Alaska Energy Authority

PART **A**

REQUEST FOR PROPOSALS PACKAGE

(Procurement per Article 3 of AS 36.30)

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ISSUING OFFICE

Agency Contact & Phone No.....: Bryan Carey – 907.771.3065 (Project Manager), Rich Wooten – 771.3019 – Rwooten@aidea.Org (Contracting Officer)
Contracting Division .....: Alaska Energy Authority (AEA)

PROJECT

RFP NUMBER ..... : 18043

Project Site (City, Village, etc.)..... : Bradley Lake, Alaska

Project Title & Contract Description ..: Bradley Lake Hydropower Project Operator

The Alaska Energy Authority (AEA or Authority) is soliciting interested proposers to operate the Bradley Lake Hydropower Project (Project) for AEA and the utility power purchasers. The current Project operator is Homer Electric Association (Operator). The operating agreement ends December 31, 2018. The selected operator (Contractor) will need to be ready to take over Project duties January 1, 2019 (Effective Date).

SCHEDULE & PAYMENT

Anticipated period for performance-Begin/End: August 2018 – December 2024, with the option to renew. (See page 5, Special Considerations, Paragraph 15.2)

Estimated amount of proposed contract:

☐ Less than $200,000 ☐ $200,000 to $250,000
☐ $250,000 to $500,000 ☐ $500,000 to $1,000,000 ☒ $1,000,000 or greater

Proposed Method(s) of Payment: ☐ Firm Fixed Price (FFP) ☐ Cost Plus Fixed Fee (CPFF)
☐ Fixed Price Plus Expenses (FPPE) ☒ Other: Time and Expense

SUBMITTAL DEADLINE AND LOCATION

OFFERORS ARE RESPONSIBLE TO ASSURE DELIVERY PRIOR TO DEADLINE (2 AAC 12.250).
ONLY PROPOSALS RECEIVED PRIOR TO THE FOLLOWING DATE AND TIME WILL BE OPENED.

DATE: **April 17, 2018** PREVAILING TIME: **3:00 PM**

HAND DELIVER ONLY DIRECTLY TO FOLLOWING LOCATION (and person, if named):
Alaska Energy Authority
813 West Northern Lights Blvd.
Anchorage, Alaska 99503

IMPORTANT NOTICE: If you downloaded this solicitation from the AIDEA's Website, you must register on the online planholders list to receive subsequent addenda. Failure to register may adversely affect your proposal. It is the Offeror's responsibility to ensure that they have received all addenda affecting this RFP. To register, go to www.AIDEA.org and provide the project name & number, company name & contact person, address, phone number & fax number.

PART

A

SELECTION PROCEDURE

1. Competitive Sealed Proposals will be evaluated by a committee (2 AAC 12, Article 4). Evaluation of responses to criteria set forth in Part C results in a numerical score for each proposal. Each criterion in Part C has an assigned weight for this RFP which demonstrates its relative importance. The total of all weights is 100 (100%). Each one- percent weight equates to a range of 0-5 points per Evaluator. The maximum points (score) obtainable for any proposal is equal to the product of 500 multiplied by the number of Evaluators.

2. Scoring of proposals will be accomplished as follows:

2.1 Each Evaluator will individually read and rate each Offeror's response to each criterion described in Part C - Section I - Technical Proposal. Ratings will be based solely on contents of proposal and in compliance with the Contracting Agency's standard Instructions for Evaluation Committee. Except as may be stated within any criterion description in Part C, a rating of "5" = Best Response from all Offerors; “4” to “1” = Progressively Less Responsive; “0” = Non-Responsive. Ratings are multiplied by the assigned weights for each criterion to obtain criteria scores.

2.2 After completion of individual ratings in Part C, Section 1, Technical Proposal, the Evaluation Committee will meet to discuss proposals. Evaluators may then alter their ratings; however, any changes shall be based solely on the criteria set forth in Part C.

2.2 After scoring Part C - Section I - Technical Proposal, criteria scores for Part C - Section II - Preferences, and Section III - Price (if applicable), will be calculated based on criteria descriptions.

2.4 The total score for each Offeror will be obtained by summing the scores determined for each criterion in Sections I, II and III of Part C. The order of ranking for negotiations shall be as follows: highest scored Offeror will be ranked first, next highest scored second, and etcetera.

3. Evaluators may discuss factual knowledge of, and may investigate Offerors' and proposed Subcontractors' prior work experience and performance, including projects referenced in proposal, available written evaluations, etcetera, and may contact listed references or other persons knowledgeable of a Contractor's and/or a Subcontractor's past performance. Factors such as overall experience relative to the proposed contract, quality of work, control of cost, and ability to meet schedules may be addressed. If any issues of significant concern to the proposed contract are discovered, the Committee may:

3.1 Provide written recommendations for consideration during contract negotiations;

3.2 Conduct discussions in accordance with paragraph 4, below.

4. The Committee may decide to conduct discussions (or "interviews") with responsible Offerors whose proposals are determined to be reasonably susceptible of being selected for award for the purpose of clarification to assure full understanding of, and responsiveness to, the solicitation requirements (AS 36.30.240 & 2 AAC 12.290). Offerors selected by the Committee for discussions may be permitted to submit Best and Final Offers (BAFO) for final Committee Evaluation. After discussions and any BAFO's, Evaluators will determine the final scoring and ranking for contract negotiations by evaluating written and oral responses using only the criteria set forth in Part C of this RFP (2 AAC 12.260(b)).

5. All Offerors will be advised of the Offeror selected for negotiation and, after completion of negotiations, a Notice of Intent to Award will be provided to all Offerors. If contract negotiations are unsuccessful with Offeror(s) selected for negotiation, the Contracting Agency may either cancel the solicitation or negotiate with other Offerors in the order of ranking.

PART

A

NOTICES

1. The Contracting Agency is an equal opportunity employer.

2. Copies of contract documents are available for review at the Contracting Agency's office. Offerors located outside the general vicinity of the Contracting Agency's office may telephone the Agency Contact identified on page one of this Part A for a discussion of such items.

General Conditions of the Professional Services Agreement are contained in the Small Procurement Standard Provisions Booklet, which is located on the Department's website under "Procurement".

The General Conditions are the **same** for both Competitive Sealed Proposals and Small Procurements.

3. Offerors are specifically advised that a contract shall not be in effect until a written agreement is executed by an authorized agent of the Contracting Agency. The Contracting Agency shall not be liable for any cost incurred by an Offeror in response to this solicitation, including any work done, even in good faith, prior to execution of a contract and issuance of a Notice to Proceed.

4. The Contracting Agency expressly reserves the right to waive minor informalities, negotiate changes or reject any and all proposals and to not award the proposed contract, if in its best interest. "Minor Informalities" means matters of form rather than substance which are evident from the submittal, or are insignificant matters that have a negligible effect on price, quantity, quality, delivery, or contractual conditions and can be waived or corrected without prejudice to other Offerors (2 AAC 12.990).

5. All proposals shall be open for public inspection (AS 36.30.230) after a Notice of Intent to Award is issued. Offerors should not include proprietary information in proposals if such information should not be disclosed to the public. Any language within a submittal purporting to render all or portions of a proposal confidential will be disregarded. Proprietary information which may be provided after selection for contract negotiations will be confidential if expressly agreed to by the Contracting Agency (AS 36.30.230).

6. Substitution for any personnel named in a proposal may result in termination of negotiations.

7. If it is discovered that a selected Offeror is in arrears on taxes due the State of Alaska, a contract may not be awarded until the Alaska Department of Revenue approves the payment provisions for the contract.

8. **Offerors and proposed subcontractors shall be in compliance with the statutory requirements for Alaska business licensing and professional registrations included in the certification statement on Page 2 of Part D in this RFP package.**

9. **PRICE COMPETITION**: Price cannot be an Evaluation Criterion in accordance with Article 3 of AS 36.30 for services that must be performed only by Architects, Engineers or Land Surveyors (A/E or LS) licensed in the State of Alaska, UNLESS the provisions of AS 36.30.270(d) apply; i.e., unless the services required are repetitious in nature, and the nature and amount of services required are thoroughly defined by measurable and objective standards to reasonably enable firms or persons making proposals to compete with a clear understanding and interpretation of the services required. If price is a factor, a majority of the evaluation committee must be registered in Alaska to perform architectural, engineering, or land surveying services.

9.1 If the services performed do not require an A/E or LS, then all Offerors including any A/E or LS must provide Price Proposals in accordance with AS 36.30.270(b) and 2 AAC 12.260(c).

9.2 Price (or any estimate of labor hours) cannot be an Evaluation Criterion for contracts that will receive federal funding (FAA) per 49 CFR 18.36(t), AC 150/5100-14D. For FAA exceptions: see AC 150/5100/14D, para 2-4(c).

10. An audit of the selected Offerors' and proposed Subcontractors' cost accounting systems and business records may be required to ascertain if systems are adequate for segregating contract costs; to establish a maximum allowable Indirect Cost Rate for the Agency's negotiator; and to investigate the accuracy of proposed labor rates and unit prices. In order

not to unduly delay contract negotiation or award, be prepared to submit Pre-Audit Statement, DOT&PF Form 25A257 immediately for your firm and any subcontract which may exceed $250,000. For contract amounts less than $250,000, the Contracting Agency may require the Offeror and proposed Subcontractor to submit the Pre-Audit Statement if deemed necessary to determine allowable costs under Title 23 CFR requirements. If selected for negotiation, failure to submit properly completed Pre-Audit Statement(s) in a timely manner may disqualify an Offeror from further consideration. Information from Pre-Audit Statements and any Audit conducted for the Contracting Agency is considered proprietary and will be confidential.

11. Standard insurance provisions for Worker's Compensation, General and Automobile Liability, and Professional Liability are contained in DOT&PF Form 25A269, Indemnification and Insurance. Coverages may be modified under very limited circumstances. Offeror should not assume any modification of coverages.

12. Professional Liability Insurance for the proposed contract: ☒ is not required

☐ is required as shown on DOT&PF Form 25A269.

13. The proposed contract ☐ will ☒ will not be a Federally Assisted Program of the U.S. Department of Transportation. If it will be an assisted program, then the Offeror shall insert the following notification in all subcontract solicitations for bids or proposals pertinent to this RFP:

"In accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C. 2000d to 2000d-4 and Title 49, CFR, U.S. Department of Transportation (U.S. DOT), Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-assisted programs of the U.S. DOT issued pursuant to such Act, in any Subcontract entered into pursuant to this RFP, Disadvantaged Business Enterprise firms will be afforded full opportunity to submit bids or proposals and will not be discriminated against on the grounds of race, color, sex, or national origin, in consideration for an award.

14. Pre-proposal Conference: ☒ None ☐ As follows:

Not at this time.

15. Special Notices:

15.1 Per Alaska Statute (AS) 36.30.210(e): An Alaska Business License is required of Contractors who do business in Alaska at time of award. To qualify for the Alaska Offerors' Preference, under AS 36.30.321, an Offeror shall have a valid Alaska business license as a prerequisite to proposal. Information regarding applying for an Alaska Business License can be found on-line at http://commerce.alaska.gov/dnn/cbpl/Home.aspx or by calling 1-907-465-2550. The business license must be in the name of the company under which the proposal is submitted.

15.2 The initial term of this Contract will be for five (5) years from the effective date. The Authority reserves the right to renew the agreement for successive five-year terms until terminated as provided herein and subject to the early termination rights of the Authority.

15.3 An electric utility or contractor may apply to operate the Project by submitting a written proposal. The proposal must contain the following information:

(1) The legal name of the utility or contractor entity and the legal authority under which it was created and other information that will demonstrate that the applicant is eligible to do business in this state;

(2) a record of the official action taken by the applicant's governing body authorizing the proposal;

(3) the name, title, and address of the applicant's official correspondent or representative for purposes of the proposal;

(4) the names and titles of the applicant's principal officers, including the chief executive officer and the general manager;

(5) the names and addresses of the engineers, legal counsel, financial advisers or consultants that the applicant may have;

(6) a general description of the operations of the electric utility or contractor entity;

(7) Proof that the proposer has operated a Generation project greater than or equal to 10 MW capacity.

Special Notices Continued:

15.4 The FY2018 Alaska Energy Authority Bradley Lake Hydroelectric Project Approved Budget can be downloaded at http://www.aideaaeaprocurement.org/

15.5 All questions must be received by April 3, 2018, any questions received after the due date may be rejected.

PART **B**

SUBMITTAL CHECKLIST

Offeror may use left margin to check off items when completed.

Prime Contractor shall have a current Alaska Business License on date of submittal, reference item 1, page 2, Part D.

[ ] 1. Offerors must carefully review this RFP Package for defects and questionable material and become familiar with submittal requirements. Submit written comments to the address shown under "Submittal Deadline and Location" on page 1 of Part A - RFP. Substantive issues will be addressed in a written addendum to all RFP recipients on record. Failure to comply with directions may result in lower score and may eliminate a submittal from consideration. Protests based on alleged improprieties or ambiguities in a solicitation may be disallowed at the discretion of the Contracting Agency if the protest is not received in writing at least ten Agency work days prior to the Submittal Deadline (AS 36.30.565).

[ ] 2. Review Part A - RFP and the proposed Statement of Services and any other attached or referenced materials. If no Statement of Services is attached, telephone the Agency contact person identified on page 1 of Part A.

[ ] 3. Review Part C - Evaluation Criteria. Read each criterion in light of the proposed Statement of Services. Note any project specific criteria which may have been added or any changes to standard criteria descriptions which may have been made. Be aware of the assigned weight for each criterion. If a weight is not entered for any criterion on Part C, notify the Agency contact person. Plan your proposal to address the applicable criteria. Criteria Responses shall not exceed the number of pages stated below.

[ ] 4. Prepare a distinct Response for each criterion that has a weight more than zero. Failure to respond directly to any criteria weighted more than zero will result in an evaluation score of zero for that criteria. Any Responses to criteria weighted zero will be disregarded. Acceptable Responses must be specific and directly related to the Contracting Agency's proposed Statement of Services. Marketing brochures, federal standard forms 330s, marketing resumes, and other non-project specific materials will be discarded without evaluation and should not be submitted.

[ ] 5. ***Each criterion Response must be titled, numbered and assembled in the order in which the criteria are listed in Part C***, so the criterion to which information applies shall be plainly evident. Material not so identified or assembled may be discarded without evaluation.

[ ] 6. Price ☒ is ☐ is not an evaluation criterion for the proposed contract.

If Price is a Criterion, prepare ***Billing Rates and/or Price Proposals*** as described in Criteria #5.

[ ] 7. Complete all entries on Part D - Proposal Form. Note the statutory requirements for Alaska business licenses and professional registrations and be sure to sign and date the Certification. Copies of licenses and registrations may be provided with submittal, and will not count in the requirements of #8 below.

[ ] 8. Attach Criteria Responses (***except any Billing Rates or Price Proposals***) to Part D - Proposal Form. The maximum number of attached pages (***each printed side equals one page***) for Criteria Responses shall not exceed: **Twelve Pages**. Attached page limit does not include the four-page Part D - Proposal Form, or any Billing Rates or Price Proposals.

Criteria Responses shall be presented in ***8-1/2" X 11" format***, except for a minimal number of larger sheets (e.g. 11" x 17") that may be used (e.g. for schedules) if they are folded to 8-1/2" X 11" size. Large sheets will count as multiple pages at 93.5 square inches or fraction thereof per page, unless otherwise noted.

CAUTION: Criteria Responses which do not comply with the required page limit or presentation size, may result in disqualification. Further, small print or typeface that is difficult to read may negatively influence evaluation of your submittal and affect scoring for "Quality of Proposal."

CHECKLIST IS CONTINUED NEXT PAGE

PART

B

[ ] 9.

[ ] 10. Parts A, B and C of Form 25A270 and the proposed Statement of Services shall not be returned to the Contracting Agency. ***Submittals shall consist of the following applicable items assembled as follows and in the order listed:***

[ ] 10.1 Completed Part D - Proposal Form (generally at least one copy with original signature) and Responses to all evaluation criteria -- ***except Billing Rates, Price Proposals*** -- attached. Each copy shall be fastened with one staple in the upper left corner. No other form of binding shall be used and no cover and no transmittal letter will be included. **CAUTION**: Failure to comply with this instruction will negatively influence evaluation of Submittal.

[ ] 10.2 Number of copies of Part D (***all pages***) and Criteria Responses (***except Billing Rates, and Price Proposals***) required is: **Seven (7) plus One (1) copy provided via electronic file on a flash drive.**

[ ] 10.3 If ***Billing Rates and/or Price Proposals*** are required, ***one copy*** bound with one staple in the upper left corner separately enclosed in a sealed envelope marked on the outside to identify it as a ***Billing Rates or Price Proposal*** and the names of the Project and Offeror. Each ***Billing Rates or Price Proposal*** must be signed and dated by the person who prepares it (may be different signatures for each Subcontractor).

[ ] 10.4 If Item 9, above, is completed for this RFP Package, any submittal items described therein. Unless otherwise stated, one copy only, bound appropriately.

[ ] 10.5 Pre-Audit Statement, DOT&PF Form 25A257, shall ***not*** be provided with Submittal. (See Notice #10 on page 3 of Part A - RFP.)

[ ] 10.6 **CAUTION:** If you replicate (other than by photocopy) Part D or any form in lieu of completing the forms provided by the Contracting Agency, provide a signed certification that lists such forms and attests that they are exact replicas of that issued by the Contracting Agency. Changed forms may result in rejection at the Contracting Agency's discretion. Any alteration - other than completion of the required entries - may be cause for rejection without recourse.

[ ] 11. Deliver ***submittals in one sealed package*** to the location and before the submittal deadline cited in Part A - RFP. ***Mark the outside of the package*** to identify the Project and the Offeror. Proposals must be received prior to the specified date and time. Late proposals will not be opened (2 AAC 12.250).

PART

C

EVALUATION CRITERIA

Criteria with a weight of zero are not applicable and should be disregarded. If a weight is not indicated for any criterion, telephone the Agency Contact person identified at the top of page 1 of Part A - RFP.

SECTION I - TECHNICAL PROPOSAL

1. Experience

1. Weight: 20

A Contractor must show it understands and has the ability to operate a hydroelectric project regulated by the Federal Energy Regulatory Commission.

- Contractor shall submit experience of Contractor and proposed Supervisor on similar sized, regulated and/or remote projects.
- Proposers are to submit Safety Record which will include documentation of proposer's safety record on recent project. Also, include the proposers Worker's Compensation Experience Modification Factor for the last three full years. Any OSHA citations are to be discussed in the proposal.
- Provide documentation that shows past experience related to operating a generation facility.

2. Turnover Plan

2. Weight: 10

Contractor shall submit a turnover plan and schedule to accommodate the following:

- Become familiar with the Project
- Train personnel to take over project (become qualified)
- Prepare and setup logistics

3. Operating Plan

3. Weight: 30

Contractor shall provide an Operating Plan that covers the following details for Project operation:

- Employee shift schedules
- Address coverage to accommodate employee vacation, off site training and turnover
- Storage of goods and equipment prior to transportation to the Project
- Transportation of goods and personnel to Project
- Contingency for employee schedules due to weather or worker illness
- Data and communication transmission and security including SCADA data from Project
- Skills and knowledge of operating personnel
- Training of new and continuing personnel
- How low turnover of operators during contract period will be achieved
- Non-site technical expertise to assist Project personnel.

PART **C**

SECTION II - PREFERENCES

4. Alaska Bidder (Offeror) Preference **49 CFR 18.36(c)(2) & 2 AAC 12.260(e)**
Weight shall be "0" if any federal funding, otherwise weight shall be at least "10".

