



REGULATORY COMMISSION OF ALASKA

Frank H. Murkowski, Governor

July 22, 2005

Steve Hamlen, President/CEO
United Utilities, Inc.
5450 A Street
Anchorage, AK 99518-1291

Re: Rural Alaska Broadband Internet Access Grant Program
Decision - United Utilities, Inc. Request to Amend the Grant Agreement

Dear Mr. Hamlen:

This letter will serve as the formal response to United Utilities, Inc's (UUI's) request for amendment of its grant under the Rural Alaska Broadband Internet Access Grant Program (grant program).

After consultation with the United States Department of Agriculture (USDA), the federal funding agency for this grant program, we agree to amend UUI's grant amount to \$5,380,843¹ up to a maximum of 44% of actual projected costs. This amended grant award will allow UUI to build a terrestrial microwave network with broadband capability, furthering the goals of this federal program.

As you are aware, Alaska's Senator Stevens was strongly involved in creating this federal program, which cites a program goal of "establishing common carrier facilities and services which . . . will result in the long-term availability to such communities of affordable broadband services which are used for the provision of high-speed Internet access."² UUI's proposal furthers this goal by establishing common carrier facilities and increasing the probability of the long-term availability of Internet service to the 11 locations included in the UUI proposal. The UUI microwave network will result in the construction of infrastructure capable of carrying communications traffic throughout the Bethel region,³ furthering program goals of establishing common carrier facilities and services. The microwave

¹The original grant award was \$2,536,698, resulting in an increase of \$2,844,145.

²See 7 U.S.C. 1926(a)(20)(E).

³The 11 locations that are funded through this grant program will be part of UUI's 47-site microwave network in Southwestern Alaska referred to as the "DeltaNet".

network will also enhance the long-term viability of Internet service by minimizing recurring expenses attributable to satellite transport.⁴

This decision recognizes that Senator Stevens has strongly supported this amendment, that the public comments received from potential end-users in the affected regions of Alaska were favorable, and that the analysis performed during our review illustrated that the design standards and cost estimates supporting the amendment are reasonable.

There has been much debate about the poor quality of UUI's original cost estimates. As the grant applicant, UUI had a responsibility to perform the research sufficient to present a reasonable estimate underlying its original grant request. While UUI has made a convincing argument that it had no reason to believe that warm permafrost would be an issue (and hence the significant redesign required), it is inconceivable that UUI was not aware of the cost increases in the period between March 2004 (when the original grant was awarded) and August 2004 (when the grant agreement was signed). Less than sixty days after signing the grant agreement, UUI presented this very significant amendment request.

In analyzing your amendment request, many factors were weighed to determine how to further the public purpose of this grant. The final award is based on recommendations or findings of the independent engineers, public comment, and a desire to achieve a fair balance between funding this infrastructure project, yet also requiring UUI to put more equity into the effort.

This letter reflects the final determination on the UUI grant amendment request.⁵

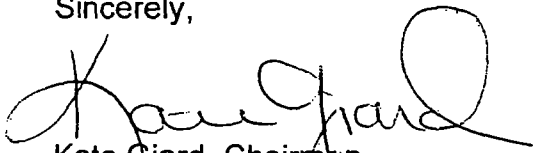
⁴Satellite transport costs are recurring costs that extend beyond the funding phase and throughout the life of the Internet service. Recurring costs such as satellite transport must be covered by service revenues in order for the service to be economically sustainable. UUI will construct a terrestrial microwave network to transport Internet traffic from the hub community to the grant communities, allowing 11 grant communities to share one satellite link to a hub community (Bethel). Satellite transport expenses will be shared by several communities, minimizing expenses extending beyond the grant funding period and thereby increasing the likelihood that Internet service will be economically viable over the long term.

