0.51</td>
<td>$7.46</td>
<td>$14,674</td>
<td>$75,000</td>
<td>19.6%</td>
</tr>
<tr>
<td>Yukon-Koyukuk Census (cont’d)</td>
<td>A (Electric residential rate $/kWh)</td>
<td>B (Heat $ / gallon fuel)</td>
<td>C (Annual Household Cost of Energy (based on typical use))</td>
<td>D (Median Household Income)</td>
<td>E (Cost of Energy Burden (C/D))</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>------------------------------------</td>
<td>--------------------------</td>
<td>----------------------------------------------------------</td>
<td>-----------------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>Manley Hot Springs CDP</td>
<td>$0.67</td>
<td>$4.48</td>
<td>$11,019</td>
<td>$55,000</td>
<td>20.0%</td>
</tr>
<tr>
<td>Minto CDP</td>
<td>$0.59</td>
<td>$5.05</td>
<td>$11,401</td>
<td>$30,250</td>
<td>37.7%</td>
</tr>
<tr>
<td>New Allakaket CDP</td>
<td>$0.86</td>
<td>$7.00</td>
<td>$16,055</td>
<td>$52,813</td>
<td>30.4%</td>
</tr>
<tr>
<td>Nikolai city</td>
<td>$0.80</td>
<td>$8.00</td>
<td>$17,284</td>
<td>$53,750</td>
<td>32.2%</td>
</tr>
<tr>
<td>Northway CDP</td>
<td>$0.67</td>
<td>$4.60</td>
<td>$11,154</td>
<td>$73,750</td>
<td>15.1%</td>
</tr>
<tr>
<td>Northway Junction CDP</td>
<td>$0.67</td>
<td>$4.60</td>
<td>$11,154</td>
<td>$24,167</td>
<td>46.2%</td>
</tr>
<tr>
<td>Northway Village CDP</td>
<td>$0.67</td>
<td>$4.60</td>
<td>$11,154</td>
<td>$23,125</td>
<td>48.2%</td>
</tr>
<tr>
<td>Nulato city</td>
<td>$0.53</td>
<td>$5.55</td>
<td>$11,838</td>
<td>$41,250</td>
<td>28.7%</td>
</tr>
<tr>
<td>Rampart CDP</td>
<td>$0.49</td>
<td>$6.00</td>
<td>$12,286</td>
<td>$45,196</td>
<td>27.2%</td>
</tr>
<tr>
<td>Ruby city</td>
<td>$0.84</td>
<td>$5.96</td>
<td>$14,322</td>
<td>$24,750</td>
<td>57.9%</td>
</tr>
<tr>
<td>Shageluk city</td>
<td>$0.60</td>
<td>$7.00</td>
<td>$14,502</td>
<td>$65,000</td>
<td>22.3%</td>
</tr>
<tr>
<td>Stevens Village CDP</td>
<td>$1.07</td>
<td>$6.76</td>
<td>$16,948</td>
<td>$14,063</td>
<td>120.5%</td>
</tr>
<tr>
<td>Takotna CDP</td>
<td>$1.02</td>
<td>$7.46</td>
<td>$17,750</td>
<td>$63,333</td>
<td>28.0%</td>
</tr>
<tr>
<td>Tanacross CDP</td>
<td>$0.49</td>
<td>$4.53</td>
<td>$9,997</td>
<td>$57,708</td>
<td>17.3%</td>
</tr>
<tr>
<td>Tanana city</td>
<td>$0.71</td>
<td>$5.75</td>
<td>$13,237</td>
<td>$46,786</td>
<td>28.3%</td>
</tr>
<tr>
<td>Tetlin CDP</td>
<td>$0.49</td>
<td>$4.40</td>
<td>$9,795</td>
<td>$36,250</td>
<td>27.0%</td>
</tr>
<tr>
<td>Tok CDP</td>
<td>$0.49</td>
<td>$4.53</td>
<td>$9,997</td>
<td>$53,565</td>
<td>18.7%</td>
</tr>
<tr>
<td>Venetie CDP</td>
<td>$0.90</td>
<td>$8.50</td>
<td>$18,637</td>
<td>$27,500</td>
<td>67.8%</td>
</tr>
<tr>
<td>Wiseman CDP</td>
<td>$0.49</td>
<td>$5.10</td>
<td>$10,885</td>
<td>$27,500</td>
<td>39.6%</td>
</tr>
</tbody>
</table>

**Population weighted regional cost of energy burden** 33.0%