4. Weight: 10

To be granted this preference:

1) ***Response must certify that Offeror meets the following requirements per AS 36.30.990***

(A) Firm holds a current Alaska Business License;

(B) Proposal is submitted under the name as appearing on the Firm's current Alaska Business License;

(C) Firm has maintained a place of business within Alaska, staffed by the Firm or an employee of the Firm, for a period of six months immediately preceding the date of the offer;

(D) Firm is incorporated or qualified to do business under the laws of the State of Alaska, is a sole proprietorship, and the proprietor is a resident of Alaska, is a limited liability company organized under AS 10.50 and all members are residents of Alaska, or is a partnership under AS 32.05, AS 32.06, or AS 32.11 and all partners are residents of Alaska; and

(E) If the Firm is a Joint Venture, it is composed entirely of entities that qualify under (A) - (D).

2) ***Offeror must designate the Alaska Bidder (Offeror) Preference on page one of Part D.***

Response will be scored: Rating x Number of Evaluators x Weight = Criterion Score. Rating will be as follows:

An Alaska Offeror's preference (i.e. a Rating of 5) will be assigned to the proposal of an Offeror who qualifies as an Alaska bidder using the criteria in 1), above.

No Alaska Offeror's preference (i.e. a Rating of 0) will be assigned to the proposal of an Offeror who does not certify that it qualifies as an Alaska bidder or who does not qualify as an Alaska bidder using the criteria in 1), above.

PART **C**

SECTION III - PRICE

5. Total Price Proposal (Required Format) | **5. Weight: 30**

Each price proposal must be signed and dated by the person who prepares it.

This proposal is for evaluation purposes only. **The items to be fixed for the initial five-year agreement are indicated below.**

Direct Costs of Direct Labor (DCDL)
Show the estimated costs for each job classification of employees proposed for the project. Monthly hours are used for evaluation purposes only, it is not reflective of actual required effort. Hourly rates must not include Indirect Costs or Fee. **Hourly rates are capped for the initial five-year term, rates may be renegotiated if the agreement is extended.**

Functions	**(A)**Monthly Hours	X	Straight Time **(B)**Rate ($/hr)	=	Proposed Costs ($)
Maintenance	320				
Operation	320				
Supervision	160				

Total DCDL $_____

Indirect Costs (IDC)
These costs include what are generally referred to as 1) Fringe Benefits (do not include training), and 2) Non-site overhead labor costs of accounting and management. Any expenses of a Contractor are based on actual costs to the Contractor without any profit or other markup. Show the Proposed IDC Rate as a percentage of Direct Costs of Direct Labor and the product. **The IDC rate will be fixed for the length of the initial term (five years) and may be renegotiated if the agreement is extended.**

IDC Rate:_____% **(DCDL * IDC)** IDC Amount: $_____

Monthly Fixed Fee
The fixed fee is fixed for the length of the initial term (five years) and may be renegotiated if the agreement is extended

$_____

Total Proposed Cost (DCDL+IDC+Fee) $_____

In accordance with the Submittal Checklist ('rfp-b'), item 10.3, Price Proposals must be signed and dated by the person who prepares it (may be a different signature for each subcontractor).

Response will be scored as follows: $\frac{\text{(Lowest Total Proposed Price) x (MPP*)}}{\text{(Offeror's Total Proposed Price)}}$ = *Criterion Score*

**MPP = Maximum Possible Points = (5) x (Number of Evaluators) x (Weight)*

If no federal funding, then per AS 36.30.250(b), total price shall be reduced for the above calculation by the following applicable percentages when the prices are from Offerors **designate preferences on page one of Part D.**

- ALASKA BIDDER (OFFEROR) PREFERENCE [2 AAC 12.260(d)]..... 5%
- ALASKA VETERAN-OWNED BUSINESS PREFERENCE [AS 36.30.175] (maximum $5,000)..... 5%

and only ONE of the following:

- EMPLOYMENT PROGRAM PREFERENCE [AS 36.30.170(c)] 15%
- DISABLED SOLE PROPRIETOR OR 50% DISABLED EMPLOYEES [AS 36.30.170(e & f)]..... 10%

To claim employment or disabled preference, Offeror must be on the appropriate Alaska Division of Vocational Rehabilitation list at the time designated for opening (i.e., receipt) of proposals.

Alaska Energy Authority
PROPOSAL FORM

PART **D**

THIS FORM MUST BE THE FIRST PAGE OF PROPOSAL. Attach criteria responses as explained in Part B - Submittal Checklist. No transmittal letter or cover sheet will be used.

PROJECT

Project Title .....: Bradley Lake Hydropower Project Operator
RFP No.....: 18043

OFFEROR (CONTRACTOR)

Contractor.....:

Street.....:
P.O. Box.....:
City, State, Zip.....:
Alaska Business License Number .....:
Federal Tax Identification No. .....:
DOT&PF DBE Certification No. (if any) .....:
Individual(s) to sign contract .....:
Title(s) .....:
Type of business enterprise (check one).....: [ ] Corporation in the state of . :
[ ] Individual [ ] Partnership [ ] Other(specify) ..... :

ALASKA STATUTORY PREFERENCES (IF NO FEDERAL FUNDING)

Check the applicable preferences that you claim for the proposed contract (reference Criteria 11, 12 & 13 in Part C):
[ ] Alaska Bidder (Offeror) **AND>>** [ ] Veterans **AND>>** [ ]Employment Program or [ ] Disabled Persons

PROPOSED SUBCONTRACTOR(S)

Service, Equipment, etc.	Subcontractor & Office Location	AK Business License No.

CERTIFICATIONS

I certify: that I am a duly authorized representative of the Contractor; that this Submittal accurately represents capabilities of the Contractor and Subcontractors identified herein for providing the services indicated; and, that the requirements of the Certifications on page 2 and 3 of this Part D for 1) Alaska Licenses/Registrations, 2) Insurance, 3) Federal-Aid Contracts exceeding $100,000, 4) Cost and Pricing Data, 5) Trade Restrictions/Suspension/Debarment, 6) Foreign Contracting, 7) DBE Commitment, and 8) Former Public Officer - will be complied with in full. These Certifications are material representations of fact upon which reliance will be placed if the proposed contract is awarded. Failure to comply with these Certifications is a fraudulent act. The Contracting Agency is hereby authorized to request any entity identified in this proposal to furnish information deemed necessary to verify the reputation and capabilities of the Contractor and Subcontractors. This proposal is valid for at least ninety days.

Signature.....: _____
Name .....: Date:
Title .....: Telephone (voice):
(fax):
Email Address:

PART

D

CERTIFICATION FOR ALASKA BUSINESS LICENSES AND REGISTRATIONS

Contractor and all Subcontractors shall comply with the following applicable requirements of Alaska Statutes:

1. **Alaska Business License** (Form 08-070 issued under AS 43.70) at the time contract is awarded as required by AS 36.30.210(e) for Contractor and all Subcontractors. In accordance with Administrative Manual, Section 81.120, proof of application for an Alaska Business license will satisfy this requirement. Per AAM 81.120, acceptable evidence that the offeror possesses a valid Alaska business license consists of any one of the following:
   a. Copy of the Alaska business license.
   b. A canceled check that demonstrates payment for the Alaska business license fee.
   c. A copy of the Alaska business license application with a receipt stamp from the State's business license office.
   d. A sworn notarized affidavit that the bidder/offeror applied and paid for the Alaska business license.
   e. Other forms of evidence acceptable to the Department of Law.

2. **Certificate of Registration** for each individual to be in "responsible charge" (AS 08.48.341(14)) for Architecture, Engineering or Land Surveying (Form 08-2407 issued under AS 08.48.211) issued prior to submittal of proposal. Associates, consultants, or specialists under the supervision of a registered individual in "responsible charge" are exempt from registration requirements (AS 08.48.331).

3. **Certificate of Authorization for Corporate Practice** for incorporated Contractors and incorporated Subcontractors for Architecture, Engineering or Land Surveying (Form 08-2407 issued under AS 08.48.241). Corporations offering to provide Architectural, Engineering or Land Surveying services do not need to be registered for such disciplines at the time proposal is submitted provided they obtain corporate registration before contract award (AS 08.48.241).

4. **Certificate of Incorporation** (Alaska firms) or **Certificate of Authorization for Foreign Firm** ("Out-of-State" firms). All corporations, regardless of type of services provided, must have one of the certificates (AS 10.06.218 and other sections of Title 10.06 - Alaska Corporations Code).

5. **Current Board of Director's Resolution** for incorporated Contractors and incorporated Subcontractors for Architecture, Engineering or Land Surveying (reference AS 08.48.241) which names the person(s) designated in "responsible charge" for each discipline. Such persons shall be licensed in Alaska and shall participate as project staff in the Contract/Subcontracts.

6. **All partners** in a Partnership to provide Architectural, Engineering, or Land Surveying **must be legally registered in Alaska** prior to submittal of proposal for at least one of those disciplines (AS 08.48.251) which the Partnership offers.

7. **Joint Ventures**, regardless of type of services provided, must be licensed/registered in the legal name of the Joint Venture as used in this proposal (AS 43.70.020 and 43.70.110(4)).

8. **Contracts for Architecture, Engineering or Land Surveying** may not be awarded to individuals, corporations or partnerships not in compliance, respectively, with the provisions of paragraph 2, 3, and 6, above (AS 36.90.100).

[For information about licensing, Offerors may contact the Alaska Department of Commerce and Economic Development, Division of Occupational Licensing at P.O. Box 110806, Juneau, AK 99811-0806, or at Telephone (907) 465-2550, or at Internet address: http://commerce.alaska.gov/dnn/cbpl/Home.aspx]

CERTIFICATION FOR INSURANCE

Contractor will ensure that it and all Subcontractors have insurance coverage to effectuate the requirements of DOT&PF Form 25A269, Indemnification and Insurance.

CERTIFICATION FOR FEDERAL-AID CONTRACTS EXCEEDING $100,000

The individual signing this proposal certifies to the best of his or her knowledge and belief, that:

(1) No federal appropriated funds have been paid, by or on behalf of the Contractor, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the Contractor shall complete and submit Standard Form-LLL, Disclosure of Lobbying Activities, in accordance with its instructions. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

This certification is a material representation of fact upon which reliance will be placed if the proposed contract is awarded. Submission of this certification is a prerequisite for making or entering into the proposed contract imposed by Section 1352, Title 31, U.S. Code. The Contractor also agrees by submitting this proposal that Contractor shall require that the language of this certification be included in all lower tier subcontracts which exceed $100,000 and that all such Subcontractors shall certify and disclose accordingly.

PART

D

CERTIFICATION - COST AND PRICING DATA

In accordance with AS 36.30.400, any cost and pricing data submitted herewith, or in any future price proposals for the proposed contract, will be accurate, complete and current as of the date submitted and will continue to be accurate and complete during the performance of the contract, if awarded.

The contractor certifies that all costs submitted in a current or future price proposal are allowable In accordance with the cost principles of the Federal Acquisition Regulations of Title 48, Code of Federal Regulations (CFR), Part 31 and that the price proposal does not include any costs which are expressly unallowable under the cost principles of the FAR of 48 CFR 31. In addition, all known material transactions or events that have occurred affecting the firm's ownership, organization and indirect costs rates have been disclosed.

CERTIFICATION – TRADE RESTRICTIONS AND SUSPENSION AND DEBARMENT

The individual signing this proposal certifies to the best of his or her knowledge that the Contractor and any subcontractors are in compliance with DOT&PF 25A262 Appendix A, General Conditions, Article A25 and Article A26.

CERTIFICATION - FOREIGN CONTRACTING

By signature on this solicitation, the offeror certifies that all services provided under this contract by the contractor and all subcontractors shall be performed in the United States. If the offeror cannot certify that all work is being performed in the United States, the offeror must contact the Contracts Officer to request a waiver at least 10 days prior to proposal deadline. The offeror must provide with their submission a detailed description of the portion of work being performed outside the United States, where, by whom, and the reason the waiver is necessary. Failure to comply with this requirement may cause the state to reject the bid or proposal as non-responsive, or cancel the contract.

CERTIFICATION – DBE COMMITMENT

For federal-aid projects with DBE goals: if the Contractor submits a utilization report that proposes to use certified DBE's in the performance of work, the Contractor certifies that every effort will be made to meet or exceed the proposed percentage.

In addition, the Contractor certifies that a Consultant Registration form shall be submitted to the DBE/Civil Rights Office for their firm and each subconsultant prior to award.

CERTIFICATION – FORMER PUBLIC OFFICER

Any proposer listing as a member of the proposer's team a current public officer or a former public officer who has left state service within the past two years must submit a sworn statement from that individual that the Alaska Executive Branch Ethics Act does not prohibit his or her participation in this project. If a proposer fails to submit a required statement, the proposal may be deemed nonresponsive or nonresponsible, and rejected, depending upon the materiality of the individual's proposed position.

The Ethics Act bars a public officer who leaves state service from representing, advising or assisting a person for compensation regarding a matter –

that was under consideration by the administrative unit in which the officer served, and in which the officer participated personally and substantially through the exercise of official action,

for two years after leaving state service. See AS 39.52.180(a). "Public officer" includes a state employee, a member of a state board and commission, and a trustee of the Exxon Valdez Oil Spill Trust. "Official action" means a recommendation, decision, approval, disapproval, vote, or other similar action or inaction. Possible remedies for violating the bar include penalties against the former public officer and voiding the state grant, contract or lease in which the former public officer is involved.

Additionally, former public officers may not disclose or use information acquired in the course of their official duties that could in any way result in a benefit to the former public officers or their families, if the information has not been disseminated to the public or is confidential by law, without appropriate authorization. *See* AS 39.52.140.

Each current or former public officer is responsible for determining whether he or she may serve in the listed capacity on this project without violating the Ethics Act. A form that a former public officer may use to certify their eligibility is attached. Current public officers may seek advice from their designated ethics supervisors concerning the scope and application of the Ethics Act. Former public officers may, in writing, request advice from the Office of the Attorney General, Ethics Attorney concerning the application of the Ethics Act to their participation in this project. It is the responsibility of the individual and the proposer to seek resolution in a timely manner of any question concerning the individual's eligibility.

Former Employee's Certification of Eligibility
Under the Alaska Executive Branch Ethics Act
(AS 39.52.140, AS 39.52.180)

I am a former employee of the State of Alaska and left state service within the last two years. My last position with the state was [*job title*] with the [*name of state agency and administrative unit*]. I propose to work on [*describe state contract or other matter*] on behalf of [*name of current employer*]. This work will not involve any matter (a) that was under consideration by the state administrative unit that I served, and (b) in which I participated personally and substantially during my state service through the exercise of official action ("official action" means a recommendation, decision, approval, disapproval, vote, or other similar action or inaction). I am therefore eligible to participate in this [*contract or matter*] under the Alaska Executive Branch Ethics Act. I also understand that as a former public officer I may not disclose or use information acquired in the course of my official duties that could in any way result in a benefit to me or my family, if the information has not been disseminated to the public, or that is confidential by law, without appropriate authorization.

I certify under penalty of perjury that the foregoing is true.

Dated: _____, 20__, at _____, Alaska.

_____
[*name of former state employee*]

STATE OF ALASKA)
) ss.
_____ JUDICIAL DISTRICT)

On this _____ day of _____, 20__, [*name of former state employee*], whom I know to be the individual described in and who executed this certification, personally appeared before me and acknowledged that [s]he signed the certification as [her or his] free and voluntary act.

IN WITNESS WHEREOF, I have placed my signature and affixed my official seal.

_____
Notary Public in and for Alaska
My commission expires: _____

If no notary or other official (judge, magistrate, U.S. postmaster or municipal clerk) is available, omit the notary certificate and include the following statement in the text: A notary or other official empowered to administer oaths is unavailable.

Background

The Alaska Energy Authority owns the Project, which was completed in 1991. The project is located at the northeast end of Kachemak Bay about 27 miles from Homer, Alaska. It is the largest hydroelectric facility in the state of Alaska with a nominal capacity rating of 120 MW. Facilities include a concrete faced rockfill dam 125 feet in height and 600 feet in length, three and a half mile long power tunnel, powerhouse, barge dock, permanent housing, airstrip, 20 miles of transmission lines and three small diversion systems. The Project is licensed by the Federal Energy Regulatory Commission (FERC). A detailed project description is provided in Attachment A.

A Bradley Project Management Committee (BPMC) was formed in 1988 with representatives from each of the power purchasers and Authority. Anchorage Municipal Light and Power (ML&P), Golden Valley Electric Association (GVEA), Chugach Electric Association (CEA), the City of Seward (Seward), and Matanuska Electric Association (MEA), and Alaska Electric & Energy Cooperative (AEEC), a subsidiary of Homer Electric Association (HEA) purchase power from the Project. The BPMC is responsible for the management, operation, maintenance, and improvement of the project, subject to the non-delegable duties of the Authority. Currently, HEA operates the Project and CEA Dispatches Project power for AEA.

Operator duties include operating and maintaining a hydroelectric powerhouse, service buildings, roads, airstrip, and dam. Operator provides support to ensure the Project stays in compliance with federal and state requirements, inspections, engineering, and procurement.

Duties:

General duties of the existing Operator are:

Provide all material, labor, engineering and other technical support, subcontract management, and training to operate, maintain, and repair the Project necessary to perform work under this Agreement in accordance with Prudent Utility Practices (Attachment B) and annual budget.

Coordinate projects, operation, maintenance, repair and other work schedules with the Purchasers in accordance with the Bradley Lake Allocation and Scheduling Procedures (Attachment C);

- Operate, maintain, and repair the Project in accordance with the Work Rules (Attachment D). The Work Rules shall be maintained at the Project site. Any revisions to the Work Rules shall be effective within a period of time after notice having due regard to the nature of the revisions requested and necessary project budget revisions;
- Comply with all applicable federal, state, and local government laws, regulations and permits. If the Operator elects to contest an order issued by a local government, state or federal agency (other than the Authority), the Operator shall promptly notify the Authority and the BPMC;
- Provide security and access in accordance with a mutually agreed plan;

- Read, maintain, and operate all Project metering devices, record such readings, and maintain or forward data and forms as required by the Authority or the BPMC;
- Maintain a Project database using a computerized maintenance management system software package; A list of preventive maintenance procedures from the existing Cascade system are attached (Attachment E);
- Maintain supervisory control and data acquisition equipment;
- Make annual and long term recommendations to the Authority and BPMC for:

    1. operation, maintenance, repair, replacement, and modification of Project facilities;
    2. installation of additional protective relaying, instrumentation, control systems, or other apparatus as necessary to maintain or improve the Project and interconnected system reliability, integrity, efficiency, and safety;
    3. a twenty-five (25) year schedule of estimated equipment modifications, replacements, additions, disposals with cost estimates;

- Recommend project efficiencies to lower Project costs or increase annual energy;
- Provide annual inventory report. Provide qualified personnel with the ability to perform the duties assigned to the Operator under this Agreement. A minimum of two employees are to be on-site at all times;
- Propose and conduct an annual training program as approved by the Authority and BPMC. The Authority may require the Operator to undertake additional training which the Authority deems necessary, however, funding for such additional training is the responsibility of the Authority;
- Operator shall maintain a daily project log. Following a protective relay or alarm action that causes a forced outage, and upon observation or notification, interpret the cause, identify corrective measures, and take corrective action as the situation warrants. The Operator shall document any such actions within 72 hours of their accomplishment and provide a report to the Authority and BPMC;
- Operator shall notify the Authority of any lost time injuries, major safety incident, hazards to the general public, and any other notifiable event (Attachment F) as soon as possible within 24 hours. Initial notification shall be followed up by an investigation and written report within three days of the incident;
- Take prudent measures to protect equipment and personnel from hazards arising from equipment failure such as electrical faults, vandalism, and mechanical failure. Report damaged facilities to the Authority within 72 hours;
- Record the operating characteristics of the power plant equipment and machinery as required;
- Maintain the Project living quarters, including expenses for utility services, as a cost of operation and maintenance. Costs for cell phones and television are the responsibility of the employee;

- Update, keep and make available to the Authority, BPMC, or any Purchaser the required Project documents, as-built drawings, and other records, including records to meet FERC license requirements and records required by any project related insurance agreements;
- Perform water and power operation studies as required to integrate power from the Project into the Purchasers' systems with due regard for the capability limits of the Project planned water reserves, and Purchasers' power needs;
- Arrange for and administer subcontracts or agency agreements related to the O&M of the Project; provided, however, that Operator agrees to comply with any written procedures adopted by the BPMC and approved by the Authority concerning the review, approval and administration of any such contracts, subcontracts, or agreements;
- Invoice the Authority for budgeted items on a monthly basis.
- May be asked to acquire insurance for the Project with appropriate types and amounts as approved by the Authority and BPMC.
- Dispose of used equipment or other assets as directed by the Authority and the BPMC.
- Assist with environmental studies.
- Prepare written budget/cost updates and Project Operation on a monthly basis. Supervisor to attend monthly meeting with Authority and BPMC in Anchorage or as directed.