⁵In order to further the transparency of the review process, this letter will be posted on the RCA website along with the engineering analysis by two independent engineering firms, HMS, Inc. (HMS) and Octagon Company, Inc. (Octagon). The HMS analysis will be redacted in accordance with our previous correspondence, along with a copy of my decision on UUI's request for confidentiality. At this stage, there has been no request from UUI for confidential treatment for portions of the Octagon analysis. In order to allow UUI to seek protected status for portions of the Octagon analysis, we will wait until August 1, 2005 to post this letter and the redacted analysis of HMS and Octagon on our agency website, and to notify commenting parties that the decision is available for review.

Attached are two appendices to provide a clearer understanding of the analysis and decision. The first appendix sets out some background information and an explanation of the analysis, while the second appendix sets forth the calculation for each of the above grant award options.

I believe this final decision will serve Alaska well and I look forward to further reports of success as the project gets underway.

Sincerely,



Kate Giard, Chairman
Regulatory Commission of Alaska

Enclosures: Appendix KG-1 (Background & Analysis)
Appendix KG-2 (Grant Award Options- Calculations)

cc: Senator Ted Stevens, United States Senate
Bill Allen, State Director, USDA Rural Development
Dean Stewart, Director, Community & Business Programs,
USDA Rural Development
Merlaine Kruse, Assistant Director, Community & Business Programs,
USDA Rural Development
Phil Bennett, Finance Officer, DCCED Administrative Services
Lori Godkin, Accountant III, DCCED Administrative Services

Appendix KG-1 – Background & Analysis

Below is a discussion of the grant program, circumstances regarding the grant award to United Utilities, Inc. (UUI), details of UUI's request to amend the Grant Agreement and the review process for this request, and the final decision regarding the request to amend the grant agreement.

The Grant Program

In August of 2003 and July of 2004, the U.S. Department of Agriculture awarded two \$7.5 million grants (total of \$15 million) to the Alaska Department of Commerce, Community, & Economic Development (DCCED) and the Regulatory Commission of Alaska (RCA) to facilitate the deployment of broadband Internet services in rural Alaska communities that lack Internet connectivity. Through sub-recipient grants, funding was available to telecommunication carriers and cable operators for up to 75% of the cost of projects that expand broadband Internet service into eligible communities that do not have local dial-up Internet access or existing broadband service. The Chairman of the RCA is the grant administrator.

Original Grant Award to UUI

In response to a request for grant proposals, UUI submitted a proposal to provide Internet service to 12 rural Alaskan communities. A five-member grant evaluation committee scored the grant applications and awarded grants to three applicants, one of which was UUI. UUI received a tentative grant award for service to 11 communities⁵ and was required to submit a revised training proposal along with a revised budget that reflected cost savings attributable to the elimination of one ineligible community.⁶ The evaluation committee accepted a revised training

⁵Those communities are Eek, Chefornak, Kipnuk, Kongiganak, Kwigillingok, Lower Kalskag, Newtok, Nightmute, Tununak, Tuntutuliak, and Upper Kalskag.

⁶ UUI requested grant funding for service to Mekyoruk, but that community was deemed ineligible for grant funding due to preexisting local dialup Internet service.

proposal and budget on March 9, 2004. A grant agreement between DCCED/RCA and UUI was executed on August 2, 2004 for \$2,536,698. On an overall project basis, the grant provided funding for 46% of the total estimated project costs of \$5,505,098.

UUI Request to Amend the Grant Agreement

On September 28, 2004, UUI filed a request to amend the grant agreement stating that total project costs increased from \$ 5.5 million to \$12.1 million due to the discovery of warm permafrost (increasing the costs of foundation pads and microwave tower footings),⁷ higher installation costs, the escalation of steel prices, an increase to fuel surcharges for freight, and unexpected costs for regulatory approvals. UUI sought an amendment to the grant agreement in the amount of \$4,661,000.

Review Process for UUI's Request to Amend the Grant Agreement

In order to properly analyze UUI's request to amend the grant agreement, UUI presented a detailed explanation of the changing conditions, their request was noticed, and the public was invited public comment.⁸ Two independent engineering firms were hired to review UUI's revised grant proposal. The first (HMS) was charged with analyzing the cost information provided by UUI, and the second (Octagon) was charged with analyzing the infrastructure design changes. Each provided a separate report and conclusions on UUI's amendment. These materials were considered as part of the final decision-making process for UUI's request.