Capital Improvements:

The BPMC and AEA may authorize the operator to procure for construction or professional services related to capital improvements. The BPMC and AEA will determine what procurement process will be followed, including but not limited to the requirement of Little Davis Bacon Wages.

Project Staff:

Replacement of, or addition to, the Project Staff named below shall be accomplished only by prior written approval from the Authority):

Name	**Project Responsibilities**
	Supervisor

Schedule:

Operator shall have a Supervisor level employee on-site by September 1, 2018 to be shadowing current onsite workers in daily operations.
Full operating staff to be on-site by December 15, 2018.
A budget for Operating the Project January 1, 2019 through June 30, 2019 is to be prepared and submitted to the Authority and BPMC by November 1, 2018.
A budget for the State Fiscal Year that starts July 1 shall be submitted to the Authority and BPMC by February 1 every year.

Supervisor & new operators/mechanics shall stay in onsite contractors' quarters until housing becomes available. Food will be flown over as a project expense.

Attachment A

PROJECT DESCRIPTION

1. PROJECT DESCRIPTION

1.1 General

The Bradley Lake Hydroelectric Project is located on the Kenai Peninsula at the northeast end of Kachemak Bay about *27* miles from Homer. The project contributes to the electrical generating capacity of Alaska's Railbelt serving customers from the Kenai Peninsula to Fairbanks.

Major elements of the project include a concrete faced, rockfill dam, to raise the level of Bradley Lake about 100 feet, an ungated spillway having discharge capacity of 23,800 cfs at pool elevation 1190.6, a diversion tunnel which also serves as a low level outlet, a submerged intake leading to the power tunnel which, including the vertical shaft, is 19.152 ft. long, a surface powerhouse located on the shore of Kachemak Bay and a tailrace channel into the bay. All elevations given in this report are referred to Bradley Lake Project Datum, at which zero is equal to 13.63 ft. above MLLW at Bear Cove.

The two unit plant has a nominal generating capacity of 120 MW at 917 ft. net head. Each generating unit consists of a six jet, vertical shaft Pelton turbine driving a 63 MVA generator at 0.95 power factor. The penstock for a future third unit was also constructed as part of the initial project development.

Usable storage in Bradley Lake at full pool (El 1180) is about 280,000 acre ft. The project is connected to the existing Kenai Peninsula transmission line, consisting of two parallel 115 KV lines. The lines run through the Fox River Delta to connect with Homer Electric Association's Fritz Creek to Soldotna Transmission line. A summary of pertinent project data is given on Table 1.

1.2 History of Development

The power generation potential of Bradley Lake was first studied by the U.S. Corps of Engineers and presented in a report dated March 1955. The project was authorized by Congress in 1962, but despite its feasibility federal funds were not available for its construction. The Alaska Energy Authority (then named the Alaska Power Authority) assumed responsibility for the project in 1982. Preliminary plans were developed and field investigations started in 1982. In April 1984, the Authority submitted an application for license to the Federal Energy Regulatory Commission (FERC). The license to construct the project was issued on December 31, 1985.

The first major contract, "Site Preparation" was let in 1986 and was completed in 1987. This contract included on-site access roads, barge dock airstrip, permanent facilities, construction camp, and diversion tunnel. Following a one year hold on project construction, the General Civil Construction and Transmission Line Clearing

Contracts were awarded in June 1988. The Powerhouse Construction Contract was awarded in December 1988 and the Transmission Line Construction Contract was awarded in June 1989. The General Civil Construction and the Powerhouse contracts were completed in August 1991.

The Alaska Energy Authority issued a contract for supply of the turbines and generators in 1987, and issued a contract for supply of the SCADA control systems in July 1989. Smaller contracts were also issued for transmission line surveying, geotechnical surveys, and construction of the Middle Fork and Nuka Diversion structures.

The diversion tunnel was closed in October 1990, however all inflow to the reservoir was released through the fish water bypass lines. Actual storage in the lake started in spring 1991 when enough water was available to meet downstream minimum flow requirements. A contract for Site Rehabilitation was issued in June 1991. Both units were released to dispatch in August 1991, and the Project was declared in commercial operation September 1, 1991. Construction of the project was completed on November *21,* 1991, with the completion of the Site Rehabilitation work.

2. DESIGN

2.1 Geology

Except for the transmission line, all major elements of the project are founded on or in the bedrock. The geology of the site is composed of Upper Mesozoic Age metamorphic rocks of the McHugh Complex. Most probably this melange is composed of turbidites which have been slightly to moderately metamorphosed. Rock types encountered are graywacke, argillite, chert, dacite, metatuff, and greenstone. The graywacke, argillite and mixtures of these rocks are dominant. Chert occurs as nodules and lenses in the argillite and metatuff with some massive beds up to 15 ft. thick. The diabase occurs as intrusive dikes generally 10 to 20 ft. in width with some dikes about 40 ft. thick. The metatuff is metamorphosed, volcanic pyroclastic debris. Frequently it is intermixed with the argilite but some layers up to 15 ft. thick were encountered. Over all it constitutes less than 5% of the rock mass. The greenstone is metamorphosed volcanics. It constitutes less than 3% of the rock mass.

Except where severely weathered, the argillite is moderately hard to hard. The graywacke, chert, dacite and greenstone are hard to very hard. Foliation (cleavage) is poorly developed in the argillite and bedding, when identifiable, is poorly preserved. The graywacke is massive and displays neither bedding nor foliation. The chert, dacite and metatuffs are generally massive and show no foliation.

Jointing is well developed. It is widely spaced in the graywacke and moderately to widely spaced in the argillite. Generally three or more sets are observed resulting in blocky structures. There are some open joints in the abutment of the dam and spillway, especially in the rock know between these structures. Hydrosplitting tests made along the tunnel alignment showed low in situ horizontal stresses ranging from 0.9 to 0.5 of overburden pressure at the depth tested. Open

vertical joints striking about parallel to the tunnel (N60 W) were observed during tunnel construction at depths of rock cover of as much as 1200 ft.

2.2 Geology Hazards

The Pacific Plat is subducting under the North American Plate south of the coast of Alaska. The Aleutian Arc trench marks the surface juncture of the two plates. This trench trends northeast-southwest and is located about 185 miles southeast of the site at its nearest approach. The Pacific Plate is moving north relative to the North American plate. The subduction zone dips northwest and the upper contact of the subduction plate, the Benioff zone, lies at a depth of about 30 miles beneath the surface at the site. The Benioff zone is the locus of great earthquakes.

Major faults in the general site area are the Border Ranges fault which lies under Kachemak Bay and the Eagle River Fault which crosses Bradley Lake near its head. Both faults trend NE-SW (about N45 E) parallel to regional structure. Three smaller faults lie within the site area crossing the power tunnel between the intake and the powerhouse. These are the Bull Moose Fault, the Bradley River Fault, and the Bear Cub Fault. These trend approximately north-south. The Bull Moose and Bradley River are the larger of these faults. Where crossed by the power tunnel they consisted of a series of gouge-filled anastamosing shears, a few feet to possibly 20 ft. wide, separated by sound rock and extending over a width of 300 to-400 ft. Lineations and minor shears parallel these faults.

Seismicity of the site was investigated by Woodward-Clyde Consultants, "Report on Bradley Lake Hydroelectric Project Design Earthquake Study," 1981. They recommended an MCE earthquake spectrum normalized to zero period horizontal acceleration of 0.75g with a duration of *25* seconds for design of critical, water retaining structures. Vertical acceleration was taken at *2/3* horizontal. This spectrum has been the basis of investigation and design of the dam, spillway and powerhouse. Dynamic analyses of the dam and spillway were made using Finite Element analyses. The time-history used an accelerogram whose spectrum envelopes the Woodward~Clyde spectrum. This was constructed by combining two appropriate shorter earthquake records. This hybrid earthquake has a duration of 28 seconds.

The nearest active volcanoes are Mt. St. Augustine and Mt. Redoubt which are more than 100 miles from the site across Cook Inlet. Renewed activity poses no direct threat to the project other than possible development of a tsunami due to large mudflows or slides from Mt. St. Augustine and ash falls from both.

The coast of Alaska has been subjected to tsunami generated by uplift due to offshore earthquakes. This hazard was investigated by Stone & Webster Engineering Corporation in a report presented to this Board (September 1987). This report indicated an annual probability (combined earthquake and volcanic activity) of about 0.007 for a wave height at the powerhouse reaching El 25 BLP Datum (El 38.63 MLLW datum) The powerhouse is designed to withstand water to this level without damage.

The hazards of seiche in Bradley Lake due to earthquake and the possibility of a wave generated in the lake by a liquefaction generated slide in the Bradley Glacier delta were investigated. It was concluded waves from these sources would not damage the dam or spillway. The mountain sides surrounding Bradley Lake are bare rock which has been scoured by late Pleistocene and

recent glaciation. Minor rockfalls may result from earthquake but slides which could cause overtopping are not a hazard. The Kachemak and Nuka glaciers are sufficiently far from the lake that ice falls or slides which might result from earthquake would not reach the lake.

2.3 Main Dam

The dam is a concrete faced, rockfill structure. Top of the embankment is El 1190. A parapet wall at the upstream face extends to El 1194. Normal full pool (crest of the spillway) is El 1180 and pool level under PMF is El 1190.6. The parapet wall is designed to provide wave protection during floods. The face slab is 12 inches thick, constant top to bottom. The toe plinth varies in width along its contact with the rock from 10.5 ft. to 13.3 ft. Minimum thickness varies from 3 ft. to 2.25 ft. depending on location and head. The face slab is underlain by a 12 ft. wide zone of crushed rock grading from fines (passing No. 200 mesh) to 3 inch size.

The toe plinth is founded on rock for its full length. General rock level in the river bottom is about El 1065 giving a nominal dam height to the top of the embankment of 125ft. However, a narrow channel was found along the right side of the river bottom. This was excavated to bedrock, at its lowest point at El 1032, over a length of 28 ft. centered on the toe plinth and backfilled with concrete. Thus the dam is actually 158 ft. high above the lowest point in the bedrock. The rock surface drops slightly south of the left abutment under the gate shaft bench. In this area the rock is covered by overburden and some rock fill. A concrete wall was constructed across this bench. This extends down to rock for its full length of about 175 ft. A single line grout curtain is located along it.

The single line ground curtain extends the full length of the toe plinth and into the abutments. Maximum hole depth is 110 ft. In general the rock was tight and takes were small. However several open joints were found in the abutments. These were grouted to refusal and check holes drilled and grouted.

Alternative types of dams considered in selecting a concrete face rock fill included a thick arch structure, a concrete gravity dam or a central core embankment dam. The concrete face rockfill was selected because of its excellent resistance to earthquake, relative cost, lack of suitable earth core material, and topographic constraints, especially space for the upstream cofferdam. Slopes upstream and downstream were established at 1.6H to 1V to restrict deforn1ation under the MCE 0.75 g horizontal) to acceptable limits.

2.4 Spillway

The spillway is an ungated concrete gravity section with side slopes of 3H to 10V upstream and 8H to 10V downstream.

Crest length is 175ft. at elevation 1180.00. Overall length of the spillway is 275ft. Spillway discharge at PMF would be 23,800 cfs at a lake level of El 1190.6. A drainage and grouting gallery extends the full length of the spillway at or just above rock level. Access to this gallery is from the left abutment. A single line grout curtain having a depth of 30 to 50 ft. below rock surface inclined 20 upstream and fanning into both abutments was constructed. Drain holes are 3 inches diameter, five feet on centers, and 30ft. deep except at the right abutment where a fan

of holes 50 ft. to 60 ft. long were drilled. All seepage from the spillway drainage system is collected and discharged over a vee notch weir to permit monitoring.

Ice loading causes some tension in the upstream face at about El 1170. Accordingly reinforcing was placed in the upstream face. Dynamic analyses using the hybrid accelogram confirmed that stresses are within allowable and no lateral displacement of the spillway would occur under the MCE.

The spillway was model tested at Colorado State University. The model extended from well upstream of the power tunnel intake to well) downstream of the main dam. Water velocities along the toe of the main dam were measured and riprap along the downstream tow sized to prevent erosion in the event of spillway operations.

2.5 Power Tunnel & Intake

The power tunnel system consists of an upper tunnel 738 ft. long extending from the intake through the upper elbow, a vertical shaft 647 ft. deep and a lower elbow and lower tunnel with a total length of 17,767 ft. The lower tunnel is on a 1.67% grade. The intake channel is about 350ft. long, and the bottom at the intake is at El 1030. Dual high-pressure gates are installed in the upper tunnel about 520 ft. downstream of the tunnel portal in a vertical drywell. The gates are hydraulically actuated. An accumulator bank rides on the hydraulic system. This is sized to permit closing each gate without recharging even in the event of complete loss of power.

Provision is made for stoplogs at the intake portal. The same stoplogs can also be used at the intake portal of the diversion tunnel. A rock trap is provided just upstream of the intake portal.

The downstream 435ft. of the lower tunnel is designated the manifold section. This section contains three wye-branch penstocks which extend to the powerhouse. Two are in service and one is closed by a hemispherical head to be used for a future third unit. The downstream end of the manifold is closed with a hemispherical head which can be removed as necessary for access to the tunnel. The manifold-penstock section and downstream portion of the tunnel for 2725 ft. upstream of the manifold are steel liner encased in concrete. Inside diameter of this section is 11 ft. Four drain pipes are located outside of the steel liner in the concrete encasement. Drain holes extend from these drains into rock at intervals of 10 and 20 ft. Seepage from these drains is collected and passed through the powerhouse where it can be measured. The remainder of the lower tunnel is 13 ft. ID with a 12-inch-thick concrete lining. The vertical shaft and upper tunnel are 11 ft. ID lined with concrete.

The manifold-penstock section was pressure tested at 960 psi (1.9 times static head) for 1 hour before encasing it in concrete. There were no indications of distress, and distortions were very small and acceptable.

In situ horizontal stresses in the rock are low. To protect against possible hydro-splitting of the rock by leakage from the tunnel, the steel lining was carried to Sta. 31 +58 where rock cover was equal to 0.8 of the static head. The concrete lining was reinforced to Sta. 38+60. From Sta. 31 +60 to Sta. 35+60 the rock was high pressure grouted (500 psi) using squeeze grouting procedures. Selected areas of the remainder of the lower tunnel were also reinforced. High pressure grouting

(250 psi) was done from Sta. 35+60 to Sta. 38+60 and at selected areas to Sta. 64+00 to ensure that open joints intersecting or close to the tunnel were filled with high strength grout. The tunnel was first filled to the then reservoir level, El 1076, in May 1991. A falling head test for a 12 hour duration was made in late May which showed an average leakage of only 58 gpm.

2.6 Powerhouse

The powerhouse has a concrete substructure with steel framed superstructure. It is founded entirely in rock, and the tailrace excavation is in rock for a modest distance away from the powerhouse. The powerhouse has been designed for safety against excessive structural stresses, sliding, overturning or flotation. Loading conditions include MCE, (0.75g) DBE (0.35g), high tides, storm high tide, tsunami, and various plant conditions such as in operation, servicing, and construction including appropriate factors of safety.

2.7 Diversion Tunnel

The diversion tunnel is approximately 407.5 ft. long and is located in the high rock spur between the spillway and the main darn. It has been converted to a low level outlet which is normally closed by a dual system of high pressure slide gates located in a deep dry well shaft. The tunnel is lined with concrete from the upstream portal to downstream of the gate shaft. Gate operation is by hydraulic actuators. There is a bank of accumulators which can open each gate completely in the event of loss of all power. The gates discharge through a steel penstock 10.5 ft. in diameter which extends past the downstream portal of the tunnel. Two 28 inch- diameter steel pipes encased in concrete extend through the entire length of the tunnel, these discharge through a system of 7 motor operated valves of different sizes so arranged that fish water releases can be made from the reservoir as necessary to maintain required flows in the Lower Bradley River of 40 to 100 cfs at Riffle Reach.

2.8 Diversions into Bradley Lake

As a part of the development of the Project, the Middle Fork of the Bradley River, a portion of the outflow from the Nuka Glacier, the East Fork Upper Battle Creek and West Fork Upper Battle Creek are diverted into the reservoir.

2.8.1 Middle Fork Diversion

The Middle Fork Diversion is located approximately one mile north of Bradley Lake in an adjacent drainage at elevation 2160 on the Middle Fork Tributary of the Bradley River. The Diversion consists of a small intake basis and two reaches of open channel approximately 760 feet and 483 feet long, separated by a stilling basin which is located in a natural bog area, all of which were established by excavation. The Diversion conveys water from the Middle Fork of the Bradley River to Marmot Creek, a tributary to Bradley Lake, and operates in all seasons.

2.8.2 Nuka Diversion

Glacial melt forms a pond called Nuka Pool at the terminus of the Nuka Glacier. Nuka Pool lies on the divide between two drainages, discharging water both into the Upper Bradley River and into the Nuka River. Water discharged into the Upper Bradley River flows to

Bradley Lake and that which is discharged to the Nuka River flows to the Kenai Fjords National Park.

The purpose of the Nuka Diversion is to cause the glacial melt water flowing through the Nuka Pool to flow in the upper Bradley River, except of an initial increment of flow which must be provided to the Nuka River in accordance with the June 1986 Contract between the Alaska Energy Authority and the U.S. Department of Interior. In compliance with this Contract, the design must assure that when flows are available in the Nuka Pool, 5 cfs will be diverted to the Nuka River prior to any diversion of water to the Upper Bradley River.

To accomplish this, flow from the Nuka Pool to the Upper Bradley River passes over a long, uniform weir constructed by modifying the naturally occurring rock weir at the pool outlet. At the Nuka River outlet of the pool, water is constrained to flow through a 12-inch steel pipe in a gabion dike. This pipe has been sized such that it will discharge 5 cfs when the Nuka Pool level is at the elevation of the Bradley-side weir crest and flow is about to commence to the Upper Bradley River. No flow is allowed to enter the Upper Bradley River from the Nuka Pool until 5 cfs enters the Nuka River. A second, identical pipe is also provided. This second pipe ensures flows if the first pipe becomes inoperative and needs to be repaired. It may also be used to augment flows.

2.8.3 East Fork Upper Battle Creek Diversion

The East Fork Upper Battle Creek Diversion is located at elevation 1342 approximately 0.7 miles south-southeast of Bradley Lake Dam and diverts a small tributary of Battle Creek into the reservoir adding 0.9 square miles of drainage area to the Project.

Diversion is accomplished by emplacement of a small, talus dike across the tributary at the base of a waterfall. An intake basin 25'x25' by 3 feet deep was constructed near the bottom of the falls and flow is directed through three interconnected ponds. Approximately 300 feet of ditch was excavated between the ponds to reverse the direction of the flow into the reservoir.

2.8.4 West Fork Upper Battle Creek Diversion

The West Fork Upper Battle Creek Diversion is under construction. When completed in 2020 water will be diverted at a small concrete dam 16' tall and 60' wide into a 8' intake pipe that tapers to a 63" HDPE pipe. The pipe conveys the water 9200' and discharges into a pool at the East Fork Upper Battle Creek. The diversion is located at elevation 1700 approximately 2 miles Southwest of the Bradley Lake dam. This add a drainage area of 7.4 square miles to the Project. Diverted flows are restricted to no more than 600 cubic feet per second May 15 to October 31 with no diversion during the winter and spring months.

2.9 Permanent Facilities

To accommodate for the needs of on-site personnel, the project is provided with two 32'x82' duplex living quarters, a 43'x50' office/transient worker residence building, a 50'x160' shop-warehouse and a fenced storage yard which also contains an unheated storage/incinerator building.

2.10 Project Airstrip

The project airstrip is incorporated into the permanent project road system between the barge dock and permanent facilities.

The strip is 2400 ft. long and 75 ft. wide and is equipped with plane lights, a taxi and parking apron, weather building and warning lights.

The airstrip is designed for VFR use only and is not open to the public.

2.11 Barge Dock

Water access to the project is from a dock facility consisting of five (5) 53 ft. diameter sheet pile cells placed out into the tidal flats of Kachemak Bay. A rockfill, gravel-surfaced causeway extending some 700ft. from the shoreline connects the barge dock cells to the project access road at the bay shore. Use of this facility is available only during half tides and greater.

A small, aluminum floating dock is attached to the sheet pile cells to provide mooring for skiffs belonging to the public. This small dock is removed each winter to prevent it from being damaged by ice.

2.12 Transmission Line

Two parallel and separate single circuit 115 kV transmission lines, each about 20 miles long, connect to the substation at the powerhouse and carry the power generated to the Fritz Creek-Soldotna 115 kV Transmission Line owned by Homer Electric Association. Inc. The point of connection for these two lines is designated as the Bradley Junction.

The Bradley Lake transmission line towers are guyed. X-configuration towers manufactured of Corten type steel. The conductor is 556 kcmil, 42/19 Aluminum/Steel "Special Dove."

2.13 Roads

About 10.8 miles of gravel surface access roads have been constructed and connect the powerhouse, permanent facilities, airstrip, dam site and other project areas. An additional 2.85 miles of new road are being constructed as part of the West Fork Upper Battle Creek Diversion Project.

2.14 Instrumentation

Settlement and deflection of the main dam are monitored by two rows of monuments set on the upstream face at approximately mid-height of the face and just below the parapet: and three monuments set in the rock fill along the upstream side of the El 1077 berm. Three monuments are set in the crest of the spillway. Instrument pedestals were established along these several lines of monuments. The instrument pedestals are referenced to four primary survey monuments set in rock.

Seepage into the spillway drainage gallery is collected and discharged over a vee notch weir.

Four exploratory borings along the line of the tunnel have been converted to open standpipe piezometers to measure groundwater levels above the tunnel

Seepage flow from the drain system around the steel lining in the tunnel is monitored in the powerhouse.

3. INITIAL FILLING OF RESERVOIR.

Filling of the reservoir started October 30, 1990, but was suspended shortly thereafter to meet the fisheries minimum flow requirements. As the hydrograph began to rise the following spring, filling was resumed. The initial rate of filling was slow but accelerated during the summer of 1991. Water level reached full pool during a severe storm in late September 1991. Spilling started on September 27 and continued for 8 days with about 0.5 ft. depth passing over the spillway. The winds during this storm were heavy. Waves splashed over the spillway and to some extent over the parapet wall of the dam. These caused no damage.

Measured deflections and settlements of the main dam during filling were very small, maximum displacements being:

crest settlement	0.02 ft.	
displacement	0.03	downstream
upstream face settlement	0.04	
displacement	0.02	downstream
downstream bench settlement	0.07	
displacement	0.01	

The settlement and deflection of the crest are only about 0.03% of the dam height. There was no detectable seepage through the dam.

4. POWER HOUSE STARTUP

The units were turned over for pre-operational testing in March 1991. Unit 2 was first rotated on May 15. 1991. and Unit 1 on May 18, 1991. The units were released to Chugach Electric Association in Anchorage, Alaska for dispatch on August 1, 1991, and the plant declared in Commercial Operation on September 1, 1991.

5. PROJECT LANDS

On the basis of the project boundary shown in Exhibit G, the acreage of the lands belonging to the United States of Alaska are tabulated below:

Asterisks (*) denote transmission line ROW acreage only.

Description	BLM Area Acres	State Area Acres	Other Acres	Water Acres	Subtotal Acres
T.3S., R.10W					
Tract A*		263.62			
Total Per TP		263.62			
					263.62
T.3S., R.11W					
Section 23		26.15			
Section 25		42.48			
Section 26		20.78			
Tract B*		129.34			
Total Per TP		218.75			
					218.75
T.4S., R.9W					
Section 30*	45.74			2.79	
Section 31*	0.33	182.13			
Tract A*			12.73		
U.S. Surv. 2937		182.13	12.73	2.79	
Total Per TP	46.07	182.13	12.73	2.79	
Description	BLM Area Acres	State Area Acres	Other Acres	Water Acres	Subtotal Acres
					240.93
T.4S., R.10W					
Section 35	149.14				
Section 36	75.94	182.13		4	
Section 36*	40.17				
Tract A*			14.36		
Total Per TP	265.25		14.36	4	
					279.61
T.5S., R.8W					
Section 19	388.74				
Section 20	93.63				
Section 29	6.04				
Section 30	139.4				
Section 31	316.24				
Total Per TP	944.05				
					944.05
T.5S.. R.9W					
Section 3	40				
Section 6	5.64				

Section 7	121.12				
Section 8	267.3			100.71	
Section 9	29.21			166.95	
Section 10	210.59			170.10	
Section 11	5.67			0.94	
Section 14	168.73			232.80	
Section 15	32.28			548.73	
Section 16	69.46	23.21		145.42	
Section 17	31.37	84.35		16.63	
Section 18	3.97				
Section 22	66.32			67.64	
Section 23	513.2			35.77	
Section 24	558.08				
Section 25	372.53				
Section 26	15.07				
Section 36	15.46				
Total Per TP	2425.17		208.39	1485.7	
					2633.56
T.5S., R.10W					
Section 1	26.81				
Section 2	128.83				
Section 3	384.89				
Section 9	127.87				
Section 10	398.57				
Section 11	222.79				
Section 12	64.41				
Section 13	41.59				
Section 14	1.56				
ATS 1418					
Total Per TP	1397.32	139.39			
Description	BLM Area Acres	State Area Acres	Other Acres	Water Acres	Subtotal Acres
					1536.71
T.6S., R.8W					
Section 6	321.00				
Total Per TP	320.00				
					320.00
Total Proj. Area – Including Transmission Line	5498.69	925.81	12.73	1492.49	
Transmission Line – Area Only	86.24	407.32			

TableA-1
Bradley Lake Hydroelectric Project Data

Dam:	Concrete-faced rockfill, 600 ft. long, 125 ft. high, 360,000 cubic yards rockfill, and 10,800 cubic yards concrete	Annual Firm Energy:	329 gigawatt hrs
		Average Annual Energy:	380 gigawatt hrs
Spillway:	Ungated concrete ogee section. 175 feet long (11,000 cubic yards concrete)		
Power Tunnel:	13-foot nominal diameter. fully concrete lined, approximately 19.152 feet in Length	Transmission Line:	115 kilovolt. two
Diversion Tunnel:	21-foot horseshoe concrete lines/penstock tunnel, 407.5 feet long	Barge Dock:	Sheet pile cells granular fill
Penstock:	Steel, 9-foot diameter with 6 1/2 foot diameter branches	Access Roads:	10.8 miles. gravel
Middle Fork Diversion:	1517 foot diversion includes upper and lower channels with intake basin and stilling Basin	Powerhouse:	Surface. steel superstructure, feet long, 80 feet wide. 92 feet high
Nuka Diversion:	2 diversion and control dikes, pilot channel and outlet weir	Turbines:	2 each Pelton, vertical shaft, 90,170 max.
WFU Battle Creek Diversion:	60 ft. long, 16 ft. high Concrete dam with 8’ intake Pipe		
EFU Battle Creek Diversion:	300 foot diversion channel with intake basin, talus diversion weir	Generators:	2 each Rated at max. operating pool is 63 MVA.
Airstrip:	Gravel surface airstrip 2,400 ft. long by 75 feet wide incorporated into access road	Governors:	2 each VA Tech digital

Attachment B

Prudent Utility Practice – shall mean at a particular time any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry at such time, or which, in the exercise of reasonable judgement in light of facts known at such time, could have been expected to accomplish the desired results at the lowest reasonable cost consistent with good business practices, reliability, safety and reasonable expedition. Prudent Utility Practice is not required to be the optimum practice, method or act to the exclusion of all others, but rather to be a spectrum of possible practices, methods or acts which could have been expected to accomplish the desired result at the lower reasonable cost consistent with reliability, safety and expedition. Prudent Utility Practices includes due regard for manufacturers' warranties and the requirements of governmental agencies of competent jurisdiction and shall apply not only to functional parts of a Project, but also to appropriate structures, landscaping, painting, signs, lighting, and other facilities. In evaluating whether any matter conforms to Prudent Utility Practices, the parties shall take into account (i) the nature of the parties hereto under the laws of the State of Alaska and their statutory duties and responsibilities, and (ii) the objective of integrating Project Capacity with the generating resources of the Purchasers, including resources available under contract, to achieve optimum utilization of the resources and achieve efficient and economical operation of each Purchaser's System. For purposes of this Agreement, "national standards for the industry" means Prudent Utility Practices.

Attachment C

BRADLEY LAKE HYDROELECTRIC PROJECT ALLOCATION AND SCHEDULING PROCEDURES

As Revised by the

BRADLEY LAKE PROJECT MANAGEMENT COMMITTEE
On
May 30, 2017

The Bradley Lake Hydroelectric Project ("Project") Allocation and Scheduling Procedures ("Procedures") dated May 30, 2017, have been approved and adopted by the Bradley Lake Project Management Committee ("BPMC") to govern the allocation and scheduling of electric capacity and energy available to the Purchasers of the output from the Project under the Project Power Sales Agreement.

Section 1. Definitions. For the purposes of these Procedures, the following definitions apply:

(a) **AEA or Authority**. The Alaska Energy Authority

(b) **AEG&T.** The Alaska Electric Generation and Transmission Cooperative, Inc.

(c) **Basic Agreements.** The agreements entered into (as may be amended from time to time) for the sale, purchase, and transmission of Project power and including the Power Sales Agreement, the Chugach Services Agreement, and the HEA Transmission Sharing Agreement.

(d) **Bradley River Minimum Flow Releases.** Those minimum amounts of water (flows) that are required to be released into the Bradley River under the conditions contained in the Project's FERC license

(e) **BPMC.** The Bradley Project Management Committee established pursuant to Section 13 of the Power Sales Agreement.

(f) **Chugach.** Chugach Electric Association, Inc.

(g) **Chugach Services Agreement.** The Bradley Lake Hydroelectric Project Agreement for the Wheeling of Electric Power and Related Services dated December 8, 1987, between Chugach, ML&P, HEA, GVEA, MEA, SES and AEG&T providing terms for Chugach's transmission and other services.

(h) **Dispatch Agreement.** The agreement between the Authority and Chugach for the day-to-day operations of the Project.

(i) **Dispatcher.** Chugach or its successor responsible for dispatch of the Project.

(j) **Effective Date.** September 1, 1991, the date of Commercial Operation of the Project as provided in the Power Sales Agreement.

(k) **Energy Account.** The account maintained by the Dispatcher to record the amount of Initial Project Energy Allocation and Revised Project Energy Allocation each Purchaser is entitled to schedule under these Procedures.

(l) **FERC.** Federal Energy Regulatory Commission.

(m) **FERC License.** FERC License No. 8221, issued by the FERC to the Authority for the construction and operation of the Project.

(n) **Fiscal Year.** As defined in Section 1(r) of the Power Sales Agreement.

(o) **Forced Outage.** An outage due to any failure of a generating facility, related auxiliaries, or a transmission facility upon which a Purchaser relies to supply firm power to meet its firm load obligation and which causes a deficiency in power resources available to meet the Purchaser's load.

(p) **GVEA.** Golden Valley Electric Association, Inc.

(q) **HEA.** Homer Electric Association, Inc.

(r) **HEA Transmission Sharing Agreement.** The Bradley Lake Hydroelectric Project Amendment to Agreement for Sale of Transmission Capability dated December 8, 1987 and as amended March 7, 1989, for wheeling of power through a portion of the HEA system from Bradley Junction to the Soldotna Substation entered into by and among Chugach, GVEA, ML&P and AEG&T.

(s) **Initial Project Water Allocation.** The amount of Project Generation expected during the Project Water Year, as computed prior to the beginning of the Project Water Year pursuant to Section 4 (c) of these Procedures.

(t) **MEA.** Matanuska Electric Association, Inc.

(u) **Minimum Use Allocation.** The Minimum Use Allocation will be based on the forecast inflow between June 1st and October 31st of the Project Water Year, and the Pond carried over from the previous Project Water Year.

(v) **ML&P.** Municipality of Anchorage d/b/a Municipal Light and Power.

(w) **Net Allocation.** The monthly water from the Project available to a Purchaser in establishing the Initial Project Water Allocation and Revised Project Water Allocation under Section 4 of these Procedures from the beginning of the Project Water Year through the end of the current month less the total water use for that Purchaser from the beginning of the Project Water Year to date plus any debits or credits from the previous Project Water Year.

(x) **O & D Committee.** The Operation and Dispatch Committee appointed by the BPMC to address technical issues related to the operation and dispatch of the Project.

(y) **Pending Spill.** The point when the reservoir level of Bradley Lake reaches 1,175'.

(z) **Percentage Share.** The fraction expressed as a percentage and set forth for each Purchaser in Exhibit D of the Power Sales Agreement.

(aa) **Pond.** The initial allocation of water to each participant for the Project Water Year.

(bb) **Pond Carry Over.** The water carried over from the previous water year when a Purchaser under-utilizes their allocation within the respective Project Water Year and reserves such amount for later use or sale to another Purchaser.

(cc) **Pond at Risk.** Pond at Risk is Pond that may be subject to Project Spill in the event that Project Spills.

(dd) **Power Sales Agreement.** The Agreement for the Sale and Purchase of Electric Power from the Project entered into by and between the Authority and the Purchasers dated December 8, 1987 (as may be amended from time to time).

(ee) **Procedures.** The Bradley Lake Hydroelectric Project Allocation and Scheduling Procedures dated May 30, 2017

(ff) **Project.** The Bradley Lake Hydroelectric Project as described in Exhibit C of the Power Sales Agreement.

(gg) **Project Capability.** The amount of electric power capable of being produced by the Project at any given time considering system conditions, equipment and Project transmission availabilities and limitations.

(hh) **Project Capacity.** The amount of electric power capable of being produced by the Project at the then current reservoir level with all generating and transmission facilities of the Project fully operational.

(ii) **Project Generation.** The amount of energy produced by the Project recorded continuously and accumulated on an hourly basis.

(jj) **Project Reservoir.** The body of water held behind the dam of the Project capable of being utilized for Project Generation, Bradley River Minimum Flow Releases, and Project Spill.

(kk) **Project Spill.** The water released from the Project Reservoir into the Bradley River when the reservoir level exceeds an elevation of 1,180 feet.

(ll) **Project Water Year.** The twelve-month period starting on June 1st and ending May 31st.

(mm) **Prudent Utility Practice.** The practice defined in Section 1(x) of the Power Sales Agreement.

(nn) **Purchaser(s).** Purchaser means, as of any particular time, ML&P, Chugach, GVEA, SES, and AEG&T. The term “Purchaser” includes HEA and MEA only to the extent specified in Section 30 of the Power Sales Agreement (as may be amended from time to time).

(oo) **Reservoir Operation Model.** The model described in Exhibit A to these Procedures and used to determine the Initial Project Water Allocation and Revised Project Water Allocation.

(pp) **Revised Project Water Allocation.** The amount of water for the remaining portion of the Project Water Year calculated under Section 4(d) of these Procedures if actual operating conditions significantly change the expected amount of total water for the Project Water Year from previous forecasts.

(qq) **SES.** City of Seward d/b/a Seward Electric System.

(rr) **Spinning Reserves.** The amount of on-line capacity available from the Project from time to time which is available to meet Purchases, minus the actual Project output in accordance with Section 9 of these Procedures.

(ss) **Termination Date.** No specific termination date is contemplated in these Procedures. These Procedures will remain in effect until the BPMC adopts revised procedures pursuant to the terms of the Power Sales Agreement which replace these Procedures.

Section 2. Term. These Procedures shall become effective as of the Effective Date and shall continue in force until the Termination Date as set forth herein.

Section 3. Exhibits. The following exhibits are incorporated by reference in these Procedures.

(a) Exhibit A, Description of Reservoir Operation Mode.
(b) Exhibit B, Bradley Lake Output and Kenai Export Limits.
(c) Exhibit C, Spill Volume Calculation over Spillway.
(d) Exhibit D, Example of Water Allocation Calculations.

Section 4. Project Allocations.

(a) **General**. Nothing in these Procedures shall cause the Project to be operated or maintained in a manner inconsistent with Prudent Utility Practice, nor shall it be operated or maintained in a manner inconsistent with the FERC license and other permits and licenses. The BPMC recognizes that the method of operating the Project may change from time to time in order of accommodate modifications to such licenses and permits.

(b) **Relationship to the Basic Agreements.** If any provisions in these Procedures conflict with the provisions in any of the Basic Agreements, the provisions in the Basic Agreements shall prevail.

(c) **Initial Project Water Allocation.** The Initial Project Water Allocation shall be determined prior to the beginning of each Project Water Year based on known operating limitations, forecasted estimates of runoff available from the watershed by the National Weather Service for the 50% exceedance probability and/or the mean monthly discharge (depending upon availability of the information), and other pertinent factors, and in a manner consistent with the following:

i) The Purchasers shall maintain a coordinated Railbelt maintenance schedule listing all major generation and transmission assets of each of the Purchasers.

ii) Prior to the beginning of the Project Water Year, the Dispatcher shall transmit to the Purchasers a preliminary estimate of the amount of capacity and preliminary Initial Project Energy Allocation available for the upcoming Project Water Year, including any Purchaser's Pond carried over from the previous Project Water Year.

iii) Following receipt of the preliminary forecast each Purchaser will submit to the Dispatcher its forecasted monthly use of its Percentage Share of the Initial Project Water Allocation. The monthly energy requirements will be based on the expected Project energy, as estimated under Section 4(c)(ii), Railbelt maintenance schedule as established in Section 4(c)(i).

iv) Based on the total monthly water usage from the Project for all the Purchasers, the Dispatcher shall perform an analysis of the projected inflows and Purchasers' usage and determine if Project Spill or Pending Spill conditions will be triggered.

v) If the results of the analysis performed above show that Project Spill or Pending Spill conditions will be triggered, the Dispatcher shall work with the Purchasing utilities to generate revised schedules such that Project Spill and Pending Spill conditions will not be triggered.

(d) **Revised Allocation.** Each month the Dispatcher shall estimate the amount of water available from the Project for the remainder of the Project Water Year and determine the amount of water which should be added or subtracted from each Purchaser's Net Allocation of water for each month in the remainder of the Project Water Year. The Dispatcher shall determine the amount of Revised Project Water Allocation for each Purchaser in the following manner:

(i) The Dispatcher shall transmit to the Purchasers a preliminary estimate of the Revised Project Water Allocation for the remainder of the Project Water Year and the Project Generation to date.

(ii) Each month, each Purchaser shall be allocated its Percentage Share of any difference between the updated Revised Project Water Allocation, and the updated estimate of Project Generation for the Project Water Year. If the result of such allocation is negative, the Purchasers Net Allocation shall be reduced by such amount in the current Project Water Year.

(iii) The Purchaser shall submit to the Dispatcher its forecasted monthly requirements of the Revised Project Water Allocation.

(iv) Based on the total monthly requirements of Revised Project Energy Allocation, the Dispatcher shall perform the Reservoir Operation Model as outlined to verify the Revised Project Energy Allocation.