Public Comments

Parties filing in support of UUI's request to amend the grant agreements included United States Senator Ted Stevens; Alaska State Senator Lyman Hoffman; Yukon Kuskokwim Health Corporation (Gene Peltola, President/CEO); Alaska Telecommunications Users Consortium (Greg Moore, Interim Executive Director); Yuut Elitnaurviat People's Learning Center (Carlton Kuhns, Executive Director); Association of Village Council Presidents (Myron Naneng, President);⁹ University of Alaska-Fairbanks Kuskokwim Campus (Joli Morgan, Interim Director); National Science Foundation TCUP (Martin Leonard III, Program Manager); Bethel Search and Rescue (Peter Atchak, President); Kyuk Bethel Broadcasting, Inc. (Joseph Seibert, Chief Engineer); Lower Yukon School District (Bob Robertson, Superintendent); Calista Corporation (Matthew Nicolai,

⁷ UUI indicates that warm permafrost was discovered at eight of the 11 grant sites.

⁸ Information regarding UUI's request to amend the grant agreement (including public comments) is posted at <http://www.state.ak.us/rca/Broadband/UUIcomments/index.html>.

⁹ Myron Naneng is also Chairman of the Board of Directors for both UUI and an affiliated local exchange company (United-KUC, Inc.).

President/CEO); and Bethel Native Corporation (Marc Stemp, President/CEO).¹⁰ In addition, pre-printed post cards were received from over 100 potential end-users located in rural Alaska.

Many respondents indicated that their support for the UUI proposal is based in part on their assessment that service delivered over the proposed terrestrial microwave network would be more reliable and avoid the latency problems inherent with satellite systems.¹¹ Other cited advantages of a terrestrial-based network included the desirability of adding communications infrastructure in rural Alaska and the importance of the grant sites to UUI's "Delta-Net" project in Rural Alaska.¹²

Comments opposing UUI's request to amend the grant agreement were received from Village Telecom Management Services (VTMS) (James Stevens); GCI (Martin Weinstein, Regulatory Attorney); Arctic Slope Telephone Cooperative Association (ASTAC) (Dave Fauske, GM/CEO); and AT&T Alascom (Mark Vasconi).

VTMS opposed UUI's request on several grounds, including that the replacement costs of the microwave system makes UUI's broadband project unsustainable and precludes local ownership and control over broadband services.¹³ ASTAC argued that UUI's lack of planning and precision in the original grant application should not be rewarded with a 183% increase in grant funding and opposed using a large portion of the remaining funds to remedy UUI's "flawed" application. ASTAC also stated that the inaccuracies in UUI's initial grant proposal necessitated careful review of UUI's amended grant proposal for accuracy. In our deliberations, we considered these comments and we decided to consider UUI's grant amendment only to the extent that funds remained from the first \$7.5 million USDA grant allocation, determining that the second \$7.5 million grant allocation would be dedicated to fund future grant proposals.

Both GCI and AT&T Alascom opposed the supplemental funding request as a material change to UUI's original grant award. GCI maintained that competitive bidding practices preclude material amendments to a competitively bid contract,

¹⁰ Several commentators also voiced their support for the UUI proposal at UUI's October 27, 2004 presentation to RCA Staff and myself. Those parties were Senator Ted Stevens' office (Liz Connell, Legislative Assistant); Alaska Telecommunications Users Consortium (Greg Moore, Interim Executive Director); Yukon Kuskokwim Health Corporation (Valerie Davidson, Executive Vice President); Yuut Eliitnaurviat People's Learning Center (Carlton Kuhns, Executive Director); and Association of Village Council Presidents (Myron Naneng, President).

¹¹ Latency refers to a time delay in receiving a signal.

¹² The 11 locations that are funded through this grant program will be part of a 47-site terrestrial microwave network in Southwestern Alaska referred to as the "DeltaNet".