(v) If the results on the Reservoir Operation Model performed show the Revised Project Water Allocation to be different than the preliminary estimate in Section 4 (d)(i) of these Procedures or there is potential for Project Spill, the Dispatcher and the Purchasers shall work together in revising monthly water requirements. To minimize the potential for Project Spill, the

Dispatcher and Purchasers shall revise monthly water requirements such that the sum of the Purchasers' monthly water requirements assumed for the Reservoir Operation Model is equal to the Revised Project Water Allocation.

(e) **Status of Energy Account.** As soon as practicable after the end of each month, the Dispatcher shall provide each Purchaser an accounting of the current amount of water remaining in the reservoir as well as a forecast for the remainder of the Project Water Year. This total will provide the Purchaser with expected project water available through the end of the Project Water Year. If an event occurs or conditions change during any month which requires the Dispatcher to increase or decrease the amount of Revised Project Energy Allocation available to a Purchaser or increases the potential of Project Spill, the Dispatcher shall use its best efforts to provide each Purchaser an interim accounting of the Initial Project Water Allocation or Revised Project Water Allocation and the amount of such energy available which could be subject to Project Spill in the next 30 days.

(f) **Review of Reservoir Operation Model.** The methodology and inputs to the Reservoir Operation Model shall be reviewed by the O & D Committee at least every five (5) years. The O & D Committee may recommend changes to the Reservoir Operation Model, and any recommendations for changes to the Reservoir Operation Model shall be provided to the BPMC. The Reservoir Operation Model shall be modified, if required, to reflect the changes to the permits and licenses under which the Project operates. The BPMC shall have the right to approve any changes made to the Reservoir Operation Model.

Section 5 Project Scheduling.

(a) **General**. Each Purchaser shall have the right to schedule during any month an amount of Project Generation not to exceed its Net Allocation plus any pond carried over from previous months of the previous Project Water Year subject to any Purchasers capacity or transmission constraints.

(b) **Schedules**. Each Purchaser's day ahead schedule shall be submitted to the Dispatcher no later than 10:00 AM the previous day for the next day's schedule. The Dispatcher shall review all schedules and notify the Purchasers if any changes are required. Changes during the day to the current day's schedule are allowed, subject to plant and transmission limitations. The Dispatcher shall provide the next day's schedule including all Purchasers' schedules for the day. Revisions to the schedule will be sent to the Purchasers in real time. The Dispatcher shall provide to each Purchaser their hourly use in MWhs from the Project.

(c) **Minimum Scheduling**. A lower limit of 2 MW per unit is required. Purchasers are not required to schedule energy in any hour to receive their share of Project spin assuming that the units are at minimum or in condense.

(d) **Minimum Operations**. If, due to operating constraints included in the various permits and licenses under which the Project is operates, the Project is required to operate in a manner such that Project Generation is greater than that amount

scheduled by all the Purchasers, the amount of Project Generation in excess of that amount scheduled shall be allocated on a pro rata basis to each Purchaser based on its Percentage Share. No Purchaser shall be obligated to take more than its Percentage Share of Project Capability.

(e) **Reduction in Schedules**. If the combined scheduled Project Generation is greater than Project Capability or transmission capacity in any given hour, each request by a Purchaser shall be reduced during that hour in the following manner:

(i) For those Purchasers who have scheduled more Project Generation than their respective Percentage Shares of Project Capability in any hour, the amount scheduled for such Purchasers shall be reduced on a pro rata basis based on the amount scheduled Project Generation exceeds Project Capability. The amount of scheduled Project Generation for any Purchaser shall not be decreased pursuant to this Section 5 (e)(i) to an amount less than each respective Purchaser's Percentage Share of Project Capacity.

(ii) If after making such reductions in this Section 5 (e)(i), the combined scheduled Project Generation still exceeds Project Capability in any hour, Project Generation for each Purchaser scheduling Project Generation in such hour will be reduced on a pro rata basis based on the respective Percentage Shares.

(f) **Schedule Modifications**.

(i) The Purchaser, subject to the limitations of the Basic Agreements, shall have the right to notify the Dispatcher and schedule, on an immediate basis, an amount of Project Generation for its use different than its schedule in effect for the day or week. Such revisions can be upward or downward.

(g) **Schedules above Purchaser's Percentage Share**.

(i) Upon obtaining permission from another Purchaser that is not scheduling all of its Percentage Share of Project Capability, a Purchaser may schedule its Net Allocation or Revised Project Energy Allocation by using Project Capability of such other Purchaser. The scheduling by a Purchaser of another Purchasers Project Capability shall include all the benefits, rights and obligations related to such schedule as provided in this Section.

(ii) As compensation for the right to schedule a portion of another Purchaser's Net Allocation or Revised Project Energy Allocation, the scheduling Purchaser shall be obligated to pay such other Purchaser at $5/MW ($.005/kW) for each hour that such Purchaser's Percentage Share is used. This obligation to purchase Project Capability shall remain in effect even under conditions where one or more Purchasers may not have access to their Project Capability due to system constraints. Project capability purchase obligations shall be suspended during declarations of Pending Spill as outlined is Section 5 (h).

(iii) The Dispatcher shall establish an account for each Purchaser in which the debits and credits (in MW's) for use of a Purchaser's Percentage Share of Project Capability under Section 5(b) will be accounted. These debits and

credits will be paid at the end of each month between Purchasers, or under terms mutually agreed by the affected Purchasers.

(iv) Each Purchaser is allocated by ownership share Project Energy for a given Project Water Year. The Purchaser can utilize their allocation within the respective Project Water Year or under-utilize their allocation for later use as Pond. However, no Purchaser shall knowingly schedule above their allocation or borrow in the next Project Water Year without the approval of another Purchaser with Pond.

If a Purchaser has used their allocation by May 31, then scheduling in the next Project Water Year may be limited to forecast inflows for June of that year. Any Purchaser may loan, borrow or sell Pond by agreement between the affected Purchasers.

(h) **Scheduling During Periods of Pending Spill**.

(i) Whenever the reservoir level reaches an elevation of 1,175 feet, the Dispatcher shall notify each Purchaser that the reservoir has reached Pending Spill and Project Spill may occur unless additional energy is scheduled by the Purchasers.

(ii) Whenever the Dispatcher declares that the Project is in Pending Spill condition, the Purchasers, to the extent system reliability and operating conditions allow, shall use their best efforts to reduce system generation to allow the Dispatcher to schedule the Project at its full available capability. The energy realized during periods of Pending Spill or immediate Project Spill shall be allocated, to each Purchaser based upon its Purchaser's Percentage Share. If a Purchaser is unable to schedule its full share of Project Capability, the energy which is not scheduled shall be made available to the other remaining Purchasers for scheduling pro rata based on their Purchasers Share.

(iii) Once a Pending Spill period is suspended by the Dispatcher, the energy scheduled and generated shall be added to each Purchaser's Net Allocation or Revised Project Energy Allocation for the month. The scheduling of energy by a Purchaser during the Pending Spill period shall then be credited against the resulting Revised Project Energy Allocation of each Purchaser for such month.

(i) **End of Project Water Year Procedures.** At the end of the Project Water Year, a comparison of final allocation to actual use through May 31st will be made for each Purchaser as well as for the Project as a whole. The total final allocation minus the total actual use will equal the total year end Project Pond. Likewise, a Purchaser allocation minus the actual Purchaser use will equal the Purchaser Pond.

(j) **Scheduling Limitations.** All Purchasers will schedule to avoid or minimize the potential for Project Spill. The Dispatcher shall provide to all Purchasers all relevant data to achieve this goal. If Project Spill is anticipated, the Dispatcher will provide an anticipated Project Spill date and a Minimum Use Allocation to avoid Project Spill. The Minimum Use Allocation will be based on the forecast inflow

between June 1st and October 31st of the Project Water Year, the Pond carried over from the previous Project Water Year

(k) To prevent a Project Spill, all Purchasers will schedule their ownership share of the Minimum Use Allocation prior to the date of the anticipated Project Spill. ***NOTE*** the Minimum Use Allocation does take Project Pond into account. Each Purchaser will have water at Risk of Spill equal to their Minimum Use Allocation plus the Purchaser's Pond Carry Over. The volume of the water at Risk of Spill will decrease as a Purchaser schedules during the Project Water year. The example provided in Exhibit D assumes a spill of 5,000 acre-feet of water.

Section 6. **Project Operations.** The Project shall be operated by the Dispatcher pursuant to the terms and conditions of the Dispatch Agreement and consistent with those set forth in Exhibits A, B, C, and D.

Section 7. **Project Spill.** The Purchasers recognize that from time-to-time water from the Project Reservoir may spill which does not result in Project Generation. If this occurs, then:

(a) The Project Operator shall determine the quantity of Project Spill.

(b) Each Purchaser with a Net Allocation greater than zero during the Project Spill period shall have its Net Allocation as adjusted in Section 5(g) of these Procedures reduced pro rata based up each Purchasers Net Allocation, such that the total reduction for all Purchasers is equal to the amount of water in the Project Spill.

(c) In the event of Project Spill, the Dispatcher will provide an accounting of the water spilled. If there is Pond at Risk at the time of Project Spill, then the Project Spill will be subtracted from each Purchaser's Pond and allocated by proportionate share of water at Risk of Spill (see example of Pond at Risk in Exhibit D).

If the Project Spill exceeds the amount of Pond at Risk (i.e. if Project Spill exceeds the 12,096 acre-feet in the Pond at Risk example) then all energy could not be accounted for in the allocation of Pond at Risk. That energy spilled beyond the Pond at Risk will be allocated on a Percentage Share basis.

Following the spill period, a Revised Project Water Allocation for the remainder of the Project Water Year will be updated by the Dispatcher.

Section 8. **Losses.**

(a) **General**. The losses provided for in this Section 8 shall be accounted for in-kind by reducing the amount of available allocation to each Purchaser and not by direct monetary compensation.

(b) **Losses on Project Transmission**. Losses on the transmission lines of the Project shall be determined by actual metering.

(c) **Losses on the HEA System**. Losses on the HEA transmission system under various operating conditions shall be determined by the following means:

(i) HEA shall maintain records adequate to determine the relevant HEA load levels and transmission conditions when particular deliveries of Project power are accomplished. Such records shall be made available to the parties in the HEA Transmission Sharing Agreement upon reasonable request.

(ii) Deliveries under the HEA Transmission Sharing Agreement shall be reduced for line losses as appropriate under this subsection.

(d) **Losses on the Chugach Electric System**. Deliveries by Chugach Electric System over its transmission facilities may be accomplished by Direct Transmission (as defined in the Chugach Services Agreement) or through Offsetting Flows (as defined in the Chugach Services Agreement).

(i) The Dispatcher shall maintain records adequate to determine the extent to which particular deliveries are accomplished in whole or in part by each of these means. Such records shall be available to the Wheeling Utilities (as defined in the Chugach Services Agreement) upon reasonable request.

(ii) If and to the extent deliveries are accomplished by Direct Transmission, such deliveries shall be reduced for the line losses. The reduction shall be by a percentage equal to the average percentage line losses on Chugach's wholesale system, such wholesale system losses to be determined in Chugach's periodic rate adjustment proceedings or (in the absence of such a proceeding) through reasonable line loss studies prepared by Chugach not less frequently than once every two years; provided, that if, after a reasonable period of experience in actual operation under the Services Agreement, Chugach's system line loss studies prepared for use in Chugach's periodic wholesale and/or retail rate adjustment proceedings demonstrate that Chugach's wholesale system line losses have increased as a direct result of Bradley Lake Energy (as defined in the Chugach Services Agreement) delivered by Direct Transmission, then deliveries of such energy through Direct Transmission shall thereafter be further reduced for line losses to the extent of the increase in Chugach's wholesale system line losses attributable thereto.

Section 9. Spinning Reserves. The O & D Committee shall recommend to the BPMC a method of allocation of Spinning Reserves in each hour under various system operating conditions. Once approved by the BPMC such Spinning Reserves shall be made available in accordance with such method as follows:

(a) Spinning Reserves shall be allocated to each Purchaser on a pro rata basis based on its Percentage Share of Project Capability net of any Project Generation scheduled by the Purchaser. See Exhibit B.

Section 10. Amendment or Replacement Procedures. Upon the request of any Purchaser or the AEA, the O & D Committee shall review any proposal to amend or replace these Procedures at the O & D Committee's next meeting and make a recommendation regarding such proposal to the BPMC as soon as practicable thereafter. It is the intent of the BPMC that the O & D Committee monitors the application of these Procedures and periodically recommends changes which improve overall administration to

the Purchasers, and reduce, where practicable, the obligation of the Authority to provide information or revised data which is not useful to the Purchasers.

EXHIBIT A

Description of Reservoir Operation Model

The Reservoir Operation Model uses the following data to predict on a monthly basis whether or not Project Spill is likely to occur in any given month during the Project Water Year. The Model is maintained by the Dispatcher.

Data required for the Model to function properly is as follows:

1. Beginning lake level as of June 1st each year.
2. Carry over Pond allocation for each Purchaser from the previous Project Water Year.
3. Initial Project Water Allocation, on a monthly basis as described in Section 4 of these Procedures.
4. Estimated monthly usage schedules from each Purchaser for each month of the Project Water Year.
5. Project and/or transmission outages scheduled in the coming Project Water Year which may limit or prevent operation of the Project or ability of any Purchaser to access their Project Generation.

Once all data is received it will be placed into the Reservoir Operation Model and checked to verify the forecast, generation schedule, and maintenance schedule. If the Reservoir Operation Model indicates that Project Spill is likely to occur with the current inputs then the Purchasers will be asked to revise their schedules in order to avoid the potential for Project Spill.

On a monthly basis, the volume of inflow into the Project will be re-evaluated and transmitted to the Purchasers. If the Project has experienced inflows above or below the Initial Project Water Allocation the Purchasers will be informed of the magnitude of their respective increase or decrease in available generation. This re-evaluation will also check on the impact of the potential for Project Spill and whether it will be necessary for each Purchaser to produce a new schedule for the remaining Project Water Year.

EXHIBIT B

Bradley Lake Output and Kenai Export Limits

Project Spin Capacity	27 MW's (both units)	14 MW's (one unit)
Initial System Condition	Export Limit	Bradley Output
System Normal	75 MW	115 MW
Soldotna TSC Unavailable	75 MW	74 MW
Soldotna SVC Off Line	57 MW	66 MW (one unit only)
Dave's Cr. SVC Off Line	67 MW	85 MW
Bradley/Soldotna Line Out of Service	75 MW	60 MW (one unit only)
Bradley/Fritz Creek Line Out of Service	69 MW	100 MW
*Dave's & Soldotna SVC's Off line	30 MW	63 MW (one unit only)

*(Best information on this condition as of 6/3/2010 has not been studied)

EXHIBIT C

Spill Volume Calculation over Spillway

Volume Q determined as follows:

$Q = CLH^{3/2}$

C = Spillway coefficient.

For reservoir pool elevations between 1,180 feet and 1,183 feet, use C = 3.2

For reservoir pool elevations between 1,183 feet and 1,185 feet, use C = 3.4

L = Spillway crest length = 175 feet

H = Head over the spillway.

This value is equal to the difference in the reservoir pool elevation (away from the spillway) and the spillway crest elevation of 1,180 ft.

Q Integrated over the time of spill is the volume of water lost to spill. For each hour of spill the average H during that hour will be utilized to calculate the total volume that is lost to spill.

EXHIBIT D
Examples of Water Allocation Calculations
Example of Project Water Year Pond Carry Over

Project Share	16.90%	25.90%	12%	30.40%	13.80%	1.00%	100.00%
	GVEA	ML&P	HEA	CEA	MEA	SES	Total
Final allocation	64,727	99,197	45,960	116,432	52,854	3,830	383,000
Actual use	62,727	94,197	45,960	100,432	49,434	3,030	355,780
Carry over pond	2,000	5,000	0	16,000	3,420	800	27,220

Notes:
1. Final allocation of water at end of Project Water Year is 383,000 Acre-Feet.
2. Numbers are for illustration purposes only and do not reflect actual use in any particular year.

Example of Minimum Use Allocation

Project Share	16.90%	25.90%	12%	30.40%	13.80%	1.00
	GVEA	ML&P	HEA	CEA	MEA	SES
Share of storage	48,020	73,593	34,097	86,379	39,211	2,
Pond carry over	2,000	5,000	0	16,000	3,420	
Available storage	46,020	68,593	34,097	70,379	35,791	2,
Projected inflow share	58,305	89,355	41,400	104,880	47,610	3,
Minimum use allocation	12,285	20,762	7,303	34,501	11,819	1,

Notes:

1. This example uses the Pond carry over from the previous example
2. Storage capacity is the reservoir storage measured at reservoir level 1,180 in acre-feet.
3. Projected inflows are an estimate of the inflows that would occur between June 1st and October 31st of any given Project Water Year

Example of Project Spill allocation with the Project Spill being less than the Pond at Risk

Project Share	16.90%	25.90%	12%	30.40%	13.80%	
	GVEA	ML&P	HEA	CEA	MEA	
Available share of storage	46,020	68,593	34,097	70,379	35,791	
Projected inflow share	58,305	89,355	41,400	104,880	47,610	
Minimum use allocation	12,285	20,762	7,303	34,501	11,819	
Actual use during period	10,600	15,300	7,303	31,080	10,500	
Pond at risk	1,685	5,462	0	3,421	1,319	
Spill allocation	697	2,258	0	1,414	545	

Notes:

1. Available storage values and projected inflow values same as used in previous examples.
2. Spill volume is less than the volume of pond at risk therefore all spill is accounted for from Pond at Risk.

Example of Project Spill where Pond at Risk and Project Spill is greater than Pond at Risk

Project Share	16.90%	25.90%	12%	30.40%	13.80%
	GVEA	ML&P	HEA	CEA	MEA
Available share of storage	46,020	68,593	34,097	70,379	35,791
Projected inflow share	58,305	89,355	41,400	104,880	47,610
Minimum use allocation	12,285	20,762	7,303	34,501	11,819
Actual use during period	10,600	15,300	7,303	31,080	10,500
Pond at risk	1,685	5,462	0	3,421	1,319
Spill allocation pond at risk	1,685	5,462	0	3,421	1,319
Current Water Year spill allocation	829	1,270	588	1,491	677
Total spill allocation	2,514	6,733	588	4,912	1,995

Notes:

1. Total Project Spill is greater than the Pond

EXAMPLE OF RESERVOIR OPERATION MODEL

	BOM Level	BOM Storage	Gen MWh	Conv	Gen Ac-Ft	EOM Level	EOM Storage	NetInflow	E
June	1,092.5	22,712	17,934	0.95	17,848	1,124.3	96,927	92063	
July	1,124.3	96,927	27,205	0.98	27,778	1,151.5	181,035	111886	
August	1,151.5	181,035	40,254	1.00	40,101	1,171.6	252,426	111492	
September	1,171.6	252,426	57,278	1.01	59,701	1,176.0	268,430	75705	
October	1,176.0	268,430	51,724	1.01	53,712	1,166.0	232,536	17818	
November	1,166.0	232,536	37,122	1.00	37,900	1,162.3	219,394	24758	
December	1,162.3	219,394	39,603	0.99	40,413	1,150.9	178,833	-432	
January	1,150.9	178,833	38,463	0.98	38,846	1,139.0	141,812	2109	
February	1,139.0	141,812	37,454	0.96	39,014			3503	
March	1,127.5	106,338	9,455	0.95	9,953			-1092	
April	1,123.6	95,293	22,375	0.95	23,553			-1394	
May	1,113.6	70,347	34,409	0.94	36,605			25764	

Notes:
1. June through January values reflect actual inflows, generation MWH's, storage volumes and lake levels
2. February through March values reflect projected inflows, projected generation MWH's, calculated storage volumes and calculated lake levels

Example of Pending Spill Water Allocation

BRADLEY LAKE HYDROELECTRIC PROJECT
PROJECT SITE WORK RULES

The Alaska Energy Authority (Energy Authority), the Bradley Project Management Committee (BPMC), and the Project Operator welcome you to the Bradley Lake Hydroelectric Project (Project) and hopes that it will be a comfortable worksite for you. While you are an employee of the Project Operator, you will be provided furnished living quarters. The following guidelines are provided to explain the various duties and responsibilities for living at the project site in a fair, equitable and nondiscriminatory manner. While the information offered here is intended to be comprehensive, it is not all-inclusive, is subject to change and may be updated or revised from time-to-time at the direction of the Energy Authority, the BPMC and/or the Project Operator. For these reasons, please check with the Bradley Lake Plant Superintendent for verification prior to taking any questionable action.

PROJECT RESIDENCY GUIDELINES

1. Moving Expenses/Logistics To and From Site. Upon assignment to the Project, the Project will transport up to 3,000 pounds of personal belongings between the project site and Homer at the commencement and the termination of employment at the Project.

2. Housing Provided. At no cost to the employee, the Project will provide a furnished housing unit (efficiency, two-bedroom, or duplex) at the Project site for use by each employee, their family, and visitors. The type of housing offered will depend on what is available (unoccupied) at the time. Generally the more senior employee will be offered the opportunity to occupy the more spacious residence (Superintendent Residence excluded). On-call employees will be required to be on-site continuously throughout their normally scheduled work shifts and period of on call.

Major appliances, maintenance equipment and normal kitchen, living room, and bedroom furniture are provided by the Project in the housing units. Small appliances, cooking utensils, bedding, entertainment devices, personal belongings and other furnishings are the responsibility of the employee and are not supplied by the Project. The Bradley Superintendent will provide employees with a list of the provided furnishings and household goods and their condition both at the commencement of employment and at the end of employment at the Project.

3. Utilities. The Project will provide electricity, heat, sewer, and water. Employees will be responsible for and pay for their personal telephone calls and any service charges for telephone and television. Employees are not to be wasteful in their use of Project utilities.

4. Food/Supplies/Mail. Employees will be responsible for the purchase and preparation of their own food. Food and mail will be transported from Homer to the Project on a space-available basis on scheduled flights by the contracted flight operator.

Delivery of food and mail to the contracted flight operator will be the responsibility of the employees. All transportation of employee food, supplies and mail must be coordinated for transportation through the Project Superintendent, the General Foreman/Bradley or their designated representative.

5. Condition and Maintenance of Housing. Employees are responsible for maintaining the original condition of housing with the exception of normal wear and tear. Employees are responsible for damage to their housing unit and/or common areas or any equipment thereon which may be sustained by reason of carelessness, negligence or intentional acts of employee or his/her relatives and visitors to the project site.

Routine maintenance, housekeeping and repair of the provided housing are the responsibility of the employees. Employees are expected to keep their housing units repaired and maintained in good sanitary order and condition.

6. Damages. Employees are not required to pay an up-front damage deposit for their housing unit. Damages to the housing unit determined to be caused by the employee or family/friends of the employee, other than normal wear and tear, may be deducted from the employee's pay.

7. Personal Property. The Operator, the Project or the Energy Authority is not responsible for damages by wind, fire, water, theft, earthquakes or natural disaster, etc., to personal effects located within the housing units or stored at the Project. Employees will be responsible for maintaining their own personal property insurance for their personal belongings.

8. Rental. Employees are not allowed to rent any portion of the Project-provided housing, or permit its use by individuals not approved as visitors.

9. Alterations. Structural alterations are not allowed to the housing units nor are additions or alterations to the common areas. Outside installations such as antennas, basketball hoops, etc. are prohibited unless approved in writing in advance of installation by the Project Superintendent, or the General Foreman/Bradley.

10. Owner/Access. The Project Superintendent, General Foreman/Bradley, other Project Operator management official, or an Energy Authority management official, may authorize entry to an employee-occupied housing unit in emergencies if there is reason to believe there may be imminent danger. Such entry may be authorized whether or not the employee is present at the time.

The Project Operator and the Energy Authority also maintain the right, in times of non-emergency, to conduct unit inspections, usually after a 24 hour notice, to ensure the health and safety of all residents, to protect the Project's and Energy Authority's property and for general maintenance of the facility.

11. Drugs, Alcohol and Smoking. In keeping with Energy Authority policy, the Project shall remain drug-free and alcohol-free. This is a State owned facility so smoking is prohibited except in designated smoking sections.

12. Noise/Offenses. Employees and their guests may not cause a nuisance to other resident employees. This includes, but is not limited to, noise; noise producing activities and noxious or other offensive activities. No improper, offensive or unlawful use shall be made of any part of the Project.

13. Trash. Employees will deliver trash from the housing units to the site incinerator. No storage of trash will be permitted in or outside of any residence in such a manner as to permit the spread of fire or encouragement of vermin.

14. Pets. One dog or cat or other non-exotic pet per residence is allowed. The Plant Superintendent or General Foreman/Bradley may authorize exceptions to this guideline for birds, fish, gerbils, etc. No kennels, dog teams, livestock, horses and/or other exotic pets are allowed. Owners of pets are responsible and liable for injury, damage or loss caused by their pets; it is their responsibility to ensure that pets are not nuisances and that they do not create unsanitary conditions in/around living quarters. Pets must be leashed or under the owner's control while on Energy Authority-owned or controlled premises.

15. Storage. Common areas in and around housing units and project facilities shall not be obstructed or littered. Explosives or illegal products shall not be kept in the housing units. Paint, stain or other inflammable products should be stored in approved containers. Personal property storage, with the exception of firewood piles, is not permitted outside of the employee's housing unit or assigned yard space. Outside property storage will be in a designated area as approved in writing by the Project Superintendent or General Foreman/Bradley.

16. Firewood. If employees so desire, they may store firewood for use in their fireplaces. Wood piles shall be allowed in common areas around the housing units at a location, or locations, specified by the Project Superintendent or General Foreman/Bradley. Wood shall be neatly stacked, and shall not touch the common area walls.

17. Gardens. Upon approval of the Project Superintendent or General Foreman/Bradley, garden plots may be permitted.

18. Education. Education for school age dependent children of employees is the sole responsibility of the employees.

19. Voting. Voting privileges will be by means of absentee ballot and will be the responsibility of the employee.

20. Firearms. Storage of firearms will be permitted in the housing units only. Use of firearms will be in accordance with local and state law. Discharge of firearms will not be permitted within one-half (1/2) mile of the Project facilities.

21. Medical Emergencies. The Project Superintendent or designated authority will arrange for and coordinate assistance or evacuation to treatment facilities for medical emergencies pursuant to the facility emergency action plan or evacuation plan. The Project Superintendent or designated authority should be contacted immediately concerning any Worker's Compensation-related illnesses or accidents. The Project Superintendent will provide and complete the necessary forms regarding the Worker's Compensation incident(s) to the appropriate Personnel Officer within 72 hours of the accident/illness report.

22. Personal Vehicles. Employees may not store or operate motorized personal wheeled vehicles on the Project roads.

Petroleum products for personal use may be purchased from the Project at the current price paid by the Project to the vendor. Purchases may be made through the Project Superintendent or designated authority.

23. Recreational Vehicles. Snowmobiles, four wheelers, and other motorized off-road vehicles including trail bikes, jeeps and other four wheel drive vehicles not used in project maintenance are prohibited on Project roads per stipulations of the FERC license.

24. Private Boats. Private boats are allowed to the extent that they do not interfere with Project operations. Private boats on the site must be approved by the Project Superintendent.

25. Private Aircraft. The Project landing strip may be used by employees who own aircraft. Use is governed by Federal Aviation Administration rules and regulations and is to be used as Visual Flight Rules only. A State liability waiver will be required for its use. Only aircraft meeting requirements of the State Division of Risk Management to use a State facility will be allowed to use the air strip. All aircraft services procured by the Project Operator and utilized by employees and their guests must be logged and coordinated through the Project Superintendent or General Foreman/Bradley. No personal aircraft storage is provided. Employees are liable and responsible for their personal equipment on site.

26. Parking. Project vehicles may not be parked in such a manner as to block access to Project facilities, fire hydrants, designated fire lanes; they may not be parked on lawns or in such a manner as to damage yards or yardwork.

27. Project Vehicles. Project vehicles are not to be used by persons other than employees except in the case of emergency. In the case of emergency use by non-employees, the Project Superintendent or General Foreman/Bradley, or his/her designee will be immediately notified. Project vehicles may be used only in the conduct and support of Project business.

28. Speed Limit. The speed limit on the Project site is as posted and as is reasonable for current conditions.

29. Transportation to and from Project. Transportation to and from Homer will be provided through the Project's contract carrier as scheduled by the Project Superintendent and/or the General Foreman/Bradley for the employee at the start and finish of each workweek schedule. On-site persons residing with the employee will be accommodated on a space-available basis on these flights. Those persons involved in a medical emergency will have first priority.

Transportation for employee, employee visitors and dependents other than scheduled flights will be arranged and paid for by the employee. Only approved air carriers meeting the requirements of the State Division of Risk Management to use a State facility will be allowed to utilize the air strip.

30. Visitors. Project visitation by relatives or friends will be permitted. Transportation will be by private boat or on a space available basis on the scheduled contracted flight operator or other approved charter. It is the employee's responsibility to have their guests/invitees sign in and out with the General Foreman/Bradley upon arrival to and departure from the Project.

Visitors will abide by these Work Rules while at the Project site. The Project Superintendent, Project Operator and Energy Authority reserve the right to ask guests to leave the Project site for safety reasons or disobeyance of site rules.

31. Bradley Lake Project Visitations. When Energy Authority personnel or other Project visitors or contractors visit the Project they shall be housed in the visitor's quarters unless other arrangements are made and shall abide by these Project Site Work Rules. During their stay, they are responsible for their own meals and shall do their own house cleaning, including washing any dishes and bed linens used.

32. Project Facilities. Spouses, significant others and other residents or Project guests are not allowed unaccompanied in Project facilities except in housing units. Project facilities include the powerhouse, maintenance building, crew's quarters, and dam site.

33. Project Equipment/Workspaces. Project materials, supplies, equipment and workspace and other Energy Authority belongings are not available for employees' personal use. If Project facilities are needed to be used, prior approval shall be received from the Project Superintendent or the General Foreman/Bradley.

34. Wildlife. Feeding of, or harassing of wildlife is expressly prohibited. Doing so can mean immediate expulsion from the Project.

35. Policies Not Covered in these Guidelines. All existing practices for the benefit and welfare of the Project Operator's employees assigned to the Project presently in effect and not specifically covered by the terms of this Agreement shall be continued until superseded by a future memorandum or directive.

36. Project Description and Definition. As described in FERC exhibits A & G to project license.

	Actual	16.90%			25.90%			12.00%			31.40%	Loses	
	Generation	GVEA	GVEA	Gained	ML&P	ML&P	Gained	HEA	HEA	Gained	Chugach	Chugach	Gained
Date	Usage	Share	Actual	(Lost)	Share	Actual	(Lost)	Share	Actual	(Lost)	Share	Actual	(Lost)
1	1,532	446	266	(180)	684	391	(293)	317	303	(14)	829	473	(356)
2	2,009	446	360	(86)	684	720	36	317	405	88	829	509	(320)
3	2,452	446	360	(86)	684	609	(75)	317	925	608	829	345	(484)
4	2,365	446	409	(37)	684	498	(186)	317	930	613	829	330	(498)
5	2,446	446	426	(20)	684	349	(334)	317	930	613	829	247	(582)
6	2,055	446	185	(261)	684	90	(594)	317	930	613	829	609	(220)
7	2,446	446	360	(86)	684	400	(284)	317	930	613	829	493	(336)
8	2,614	446	360	(86)	684	396	(287)	317	930	613	829	487	(342)
9	2,583	446	360	(86)	684	521	(163)	317	920	603	829	363	(465)
10	2,581	446	360	(86)	684	552	(132)	317	920	603	829	317	(512)
11	2,619	446	360	(86)	684	552	(132)	317	930	613	829	319	(510)
12	2,522	446	344	(102)	684	552	(132)	317	920	603	829	362	(467)
13	2,586	446	360	(86)	684	498	(186)	317	930	613	829	317	(512)
14	2,614	446	360	(86)	684	516	(167)	317	930	613	829	346	(483)
15	2,594	446	360	(86)	684	499	(185)	317	930	613	829	383	(446)
Total	36,017	6,692	5,229	(1,463)	10,256	7,143	(3,114)	4,752	12,763	8,011	12,434	5,901	(6,533)

Notes:

1. The maximum output of the plant is assumed at 2640 MWH's per day.
2. The Share of each Purchaser is their share of the maximum output based on their project share.
3. Actual generation is the amount of generation used by each Purchaser on the give day.
4. The Gain/Lost allocation is that amount that the Purchaser was able to take above or below their share of the maximum output. This amount is not included in the calculation of the Purchasers Net Allocation of Bradley Lake inflows.

Attachment E

Location	Equip_Position	Equip_Type	Mx_Procedure
Diversion Portal	Dirty Oil Storage Tank #5	TankSump	PM0270 - Dirty Oil Storage Tanks
Diversion Portal	Dirty Oil Storage Tank #6	TankSump	PM0270 - Dirty Oil Storage Tanks
Power House	Fuel Facility Gas and Diesel Tanks	TankSump	PM0254 - Fuel Tankage Inpsection
Power House	DWS Septic Tank	TankSump	PM0102 - Septic System
Power House	#2 Governor Oil Sump Tank	TankSump	PM0285 - Filter #2 Gov Oil Sump
Power House	#1 Governor Oil Sump Tank	TankSump	PM0284 - Filter Governor Oil
Diversion Tunnel	Power Tunnel Gatehouse 7.2 kV	Transformer	PM0019 - Station Transformers - TSD 052
Diversion Tunnel	Power Tunnel to Micro-Wave 7.2 kV	Transformer	PM0019 - Station Transformers - TSD 052
Residential Buildings	Living Quarters 12.47 Transformer	Transformer	PM0019 - Station Transformers - TSD 052
Power House	Lighting Transformer XD5	Transformer	PM0063 - Lighting Transformers
Power House	Lighting Transformer 09	Transformer	PM0063 - Lighting Transformers
Power House	Lighting Transformer 10	Transformer	PM0063 - Lighting Transformers
Power House	Lighting Transformer 11	Transformer	PM0063 - Lighting Transformers
Maintenance Shop	Maint Shop Transformer - Lighting	Transformer	PM0019 - Station Transformers - TSD 052
Residential Buildings	Crew Quarters 12.47 Transformer	Transformer	PM0019 - Station Transformers - TSD 052
Maintenance Shop	Maint Shop 480 Trans. Emerg. Cir.	Transformer	PM0019 - Station Transformers - TSD 052
Cold Storage	Incinerator Building Transformer	Transformer	PM0019 - Station Transformers - TSD 052
Location	Equip_Position	Equip_Type	Mx_Procedure
Airport	Landing Strip Transformer	Transformer	PM0019 - Station Transformers - TSD 052
Maintenance Shop	Maint Shop 12.47 Transformer	Transformer	PM0019 - Station Transformers - TSD 052
Power House	Station Service Transformer 2	Transformer	PM0073 - 480 V Swgr Transformer
Barge Dock	Barge Dock Transformer	Transformer	PM0019 - Station Transformers - TSD 052
Power House	Main Step-Up Transformer Spare	Transformer	PM0330 - Clean & Inspect Transformers
Power House	Main Step-Up Transformer Spare	Transformer	PM0081 - Lube and Hydraulic Oils - Xfmr
Power House	Main Step-Up Transformer #1	Transformer	PM0330 - Clean & Inspect Transformers
Power House	Main Step-Up Transformer #1	Transformer	PM0081 - Lube and Hydraulic Oils - Xfmr
Power House	Main Step-Up Transformer #1	Transformer	PM0329 - Power Factor Test
Power House	Main Step-Up Transformer #2	Transformer	PM0330 - Clean & Inspect Transformers
Power House	Main Step-Up Transformer #2	Transformer	PM0081 - Lube and Hydraulic Oils - Xfmr
Power House	Main Step-Up Transformer #2	Transformer	PM0329 - Power Factor Test
Power House	Station Service Transformer 1	Transformer	PM0073 - 480 V Swgr Transformer
Power House	Project Facilities Transformer	Transformer	PM0205 - 13.8 kV Transformer (FAC.) - O&M
Diversion Tunnel	Diversion Tunnel Gatehouse 7.2 KV	Transformer	PM0019 - Station Transformers - TSD 052
Power House	160 Ton Bridge Crane	CraneHoist	PM0196 - Cranes & Hoists - O&M
Power House	3 Ton Substation Bridge Crane	CraneHoist	PM0196 - Cranes & Hoists - O&M
Power House	1 Ton Jib Crane	CraneHoist	PM0193 - Hand Hoist - O&M
Power House	1 Ton Jib Crane	CraneHoist	PM0194 - Hand Hoist - O&M
Power House	7.5 Ton Tailrace Gatehoist 2	CraneHoist	PM0196 - Cranes & Hoists - O&M
Power House	7.5 Ton Tailrace Gatehoist 1	CraneHoist	PM0196 - Cranes & Hoists - O&M
Power House	1 Ton Jib Crane 2	CraneHoist	PM0193 - Hand Hoist - O&M
Power House	1 Ton Jib Crane 2	CraneHoist	PM0194 - Hand Hoist - O&M
Power House	Station Metering Cabinet R1	Controls	PM0083 - Metering Equipment

Power House	Station Metering Cabinet R1	Controls	PM0213 - Controls - O&M
Power House	SCADA Master & Operator Stations	Controls	PM0117 - SCADA
Power House	RIO 3-1 Level 21 Ctrl Rm stairs-Pwrhouse	Controls	PM0126 - RTU's
Power House	RIO 3-2 Substation Rm	Controls	PM0126 - RTU's
Power House	RTU 15 - Control Room	Controls	PM0126 - RTU's
Power House	Main Control Board	Controls	PM0213 - Controls - O&M
Power House	Main Control Board	Controls	PM0021 - Instrumentation
Power House	Main Control Board	Controls	PM0089 - Annunciators
Power House	Line Relaying Cabinet	Controls	PM0213 - Controls - O&M
Power House	Flowmeter Annunciator Cabinet P8	Controls	PM0213 - Controls - O&M
Power House	Synchronizing Cabinet R6	Controls	PM0213 - Controls - O&M
Power House	Generator Protection Cabinet R7	Controls	PM0213 - Controls - O&M
Power House	Generator Protection Cabinet R5	Controls	PM0213 - Controls - O&M
Power House	Main Xfmr Protection Cabinet R3	Controls	PM0213 - Controls - O&M
Power House	115 kV Bus Protect Cabinet R2	Controls	PM0213 - Controls - O&M
Power House	115 kV Bus Protect Cabinet R4	Controls	PM0213 - Controls - O&M
Remote Sites	North Fork Structure	Controls	PM0116 - Remote RTU Buildings
Diversion Tunnel	CTLR 4/54 Pwr Tunnel Gatehouse	Controls	PM0126 - RTU's
Diversion Tunnel	RIO 4-1 Diversion Tunnel Gatehouse	Controls	PM0126 - RTU's
Remote Sites	RTU 07 - Lower Bradley River	Controls	PM0126 - RTU's
Power House	Unit 2 Exciter	Exciter	PM0230 - Excitation Brush Inspection
Power House	Unit 2 Exciter	Exciter	PM0300 - Exciter - TSD 043
Power House	Unit 2 Exciter	Exciter	PM0227 - Excitation Brush Inspection
Power House	Unit 1 Exciter	Exciter	PM0027 - Exciter - TSD 043
Location	Equip_Position	Equip_Type	Mx_Procedure
Power House	Unit 1 Exciter	Exciter	PM0227 - Excitation Brush Inspection
Power House	Depression Air Filter 11 (Fan 2)	Filter	PM0258 - Filter
Power House	Depression Air Filter 12 (Fan 5)	Filter	PM0258 - Filter
Power House	Instrument Air Afterfilter 2A	Filter	PM0187 - Service Air Filter - O&M
Power House	Instrument Air Afterfilter 2B	Filter	PM0187 - Service Air Filter - O&M
Power House	Service Air Filter 10B	Filter	PM0187 - Service Air Filter - O&M
Power House	Service Air Filter 10A	Filter	PM0187 - Service Air Filter - O&M
Diversion Tunnel	Power Tunnel Diesel Generator	Generator	PM0081 - Lube and Hydraulic Oils - Gen
Diversion Tunnel	Power Tunnel Diesel Generator	Generator	PM0147 - Diesel O&M
Diversion Tunnel	Power Tunnel Diesel Generator	Generator	PM0145 - Diesel O&M
Diversion Tunnel	Power Tunnel Diesel Generator	Generator	PM0146 - Diesel O&M
Diversion Tunnel	Power Tunnel Diesel Generator	Generator	PM0199 - Diesel Gen O&M
Power House	Powerhouse Diesel Generator	Generator	PM0007 - Diesel Generator
Power House	Powerhouse Diesel Generator	Generator	PM0081 - Lube and Hydraulic Oils - Gen
Power House	Unit 2 Electric Generator	Generator	PM0289 - Electric Generator
Power House	Unit 2 Electric Generator	Generator	PM0290 - Electric Generator - TSD 043
Power House	Unit 2 Electric Generator	Generator	PM0299 - Gen Stator Hi-Pot
Power House	Unit 2 Electric Generator	Generator	PM0322 - Generator-Air Filters
Power House	Unit 2 Electric Generator	Generator	PM0034 - Electric Generator - TSD 042
Power House	Unit 2 Electric Generator	Generator	PM0223 - Filter T-G Bearing Oil
Power House	Unit 2 Electric Generator	Generator	PM0081 - Lube and Hydraulic Oils - Gen
Power House	Unit 2 Electric Generator	Generator	PM0325 - Unit Vibration Analysis
Power House	Unit 2 Electric Generator	Generator	PM0021 - Instrumentation - Gen
Power House	Unit 1 Electric Generator	Generator	PM0322 - Generator-Air Filters