¹³ VTMS proposed to install a satellite-based system in four rural Alaska locations, with ownership of the facilities held by the local village tribal council. VTMS' proposal was rejected as untimely and thus was not considered by the evaluation committee.

and indicated that the integrity of the grant's competitive bid process will be undermined should UUI be allowed to increase grant funding levels to almost triple the cost estimate provided during the competitive bid process.

In response to GCI's comments, UUI disputed GCI's characterization of the broadband program grant award process as a competitive bid process, describing it as an open competitive grant selection process. UUI also argued that Alaska case law supports a finding that UUI's grant amendment is not a material change to the original grant award, and the grant agreement between UUI and DCCED/RCA does not require adherence to the state procurement code or conventional bid processes.

UUI's request for additional grant funding is properly treated as a request for amendment to the Grant Agreement under Article 5 of Appendix A and Article 2 of Appendix G to the Grant Agreement. These provisions specify that Grant Amendments require mutual consent, and any increase to DCCED's portion of the project costs requires DCCED's prior approval documented with a Grant Amendment. This decision constitutes DCCED's approval of a portion of the request for a Grant Amendment, an approval that will become effective upon the execution of a Grant Amendment.

GCI recommended that the RCA cancel UUI's original grant award if UUI is unable to perform under the terms of its original bid, while AT&T Alascom argued that the magnitude of the cost increase places in doubt UUI's ability to manage a project of this scale. We considered terminating UUI's Grant Agreement on the grounds that UUI was unable to perform under the terms of the agreement. However, UUI provided written confirmation of its ability to complete its grant proposal regardless of the outcome of its request for additional grant funding.¹⁴ Upon receipt of this letter, we were satisfied that UUI would be able to perform under the terms of the existing Grant Agreement.

AT&T Alascom stated that UUI's microwave network will result in duplicative interexchange facilities and consequently UUI's use of grant funds exceeds the grant's intended purpose of extending the availability of broadband Internet service.¹⁵ AT&T Alascom stated that the funds dedicated to UUI's 11 proposed grant communities could be used to deploy broadband service to around 60 villages.¹⁶ AT&T Alascom also disputed UUI's claim that the microwave system

¹⁴See November 5, 2004 letter from Steve Hamlen, UUI, to Kate Giard, Program Administrator for the Rural Alaska Broadband Internet Access Grant Program.

¹⁵AT&T Alascom argued that UUI will use the microwave network to provide long distance services in addition to broadband Internet service.

¹⁶While AT&T Alascom's comments state that UUI will provide Internet service to 13 communities under the grant program, UUI will deploy Internet service in 11 communities.

will result in more reliable Internet service, noting that out-of-region Internet traffic will still need to traverse a satellite system to reach information services.¹⁷

UUI contended that the terrestrial network offers a more robust, reliable, and long-term infrastructure solution for Internet services. UUI also indicated that its microwave system provides improved performance and increased capacity over satellite-based systems.

GCI Letter to USDA

By letter dated March 24, 2005, GCI contacted USDA Rural Development to request that the agency decline to disburse grant money for UUI's request to amend grant funding levels for nine of the 11 communities covered under UUI's grant proposal. GCI stated that these nine communities are locations where GCI recently implemented broadband Internet services,¹⁸ and the appropriating legislation prohibits the uses of grant money for communities that have existing Internet service.¹⁹ GCI also cited comments AT&T Alascom filed with our agency indicating that UUI's microwave tower project is not an appropriate project under the grant program since it is not constructed strictly for Internet service, but rather will duplicate an existing satellite network that is the backbone for interexchange telecommunications services provided in rural Alaska.

With regard to GCI's deployment of Internet service in the nine locations included in UUI's grant application, it should be noted that GCI deployed Internet service in those locations after UUI executed its grant agreement and requested supplemental funding. UUI executed its grant agreement on August 2, 2004 and filed a request for additional funding on September 28, 2004. My understanding is that GCI commenced service to the nine locations in question in October and November of 2004.