Location	Equip_Position	Equip_Type	Mx_Procedure
Power House	Unit 1 Electric Generator	Generator	PM0026 - Electric Generator - TSD 043
Power House	Unit 1 Electric Generator	Generator	PM0288 - Electric Generator
Power House	Unit 1 Electric Generator	Generator	PM0223 - Filter T-G Bearing Oil
Power House	Unit 1 Electric Generator	Generator	PM0081 - Lube and Hydraulic Oils - Gen
Power House	Unit 1 Electric Generator	Generator	PM0325 - Unit Vibration Analysis
Power House	Unit 1 Electric Generator	Generator	PM0021 - Instrumentation - Gen
Maintenance Shop	Water Treatment Room MAU-3	HVAC	PM0209 - HVAC - O&M
Maintenance Shop	Warehouse Air Handling MAU-2	HVAC	PM0209 - HVAC - O&M
Maintenance Shop	Maint Shop Air Handling MAU-1	HVAC	PM0209 - HVAC - O&M
Maintenance Shop	Maint Shop Unit Heater	HVAC	PM0050 - Unit Heaters
Power House	Air Handling Unit 7	HVAC	PM0209 - HVAC - O&M
Power House	Air Handling Unit 7	HVAC	PM0051 - Duct Heaters
Power House	Air Handling Unit 5	HVAC	PM0209 - HVAC - O&M
Power House	Air Handling Unit 5	HVAC	PM0051 - Duct Heaters
Power House	Air Handling Unit 3	HVAC	PM0209 - HVAC - O&M
Power House	Air Handling Unit 3	HVAC	PM0051 - Duct Heaters
Power House	Air Handling Unit 1	HVAC	PM0209 - HVAC - O&M
Power House	Air Handling Unit 1	HVAC	PM0051 - Duct Heaters
Power House	HVAC Fan 13	HVAC	PM0076 - HVAC Fans
Power House	HVAC Fan 12	HVAC	PM0076 - HVAC Fans
Power House	HVAC Fan 11	HVAC	PM0076 - HVAC Fans
Power House	HVAC Fan 10	HVAC	PM0076 - HVAC Fans
Power House	HVAC Fan 9	HVAC	PM0076 - HVAC Fans
Power House	HVAC Fan 8	HVAC	PM0076 - HVAC Fans
Power House	HVAC Fan 6	HVAC	PM0076 - HVAC Fans
Power House	HVAC Fan 4	HVAC	PM0076 - HVAC Fans
Power House	HVAC Fan 2	HVAC	PM0076 - HVAC Fans
Diversion Tunnel	Diversion Tunnel Gatehouse and Shaft	HVAC	PM0050 - Unit Heaters
Maintenance Shop	Exhaust Fan 7	HVAC	PM0076 - HVAC Fans
Maintenance Shop	Exhaust Fan 8	HVAC	PM0076 - HVAC Fans
Diversion Tunnel	Power Tunnel Unit Heater	HVAC	PM0050 - Unit Heaters
Power House	Powerhouse Electric Unit Heaters	HVAC	PM0050 - Unit Heaters
Power House	Electric Water Heater	TankSump	PM0239 - Electric Hot Water Heaters
Power House	125 VDC Battery Charger 1	UPS	PM0214 - Battery Charger - O&M
Power House	125 VDC Battery Charger 2	UPS	PM0214 - Battery Charger - O&M
Power House	125 VDC Static Inverter	UPS	PM0214 - Battery Charger - O&M
Diversion Tunnel	Power Tunnel UPS	UPS	PM0214 - Battery Charger - O&M
Power House	125 VDC Battery Disconnect Panel	UPS	PM0097 - AC/DC Panels
Power House	120 VAC Panel 13 from Inverter	UPS	PM0097 - AC/DC Panels
Power House	125 VDC Panel 12	UPS	PM0097 - AC/DC Panels
Power House	125 VDC Panel 16	UPS	PM0097 - AC/DC Panels
Power House	125 VDC Panel 14	UPS	PM0097 - AC/DC Panels
Power House	125 VDC Panel 15	UPS	PM0097 - AC/DC Panels
Power House	125 VDC Battery Bank	UPS	PM0200 - Battery - O&M
Power House	125 VDC Battery Bank	UPS	PM0201 - Battery - O&M

Power House	125 VDC Battery Bank	UPS	PM0202 - Battery - O&M
Diversion Tunnel	Power Tunnel Gatehouse Battery Charger	UPS	PM0214 - Battery Charger - O&M
Diversion Tunnel	Power Tunnel Gatehouse Sump Pump	Pump	PM0221 - Sump Pump O&M
Diversion Portal	Fish Watr Release Sump Pump	Pump	PM0221 - Sump Pump O&M
Power House	Dirty Water Pump 1A	Pump	PM0157 - Pump (Diaphragm) - O&M
Power House	Dirty Water Pump 1B	Pump	PM0157 - Pump (Diaphragm) - O&M
Power House	Dirty Oil Transfer Pump	Pump	PM0158 - Pumps (Sand Piper) - O&M
Power House	Unit 2 Thrust Bearing Oil Pump	Pump	PM0302 - Motors and Starters - TSD 053
Power House	Component Cooling Water Pump 2A	Pump	PM0301 - Motors and Starters - TSD 053
Power House	Component Cooling Water Pump 2B	Pump	PM0301 - Motors and Starters - TSD 053
Maintenance Shop	Maintenance Shop Domestic Water System Pump A	Pump	PM0162 - Pump - Domestic - O&M
Power House	Domestic Water System Pump 1A	Pump	PM0049 - Domestic Water Pump
Power House	Domestic Water System Pump 1B	Pump	PM0049 - Domestic Water Pump
Power House	Unit 1 Governor Pump 1HAG-P1A	Pump	PM0295 - Motors and Starters - TSD 053
Power House	Unit 1 Governor Pump 1HAG-P1A	Pump	PM0184 - Hydraulic Pumping Unit - O&M
Power House	Unit 1 Governor Pump 1HAG-P1B	Pump	PM0296 - Motors and Starters - TSD 053
Power House	Unit 1 Governor Pump 1HAG-P1B	Pump	PM0184 - Hydraulic Pumping Unit - O&M
Power House	Unit 1 Governor Pump 2HAG-P1A	Pump	PM0297 - Motors and Starters - TSD 053
Power House	Unit 1 Governor Pump 2HAG-P1A	Pump	PM0184 - Hydraulic Pumping Unit - O&M
Power House	Unit 1 Governor Pump 2HAG-P1B	Pump	PM0298 - Motors and Starters - TSD 053
Power House	Unit 1 Governor Pump 2HAG-P1B	Pump	PM0184 - Hydraulic Pumping Unit - O&M
Diversion Tunnel	Power Tunnel Diesel Engine Pump	Pump	PM0236 - Power & Diversion Tunnel Diesel Engine Pump
Location	Equip_Position	Equip_Type	Mx_Procedure
Diversion Tunnel	Power Tunnel Diesel Engine Pump	Pump	PM0147 - Diesel O&M - Pump
Diversion Tunnel	Power Tunnel Diesel Engine Pump	Pump	PM0146 - Diesel O&M - Pump
Diversion Portal	Diversion Tunnel Diesel Engine Pump	Pump	PM0146 - Diesel O&M - Pump
Diversion Portal	Diversion Tunnel Diesel Engine Pump	Pump	PM0147 - Diesel O&M - Pump
Diversion Portal	Diversion Tunnel Diesel Engine Pump	Pump	PM0236 - Power & Diversion Tunnel Diesel Engine Pump
Diversion Tunnel	Diversion Tunnel Hydraulic Power Unit	Pump	PM0150 - Gates O&M
Power House	Jockey Pump P3	Pump	PM0155 - Pump (F&J) - O&M
Power House	Service Water Pump 5B	Pump	PM0190 - Service Water Pump - O&M
Power House	Service Water Pump 5A	Pump	PM0190 - Service Water Pump - O&M
Power House	Sewage Lift Pump 2A	Pump	PM0066 - Sewage Lift Station
Power House	Sewage Lift Pump 2A	Pump	PM0160 - Pump (Submersible) - O&M
Power House	Sewage Lift Pump 2B	Pump	PM0066 - Sewage Lift Station
Power House	Sewage Lift Pump 2B	Pump	PM0160 - Pump (Submersible) - O&M
Power House	Fire Pump P2	Pump	PM0155 - Pump (F&J) - O&M
Diversion Tunnel	Power Tunnel Hydraulic Power Unit	Pump	PM0150 - Gates O&M
Power House	Governor Air Compressor A	CompressorBlower	PM0280 - Motors and Starters - TSD 053 - Comp
Power House	Governor Air Compressor A	CompressorBlower	PM0269 - Governor Air Compressor
Power House	Governor Air Compressor A	CompressorBlower	PM0179 - Gov Air Comp - O&M
Power House	Governor Air Compressor B	CompressorBlower	PM0179 - Gov Air Comp - O&M
Power House	Governor Air Compressor B	CompressorBlower	PM0280 - Motors and Starters - TSD 053 - Comp
Power House	Station Air Compressor C1B	CompressorBlower	PM0192 - Service Air Compressor - O&M
Power House	Station Air Compressor C1B	CompressorBlower	PM0029 - Service Air Compressor - TSD 054
Power House	Station Air Compressor C1A	CompressorBlower	PM0192 - Service Air Compressor - O&M
Power House	Station Air Compressor C1A	CompressorBlower	PM0029 - Service Air Compressor - TSD 054

Maintenance Shop	Maintenance Shop Air Compressor	CompressorBlower	PM0313 - Compressor
Maintenance Shop	Maintenance Shop Air Compressor	CompressorBlower	PM0314 - Compressor
Maintenance Shop	Maintenance Shop Air Compressor	CompressorBlower	PM0315 - Compressor
Power House	1HNS-MCC 1B ACB Breaker	MCC	PM0084 - 480 V Breakers - MCC
Power House	1HNS-MCC 1B ACB Breaker	MCC	PM0215 - 480 V Switchgear - O&M - MCC
Power House	2NHS-MCC 2B ACB Breaker	MCC	PM0215 - 480 V Switchgear - O&M - MCC
Power House	1EHS-MCC1A ACB Breaker	MCC	PM0084 - 480 V Breakers - MCC
Power House	2EHS-MCC2A ACB Breaker	MCC	PM0084 - 480 V Breakers - MCC
Power House	0NHS-MCC 4 ACB Breaker	MCC	PM0084 - 480 V Breakers - MCC
Power House	0NHS-MCC 4 ACB Breaker	MCC	PM0215 - 480 V Switchgear - O&M - MCC
Power House	Motor Control Center 5	MCC	PM0203 - 480 V MCC - O&M
Power House	Motor Control Center 2A	MCC	PM0203 - 480 V MCC - O&M
Power House	Powerhouse Lighting	Lighting	PM0040 - Emergency Lighting
Power House	Powerhouse Lighting	Lighting	PM0052 - Lighting - TSD 052
Maintenance Shop	Maintence Shop / Powerhouse Lighting	Lighting	PM0040 - Emergency Lighting
Maintenance Shop	Maintence Shop / Powerhouse Lighting	Lighting	PM0052 - Lighting - TSD 052
Residential Buildings	Crew Quarters Lighting	Lighting	PM0040 - Emergency Lighting
Cold Storage	Incinerator Building Lighting	Lighting	PM0052 - Lighting - TSD 052
Diversion Tunnel	Power Tunnel Gatehouse Lighting	Lighting	PM0040 - Emergency Lighting

Location	Equip_Position	Equip_Type	Mx_Procedure
Residential Buildings	Crew Quarters Lighting	Lighting	PM0052 - Lighting - TSD 052
Power House	Fuel Facility Lighting	Lighting	PM0052 - Lighting - TSD 052
Maintenance Shop	Dry Storage Warehouse Lighting	Lighting	PM0052 - Lighting - TSD 052
Diversion Tunnel	Diversion Structures Lighting	Lighting	PM0040 - Emergency Lighting
Airport	Airport Lighting System	Lighting	PM0251 - Airport Lighting System Maintenance
Airport	Plasi Light	Lighting	PM0241 - Plasi Light
Power House	First Aid Kits	Safety	PM0334 - First Aid Kits
Power House	Portable Eyewash	Safety	PM0331 - Portable Eyewashers
Power House	Eyewash Station	Safety	PM0238 - Eye Wash Station
Power House	Fire Extinguishers	Safety	PM0064 - Fire Extinguishers - TSD 227
Residential Buildings	Fire Extinguisher - Apartment A	Safety	PM0327 - Fire Extinguishers Inspection
Residential Buildings	Fire Extinguisher - Apartment B	Safety	PM0327 - Fire Extinguishers Inspection
Residential Buildings	Fire Extinguisher - Apartment C	Safety	PM0327 - Fire Extinguishers Inspection
Residential Buildings	Fire Extinguisher - Apartment D	Safety	PM0327 - Fire Extinguishers Inspection
Power House	Powerhouse Rollup Door	Structure	PM0274 - Rollup Doors
Power House	Powerhouse Rollup Door	Structure	PM0274 - Rollup Doors
Maintenance Shop	Shop Warehouse Rollup Doors	Structure	PM0274 - Rollup Doors
Cold Storage	Dry Storage Building Rollup Doors	Structure	PM0274 - Rollup Doors
Power House	Powerhouse Rollup Door	Structure	PM0274 - Rollup Doors
Roads	Site Roadways	Structure	PM0306 - Roads - TDS 031
Roads	Site Roadways	Structure	PM0047 - Roads
Roads	Site Roadways	Structure	PM0044 - Roads - TDS 031
Roads	Site Roadways	Structure	PM0100 - Bridge
Airport	Landing Strip	Structure	PM0250 - Landing Strip Maintenance
Roads	Solid Waste Landfills	Structure	PM0268 - Land Fill Inspections
Residential Buildings	Living Quarters 2	Structure	PM0103 - Buildings - TSD 029
Residential Buildings	Living Quarters 1	Structure	PM0103 - Buildings - TSD 029
Barge Dock	Barge Dock	Structure	PM0082 - Barge Dock - TSD 032
Barge Dock	Small Boat Landing Float and Ramp	Structure	PM0232 - Small Boat Dock Maintenance
Barge Dock	Small Boat Landing Float and Ramp	Structure	PM0233 - Boat Dock Installation
Maintenance Shop	Maintenance Shop	Structure	PM0095 - Steel Buildings
Maintenance Shop	Maintenance Shop	Structure	PM0103 - Buildings - TSD 029
Cold Storage	Incinerator Building	Structure	PM0095 - Steel Buildings
Power House	Fuel Facility Building	Structure	PM0103 - Buildings - TSD 029
Power House	Fuel Facility Building	Structure	PM0095 - Steel Buildings
Cold Storage	Cold Storage Yard & Warehouse Building	Structure	PM0103 - Buildings - TSD 029
Cold Storage	Cold Storage Yard & Warehouse Building	Structure	PM0095 - Steel Buildings
Barge Dock	Barge Dock Building	Structure	PM0103 - Buildings - TSD 029
Airport	Airport Terminal Building	Structure	PM0103 - Buildings - TSD 029

Location	Equip_Position	Equip_Type	Mx_Procedure
Residential Buildings	Office Building / Crew Quarters	Structure	PM0103 - Buildings - TSD 029
Maintenance Shop	Warehouse	Structure	PM0103 - Buildings - TSD 029
Maintenance Shop	Warehouse	Structure	PM0095 - Steel Buildings
Power House	Powerhouse	Structure	PM0094 - Concrete Buildings
Power House	Powerhouse	Structure	PM0130 - Insurance Inspection
Power House	Powerhouse	Structure	PM0103 - Buildings - TSD 029
Power House	Powerhouse	Structure	PM0111 - Safety Inspection - TSD 021 - Structures
Remote Sites	Camp Sites and Project Rec. Feature	Structure	PM0235 - Camp Site and Rec. Facilities Maint.
Diversion Tunnel	Power Tunnel Gatehouse	Structure	PM0094 - Concrete Buildings
Diversion Tunnel	Power Tunnel Gatehouse	Structure	PM0103 - Buildings - TSD 029
Dam	Main Dam Spillway	Structure	PM0218 - Spillway and Drainage Gallery Inspection
Dam	Bradley Lake Spillway Channel	Structure	PM0041 - Dam Inspection
Dam	Bradley Lake Dam	Structure	PM0041 - Dam Inspection
Dam	Bradley Lake Dam	Structure	PM0046 - Dam - TSD 011
Dam	Bradley Lake Dam	Structure	PM0333 - Winter Flyover Dam
Dam	Bradley Lake Dam	Structure	PM0358 - Bradley Lake Dam Survey
Dam	Bradley Lake Reservoir	Structure	PM0243 - Bradley Lake Reservoir Inspection
Diversion Tunnel	Outlet Portal	Structure	PM0103 - Buildings - TSD 029
Diversion Tunnel	Outlet Portal	Structure	PM0094 - Concrete Buildings
Diversion Tunnel	Diversion Tunnel Gatehouse	Structure	PM0103 - Buildings - TSD 029
Diversion Tunnel	Diversion Tunnel Gatehouse	Structure	PM0094 - Concrete Buildings
Diversion Tunnel	Diversion Tunnel Gatehouse	Structure	PM0050 - Unit Heaters - Structures
Diversion Tunnel	Diversion Tunnel	Structure	PM0256 - Diversion Tunnel Inspection
Power House	Medium Voltage Switchgear	Switchgear	PM0131 - Med Voltage Swgr - TSD 063
Power House	480 VAC Swtichgear	Switchgear	PM0085 - 480 V Switchgear - TSD 051
Power House	480 VAC Swtichgear	Switchgear	PM0023 - 480 V Switchgear - O&M
Power House	480 VAC Swtichgear	Switchgear	PM0320 - Med Voltage Swgr - TSD 063
Power House	480 VAC Swtichgear	Switchgear	PM0088 - 480 V Switchgear - TSD 051/053
Power House	US2 Bus Supply Breaker ACB 201	Breakers	PM0283 - 480 V Breakers
Power House	Powerhouse Crane Breaker OMHT-CRN-1	Breakers	PM0084 - 480 V Breakers
Power House	Powerhouse Crane Breaker OMHT-CRN-1	Breakers	PM0215 - 480 V Switchgear - O&M
Power House	480 VAC Spare Breaker US-1	Breakers	PM0084 - 480 V Breakers
Power House	OPDP-PNL 4 ACB Breaker	Breakers	PM0084 - 480 V Breakers
Power House	OPDP-PNL 4 ACB Breaker	Breakers	PM0215 - 480 V Switchgear - O&M
Power House	OPDP-PNL 3 ACB Breaker	Breakers	PM0084 - 480 V Breakers
Power House	OPDP-PNL 3 ACB Breaker	Breakers	PM0215 - 480 V Switchgear - O&M
Power House	480 VAC Spare Breaker US-2	Breakers	PM0215 - 480 V Switchgear - O&M
Power House	480 VAC Spare Breaker US-2	Breakers	PM0084 - 480 V Breakers
Power House	480 VAC Bus-Tie Breaker ACB-102	Breakers	PM0215 - 480 V Switchgear - O&M
Power House	480 VAC Bus-Tie Breaker ACB-102	Breakers	PM0084 - 480 V Breakers
Power House	OPDP-PNL 1 ACB Breaker	Breakers	PM0215 - 480 V Switchgear - O&M
Power House	OPDP-PNL 1 ACB Breaker	Breakers	PM0084 - 480 V Breakers
Power House	OFPW-MST1 Fire Pump Controller	Breakers	PM0215 - 480 V Switchgear - O&M
Power House	OFPW-MST1 Fire Pump Controller	Breakers	PM0084 - 480 V Breakers