After discussions with USDA, I delayed a decision on UUI's request to amend the grant agreement until USDA Rural Development's Office of General Counsel could review the issue of community eligibility posed by GCI and provide an

¹⁷Some commentors indicate that the microwave system will reduce or eliminate the latency issues inherent with the satellite transport of Internet traffic. Internet traffic originating or terminating from outside the region served by the UUI microwave system would use satellite transport to reach the microwave network. Internet traffic originating and terminating within the region would be carried along the microwave network and would not require the use of satellite transport.

¹⁸These communities are Chefornak, Eek, Kipnuk, Kongiganak, Kwillingok, Newtok, Nightmute, Tununak, and Tuntutuliak. Two remaining communities in the UUI grant proposal - Lower Kalskag and Upper Kalskag - were not listed by GCI as locations where the company provides Internet service.

¹⁹Specifically, 7 U.S.C. 1926(a)(20)(E) provides that "the Secretary may make grants to state agencies for use by regulatory commissions in states with rural communities without local dial-up Internet service or broadband service . . ."

opinion regarding whether additional grant funds could be awarded to UUI based on these circumstances. On June 21, 2005, I received a letter from USDA Rural Development indicating that the USDA could allow the RCA to provide additional grant funding to UUI.

Independent Engineering Analysis

As noted above, we hired two independent engineering firms to review UUI's revised grant proposal. One engineering firm was retained to review UUI's estimated and to-date construction costs, while the other engineering firm reviewed the design specifications for the project. Both engineering firms were instructed to analyze the project on an overall basis, and to conduct a detailed review of three specific locations. While we provided some criteria for the selection, the engineering firms were allowed to select the three locations and chose Bethel, Kongiganak, and Tuntutuliak (review sites).

Engineering Analysis – Project Costs

We hired HMS to determine the validity of the cost quotations in UUI's request to amend the grant agreement.²⁰ In a report submitted on March 30, 2005, HMS reviewed UUI's microwave network construction costs for the review sites. Since UUI had commenced construction in those locations, HMS reviewed a combination of actual costs incurred and anticipated costs.²¹ HMS provided a detailed cost analysis for the three review sites and concluded, "the significant cost increases indicated from the original grant proposal appear largely in keeping with what would be expected for the scope indicated".

Engineering Analysis – Design Specifications

We also retained Octagon to review design specifications on UUI's grant proposal.²² In a report submitted June 24, 2005, Octagon evaluated the reasonableness and foreseeability of engineering revisions to construction plans for the microwave network. Octagon concluded that UUI's original bid estimate was flawed since structural engineers did not take into account changes in tower standards, the effects of heat transfer into the permafrost, and the possibility of

²⁰HMS has significant construction expertise in rural Alaska, including the region where UUI's microwave network will be constructed.

²¹HMS noted that some UUI project costs were below the estimated amounts stated in UUI's request to amend the grant agreement. While HMS's cost analysis included a 5% contingency allocation, HMS noted that the allowance of a 5% contingency allocation was questionable given that UUI's original project cost estimates did not include a 5% contingency allocation (UUI included a 5% contingency allocation in its request to amend the grant agreement).

²²Octagon has several years experience constructing facilities and towers in rural Alaska.

"warm permafrost."²³ UUI intends to use its microwave network to provide a variety of services and Octagon's report discussed whether the system design exceeded the scope necessary for Internet service. Octagon concluded that "if the network were only utilized for the [I]nternet, it could be done for significantly less cost."²⁴ Octagon estimated that cost savings could be as much as 25%.

Decision on UUI's Request to Amend the Grant Agreement

Alternatives for Establishing the Amendment Amount

Outlined below are three alternatives I considered in deciding the appropriate level of amendment. UUI requested an amendment of \$4,661,000. We structured the alternatives based on the analysis of UUI's revised cost and infrastructure design by the independent engineering firms.

Option 1: \$2,943,422 Amendment Based on HMS Analysis

One alternative for calculating the supplemental funding award is based on the HMS cost review and attempts to limit reimbursement to UUI's actual anticipated costs by eliminating funding for costs that are either overstated or unsubstantiated allocations (e.g., contingency allocation, cost savings determined by comparing UUI's request to amend the grant agreement with the HMS cost analysis, and an allocation for miscellaneous project coordination and labor costs). This approach would result in an amendment of \$2,943,422.

Option 2: \$2,844,145 Amendment Based on Octagon Analysis

The second alternative is based on the Octagon analysis, and limits grant funding to that portion of the microwave network necessary to deliver broadband Internet service. Octagon's report notes that project costs are likely higher than necessary due to the higher standards required of telecommunications networks. Octagon estimates these standards could increase the cost of the network by as much as 25%. Under this approach, estimated project costs decreased by 25% to reflect the allocation for non-Internet service. Applying the 59% grant contribution level requested in UUI's additional funding request to the decreased project cost would result in UUI receiving an amendment of \$2,844,145.

²³UUI's initial grant project estimate was based on the company's previous experience constructing microwave towers. Octagon stated that this previous tower construction experience took place under different conditions; global warming was a recent phenomenon in the Bethel region and had not previously been an issue for arctic or subarctic construction. Several changes to UUI's structural design were necessary to mitigate the problems of warm permafrost.

²⁴Octagon explained that the tower design was based in part on the height of the towers, the need to attach diversity antennas, and the need to compensate for the wind load on the towers (the number and depth of pilings for the tower are partially dependant on the wind load exerted on the tower, and wind load increases as antennas get larger). Octagon stated that a system dedicated to Internet traffic could get by with a smaller antenna and (possibly) no diversity antennas, reducing the size and cost of UUI's microwave towers.

Option 3: \$3,056,947 Amendment Based on Original Funding Percentage

The original grant award reimbursed UUI for approximately 46% of its then estimated project costs. Another approach to determining the amount of additional funding would be to maintain existing levels for grant funding and UUI contribution. Applying the 46% grant funding level to UUI's revised estimated project cost of \$12,160,098, UUI would receive an amendment of \$3,056,947.

Decision – Calculation Based on Option #2: \$2,844,145 Award

I have determined that Option 2 will provide the most equitable solution to UUI's request to amend the grant agreement. This approach allows UUI to recover some of the increased project costs while nearly adhering to the respective contribution levels proposed in UUI's approved grant project and incorporated into the grant agreement.²⁵

One positive aspect of Option #2 is that grant funding levels remain close to the grant funding levels in the currently-approved UUI grant award. The contribution levels in UUI's original grant agreement required UUI to contribute 54% (\$2,968,098) of estimated project costs totaling \$5,505,098, with grant funding covering 46% (\$2,537,000). The additional award of \$2,844,145 will result in a UUI contribution of approximately 56% (\$6,779,254) towards total estimated project costs of \$12,160,098, with grant funding covering the remaining 44% (\$5,380,843).

We also note that in HMS' review, some of UUI's actual costs were less than proposed in its request for additional grant funding. We are primarily concerned with ensuring that respective contribution levels closely resemble those proposed in UUI's currently-approved grant proposal. We will therefore limit the grant reimbursement amount to 44% of UUI's actual project costs up to \$5,380,543.

²⁵Based on UUI's revised estimate of project costs (\$12,160,098), UUI will contribute 56% (\$6,779,254) while the grant would cover the remaining 44% (\$5,380,844).

Appendix KG-2 (Grant Award Options - Calculations)

Option #1: Amendment Based on HMS Analysis

| | <i>Eliminate HMS Markup</i> | <i>Retain HMS Markup</i> |
|---|-------------------------------------|----------------------------------|
| Supplemental Funding Request (Bethel, Kongiganak, Tuntutuliak) | | |
| Total Funding Request | \$2,568,000 | \$2,568,000 |
| Adjustments (HMS Cost Review) | | |
| <i>less</i> UUI Potentially Overstated Costs | \$372,264 | \$817,834 |
| <i>less</i> 5% Contingency | \$128,400 | \$128,400 |
| Adjusted HMS Review Calculation | \$2,067,336 | \$1,621,766 |
| Ratio: (HMS Review Calculation) divided by (Supplemental Funding Request) | 80.50% | 63.15% |
| Grant Award Calculation | | |
| Supplemental Funding Request | \$4,661,000 | \$4,661,000 |
| <i>multiplied by</i> Grant Award Ratio | <u>80.5037%</u> | <u>63.15%</u> |
| Supplemental Funding Amount | \$3,752,279 | \$2,943,556 |
| <i>plus</i> Original Grant Award (Microwave Network) | <u>\$1,968,000</u> | <u>\$1,968,000</u> |
| Total Grant Amount | <u>\$5,720,279</u> | <u>\$4,911,556</u> |

| | | Building | Foundation | Tower | HMS Misc. Adjustment | HMS Markup | Total |
|--|--------------------------------|------------------|------------------|------------------|-------------------------|------------------|------------------|
| Calculation of UUI Potentially Overstated Costs | | | | | | | |
| Bethel | Supplemental Request | \$302,000 | \$487,000 | \$265,000 | | | \$1,054,000 |
| | HMS Review (With 20% Markup) | <u>\$298,310</u> | <u>\$291,363</u> | <u>\$205,133</u> | \$0 | <u>\$158,961</u> | <u>\$953,767</u> |
| | Total Bethel Cost Savings | \$3,690 | \$195,637 | \$59,867 | \$0 | (\$158,961) | \$100,233 |
| Kongiganak | Supplemental Request | \$268,000 | \$582,000 | \$243,000 | | | \$1,093,000 |
| | HMS Review (With 30% Markup) | <u>\$230,940</u> | <u>\$274,181</u> | <u>\$230,486</u> | \$1,355 | <u>\$221,089</u> | <u>\$958,051</u> |
| | Total Kongiganak Cost Savings | \$37,060 | \$307,819 | \$12,514 | (\$1,355) | (\$221,089) | \$134,949 |
| Tuntutuliak | Supplemental Request | \$32,000 | \$312,000 | \$77,000 | | | \$421,000 |
| | HMS Review (With 30% Markup) | <u>\$32,025</u> | <u>\$101,250</u> | <u>\$57,126</u> | <u>\$27,997</u> | <u>\$65,520</u> | <u>\$283,918</u> |
| | Total Tuntutuliak Cost Savings | (\$25) | \$210,750 | \$19,874 | (\$27,997) | (\$65,520) | \$137,082 |
| Total UUI Cost Savings (Eliminate HMS Markup) | | \$40,725 | \$714,206 | \$92,255 | (\$29,352) | (\$445,570) | \$372,264 |
| Total UUI Cost Savings (Retain HMS Markup) | | \$40,725 | \$714,206 | \$92,255 | (\$29,352) | \$445,570 | \$817,834 |

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Option #2: Amendment Based on Octagon Analysis

| | |
|--|--------------------|
| Total Project Cost (Supplemental Funding Request) | \$12,160,098 |
| <i>less</i> Non-Internet Allocation (25%) | <u>\$3,040,025</u> |
| Adjusted Project Cost (Supplemental Funding Request) | \$9,120,074 |
| Grant Funding Based on Grant Contribution Level | \$5,380,843 |
| Awarded Supplemental Funding | |
| Total Grant Award | \$5,380,843 |
| <i>less</i> Original Grant Award | <u>\$2,536,698</u> |
| Supplemental Funding Amount | <u>\$2,844,145</u> |

Option #3: Amendment Based on the Original Funding Percentage

| | |
|---|--------------------|
| Total Project Cost (Supplemental Funding Request) | \$12,160,098 |
| <i>multiplied by</i> 46% Grant Funding Level | <u>\$5,593,645</u> |
| Awarded Supplemental Funding | |
| <i>less</i> Original Grant Award | <u>\$2,536,698</u> |
| Supplemental Funding Amount | <u>\$3,056,947</u> |