Location	Equip_Position	Equip_Type	Mx_Procedure
Power House	Diesel Generator Breaker ONJS ACB 103	Breakers	PM0084 - 480 V Breakers
Power House	Diesel Generator Breaker ACB 301	Breakers	PM0215 - 480 V Switchgear - O&M
Power House	480 VAC Power Panel 1	ElectricalPanels	PM0097 - AC/DC Panels - Pnl
Power House	120 VAC Lighting Panel 09	ElectricalPanels	PM0097 - AC/DC Panels - Pnl
Power House	120 VAC Lighting Panel 10	ElectricalPanels	PM0097 - AC/DC Panels - Pnl
Power House	120 VAC Lighting Panel 11	ElectricalPanels	PM0097 - AC/DC Panels - Pnl
Maintenance Shop	Transformer Isolation Switch	ElectricalPanels	PM0097 - AC/DC Panels - Pnl
Residential Buildings	LQ2 Facility 120 VAC Electrical Service	ElectricalPanels	PM0097 - AC/DC Panels - Pnl
Residential Buildings	LQ1 Facility 120 VAC Electrical Service	ElectricalPanels	PM0097 - AC/DC Panels - Pnl
Maintenance Shop	Warehouse Electrical Main Panel	ElectricalPanels	PM0097 - AC/DC Panels - Pnl
Maintenance Shop	Shop Electrical Panel B	ElectricalPanels	PM0097 - AC/DC Panels - Pnl
Maintenance Shop	Shop Electrical Panel A	ElectricalPanels	PM0097 - AC/DC Panels - Pnl
Maintenance Shop	Shop Electrical Panel C	ElectricalPanels	PM0097 - AC/DC Panels - Pnl
Power House	480 VAC Power Panel 6	ElectricalPanels	PM0097 - AC/DC Panels - Pnl
Power House	480 VAC Power Panel 5	ElectricalPanels	PM0097 - AC/DC Panels - Pnl
Power House	480 VAC Power Panel 4	ElectricalPanels	PM0097 - AC/DC Panels - Pnl
Power House	480 VAC Power Panel 3	ElectricalPanels	PM0097 - AC/DC Panels - Pnl
Power House	480 VAC Power Panel 2	ElectricalPanels	PM0097 - AC/DC Panels - Pnl
Power House	Circuit Breaker 1110-PCB1	Substation	PM0242 - SF6 Circuit Breaker Maintenance
Power House	Circuit Breaker 2110-PCB3	Substation	PM0242 - SF6 Circuit Breaker Maintenance
Power House	Circuit Breaker 1210	Substation	PM0242 - SF6 Circuit Breaker Maintenance
Power House	Circuit Breaker 1310	Substation	PM0242 - SF6 Circuit Breaker Maintenance
Power House	SF6 Gas Isulated Substation	Substation	PM0165 - SF6 Gas Cart - O&M
Power House	SF6 Main Control Board	Substation	PM0166 - SF6 Control Panel - O&M
Power Tunnel	Guard Gate Equalizing Valves - 6"	Valve	PM0255 - Valve Exercise
Power Tunnel	Power Tunnel Fill Valve	Valve	PM0255 - Valve Exercise
Diversion Tunnel	Diversion Tunnel Fill Valve	Valve	PM0255 - Valve Exercise
Power House	Unit 1 Spherical Valve Strainer	Valve	PM0001 - Spherical Valve Strainer - TSD 041
Power House	Unit 2 Spherical Valve Strainer	Valve	PM0001 - Spherical Valve Strainer - TSD 041
Power House	Unit 2 Spherical Valve	Valve	PM0008 - Spherical Valve - TSD 041
Power House	Unit 2 Spherical Valve	Valve	PM0170 - Spherical Valve - O&M/TSD 041
Power House	Unit 1 Spherical Valve	Valve	PM0008 - Spherical Valve - TSD 041
Power House	Unit 1 Spherical Valve	Valve	PM0170 - Spherical Valve - O&M/TSD 041
Power House	Unit 1 Spherical Valve Bypass	Valve	PM0292 - Spherical Bypass Valve
Power House	Unit 2 Spherical Valve Bypass	Valve	PM0292 - Spherical Bypass Valve
Power House	Unit 2 Hydroelectric Turbine	Turbine	PM0173 - Hydro Turbine - O&M
Power House	Unit 2 Hydroelectric Turbine	Turbine	PM0024 - Hydro Turbine - TSD 042/O&M
Power House	Unit 2 Hydroelectric Turbine	Turbine	PM0081 - Lube and Hydraulic Oils - Turb
Power House	Unit 2 Hydroelectric Turbine	Turbine	PM0360 - Hydro Turbine - Dye Pen Test
Power House	Unit 1 Hydroelectric Turbine	Turbine	PM0173 - Hydro Turbine - O&M
Power House	Unit 1 Hydroelectric Turbine	Turbine	PM0024 - Hydro Turbine - TSD 042/O&M
Power House	Unit 1 Hydroelectric Turbine	Turbine	PM0081 - Lube and Hydraulic Oils - Turb
Power House	Unit 1 Hydroelectric Turbine	Turbine	PM0360 - Hydro Turbine - Dye Pen Test

Location	Equip_Position	Equip_Type	Mx_Procedure
Power House	Depression Air Blower 2	CompressorBlower	PM0191 - Depress Blower - O&M
Power House	Depression Air Blower 2	CompressorBlower	PM0219 - Depression Air Blowers
Power House	Depression Air Blower 2	CompressorBlower	
Power House	Depression Air Blower 5	CompressorBlower	PM0191 - Depress Blower - O&M
Power House	Depression Air Blower 5	CompressorBlower	PM0219 - Depression Air Blowers
Power House	Unit 1 Governor Actuator Cabinet	Governor	PM0281 - Governor Acuator Cabinets
Power House	Unit 2 Governor Actuator Cabinet	Governor	PM0281 - Governor Acuator Cabinets
Power House	Unit 2 Governor Speed Signal Generator	Governor	PM0182 - Gov Speed Sig Gen - O&M
Power House	Unit 2 Governor Speed Signal Generator	Governor	PM0181 - Gov Speed Sig Gen - O&M
Power House	Unit 1 Governor Speed Signal Generator	Governor	PM0182 - Gov Speed Sig Gen - O&M
Power House	Unit 1 Governor Speed Signal Generator	Governor	PM0181 - Gov Speed Sig Gen - O&M
Power House	Unit 1 Governor System	Governor	PM0081 - Lube and Hydraulic Oils - Gov
Power House	Unit 1 Governor System	Governor	PM0005 - Gov System Filters
Power House	Unit 2 Governor System	Governor	PM0081 - Lube and Hydraulic Oils - Gov
Power House	Unit 2 Governor System	Governor	PM0005 - Gov System Filters
Power House	Main Fire Pump Control	System	PM0154 - Fire Pump Controller O&M
Power House	Heat Trace System	System	PM0260 - Heat Trace System
Power House	Cathodic Protection System	System	PM0138 - Cathodic Protection O&M
Maintenance Shop	Warehouse Sprinkler System	System	PM0011 - Piping System - TSD 046
Power House	Fire Sprinkler System	System	PM0011 - Piping System - TSD 046
Power House	Fire Sprinkler System	System	PM0211 - Systems - O&M
Power House	Powerhouse Fire Protection System	System	PM0060 - Smoke Detector
Power House	Halon Fire Protection System	System	PM0208 - Halon 1301 - NFPA
Power House	Halon Fire Protection System	System	PM0207 - Halon 1301 - NFPA
Diversion Tunnel	Fish Water Bypass System	System	PM0011 - Piping System - TSD 046
Diversion Tunnel	Fish Water Bypass System	System	PM0211 - Systems - O&M
Power House	Domestic Water System	System	PM0002 - Domestic Water
Power House	Domestic Water System	System	PM0011 - Piping System - TSD 046
Power House	Domestic Water System	System	PM0021 - Instrumentation - Sys
Power House	Domestic Water System	System	PM0038 - Domestic Water
Power House	Domestic Water System	System	PM0030 - Domestic Water - TSD 027
Power House	Component Cooling Water System	System	PM0277 - Component Cooling Water Chemistry
Power House	Component Cooling Water System	System	PM0211 - Systems - O&M
Power House	Component Cooling Water System	System	PM0011 - Piping System - TSD 046
Power House	Component Cooling Water System	System	PM0021 - Instrumentation - Sys
Power House	Service Water System	System	PM0011 - Piping System - TSD 046
Power House	Service Water System	System	PM0211 - Systems - O&M
Power House	Service Water System	System	PM0021 - Instrumentation - Sys
Power House	Depression Air System	System	PM0211 - Systems - O&M
Power House	Station Air System	System	PM0006 - Service Air Piping - TSD 054
Power House	Station Air System	System	PM0211 - Systems - O&M
Power House	Station Air System	System	PM0021 - Instrumentation - Sys
Rolling Stock	2000 Ford V10 (White)	RollingStock	PM0144 - Truck (PU) - O&M
Rolling Stock	Black Suburban (Emergency Vehicle)	RollingStock	PM0144 - Truck (PU) - O&M
Rolling Stock	Black Suburban (Emergency Vehicle)	RollingStock	PM0279 - Emergency Vehicle Check - Staff

Location	Equip_Position	Equip_Type	Mx_Procedure
Rolling Stock	Motor Grader	RollingStock	PM0141 - Grader - O&M
Rolling Stock	Motor Grader	RollingStock	PM0225 - Winter Preparation
Rolling Stock	Motor Grader	RollingStock	PM0231 - Heavy Equipment General Maintenance
Rolling Stock	Motor Grader	RollingStock	PM0139 - Grader - O&M
Rolling Stock	Motor Grader	RollingStock	PM0081 - Lube and Hydraulic Oils - RS
Rolling Stock	Motor Grader	RollingStock	PM0140 - Grader - O&M
Rolling Stock	Dump Truck	RollingStock	PM0081 - Lube and Hydraulic Oils - RS
Rolling Stock	Dump Truck	RollingStock	PM0231 - Heavy Equipment General Maintenance
Rolling Stock	Dump Truck	RollingStock	PM0225 - Winter Preparation
Rolling Stock	John Deere 310 Backhoe	RollingStock	PM0231 - Heavy Equipment General Maintenance
Rolling Stock	John Deere 310 Backhoe	RollingStock	PM0225 - Winter Preparation
Rolling Stock	John Deere 310 Backhoe	RollingStock	PM0081 - Lube and Hydraulic Oils - RS
Rolling Stock	Flatbed Truck with Material Boom	RollingStock	PM0246 - Boom Truck Inspection Quarterly
Rolling Stock	Flatbed Truck with Material Boom	RollingStock	PM0247 - Boom Truck Inspection
Rolling Stock	Flatbed Truck with Material Boom	RollingStock	PM0231 - Heavy Equipment General Maintenance
Rolling Stock	2002 Chevy 4x4 4 Door Pickup (White)	RollingStock	PM0144 - Truck (PU) - O&M
Rolling Stock	Caterpiller Tracked Dozer	RollingStock	PM0231 - Heavy Equipment General Maintenance
Rolling Stock	Caterpiller Tracked Dozer	RollingStock	PM0081 - Lube and Hydraulic Oils - RS
Rolling Stock	Michigan Loader	RollingStock	PM0231 - Heavy Equipment General Maintenance
Rolling Stock	Michigan Loader	RollingStock	PM0228 - Loader O&M
Rolling Stock	Michigan Loader	RollingStock	PM0225 - Winter Preparation
Rolling Stock	Michigan Loader	RollingStock	PM0081 - Lube and Hydraulic Oils - RS
Diversion Tunnel	Diversion Tunnel Outlet Exhaust Fan	HVAC	PM0076 - HVAC Fans
Diversion Tunnel	Diversion Tunnel Vent Fan	HVAC	PM0076 - HVAC Fans
Diversion Tunnel	Diversion Tunnel Structures Heaters	HVAC	PM0050 - Unit Heaters
Penstock	Penstock Drains	System	PM0374 - Penstock Drains
Penstock	Penstock Drains	System	PM0039 - Penstock
Penstock	Penstock Drains	System	PM0332 - Monitor Penstock Drains
Power Tunnel	Power Tunnel Gate Indicator	Valve	PM0240 - Gate Position Indicators
Diversion Tunnel	Diversion Tunnel Gate Indicator	Valve	PM0240 - Gate Position Indicators
Power Tunnel	Power Tunnel Oil Seperator DMF-SEP7	System	PM0249 - Oil Seperator Maintenance
Power House	Service Water Heat Exchanger 4A	System	PM0273 - Component Cooling Water Heat Exchanger
Power House	Service Water Heat Exchanger 4B	System	PM0273 - Component Cooling Water Heat Exchanger
Power House	Instrument Air Dryer	System	PM0237 - Instrument Air Dryer
Cold Storage	Garbage Incinerator	System	PM0248 - Incinerator Maintenance
Maintenance Shop	Maintenane Shop Air Dryer	System	PM0316 - Dryer
Power House	Oil Separator DPS-SEP4	System	PM0265 - Oil Seperator Maintenance
Transmission	Bradley/Soldotna Transmission Line	Structure	PM0119 - Infrared Survey - TSD 091
Transmission	Bradley/Soldotna Transmission Line	Structure	PM0115 - Transmission Line - TSD 091
Transmission	Bradley/Diamond Ridge Transmission Line	Structure	PM0115 - Transmission Line - TSD 091
Power House	Gas & Oxygen Monitor	Safety	PM0305 - Gas & Oxygen Monitors
Power House	Ozone Monitor	System	PM0020 - U1 & U2 Ozone Monitor - TSD 043
Power House	Standby Diesel Day Tank	TankSump	PM0177 - Diesel Day Tank - O&M
Power House	Governor Electronics Cubicle	Controls	PM0336 - Governor Circuit Boards
Power House	Unit 1 Governor Cabinet	Controls	PM0213 - Controls - O&M
Power House	Unit 2 Governor Cabinet	Controls	PM0213 - Controls - O&M
Power House	DCS Controllers in Power Plant	Controls	PM0125 - SCADA Master Equipment

Location	Equip_Position	Equip_Type	Mx_Procedure
Power House	DCS Controllers in Power Plant	Controls	PM0261 - SCADA System Master
Power Tunnel	Power Tunnel Diesel Day Tank	TankSump	PM0176 - Diesel Day Tank - O&M
Power House	Telsa Disturbance Recorder - Control Room	Controls	PM3000 - Tesla Distrubance Recorder
Rolling Stock	2009 4D Silverado Longbed Pickup	RollingStock	PM0144 - Truck (PU) - O&M
Rolling Stock	2008 F250 Super Duty 4D Short Bed Pickup	RollingStock	PM0144 - Truck (PU) - O&M
Rolling Stock	2015 F250 Super Duty 4D Short Bed Pickup	RollingStock	PM0144 - Truck (PU) - O&M
Bradley Project		Safety	Monthly SPCC Inspection

ATTACHMENT F

Bradley Lake Hydropower Project Notification Directory

***CONTACTS*:**

State Troopers: 907-
Homer Police: 907-
CEA Dispatcher: 907-
HEA Bradley Lake Plant Superintendent:
XXX-XXXX (O) XXX-XXXX (C)
HEA Manager of Power Production:
XXX-XXXX (O) XXX-XXXX (C)
AEA Project Manager/Chief Dam Safety Engineer:
XXX-XXXX (W) XXX-XXXX (C) XXX-XXXX (F)
AEA Railbelt Energy Director:
XXX-XXXX (W) XXX-XXXX (C) XXX-XXXX (F)

NOTIFICATIONS: AEA is required to notify FERC of certain conditions or events. Notify AEA promptly in case of:

- **Security incident**
- **Earthquake magnitude 5.0 or greater within 50 miles of project**
- **Serious injury or death of person**
- **Spills (petroleum or chemicals) that enter water**
- **Dam or power plant unusual conditions**

SECURITY: Follow Security Procedures and immediately notify the State Troopers, Homer Police, Project Dispatcher, and (AEA & HEA) Management if a Probable Security Risk is noted.

EARTHQUAKE: While most interested in earthquakes greater than magnitude 5.0 within 50 miles of project a physical inspection of project facilities should be performed for any strongly felt earthquake. Once inspection finished, email AEA Project Manager with findings. If no damage, still email and state "no damage noted".

SERIOUS INJURY OR DEATH: Immediately telephone and follow up email to AEA within 24 hours with a short description of when, who, and what happened.

SPILLS: Notify immediately - any amount that enters water. Notify within 24 hours - spills to soil.
Follow HEA SPCC Plan in particular ADEC spill reporting procedures

UNUSAL CONDITIONS: Notify AEA of any conditions that may affect the safety of the project. Such conditions may include, but are not limited to, gate operation failure, piping, seepage, slides, unusual instrument readings, sinkholes, sabotage, natural disasters (floods & EQ), and

any other signs of instability of any project works. Additional conditions include, but are not limited to, reservoir monitoring instrumentation and communication systems malfunction or failure, and remote control systems malfunction or failure.

<u>Notify AEA of any event/condition that may make the news.</u>

PROFESSIONAL SERVICES AGREEMENT

Agreement No:

Project Title:

To this Agreement between

hereafter the CONTRACTING AGENCY, and

hereafter the CONTRACTOR, effective on the last date executed by its parties, in consideration of the terms, conditions and promises of Articles 1 through 7 in this document, the parties hereby agree.

CONTRACTOR

Signature: _____ Date
Name:
Title:

Signature: _____ Date
Name:
Title:

CONTRACTING AGENCY

Contract Manager

Signature: _____ Date
Name:
Title:

Contracting Officer

Signature: _____ Date
Name:
Title:

ARTICLE 1 - PURPOSE

1.1

ARTICLE 2 - COMPENSATION

2.1 The maximum amount payable under this Agreement as set out in Appendix C, shall not exceed:

and No/100 Dollars

($)

ARTICLE 3 - PERIOD OF PERFORMANCE

3.1 CONTRACTOR shall commence services under this Agreement as authorized by written *Notice(s) to Proceed* and shall complete the services in accordance with any time schedule required by Appendices. This Agreement is of no force or effect until executed by the CONTRACTOR and the CONTRACTING AGENCY and no services shall be undertaken or performed until a Notice to Proceed is issued.

3.2 The Period of Performance under this Agreement shall end:

ARTICLE 4 - APPENDICES

4.1 The following Appendices are attached to this document and incorporated herein:

Appendix	Title	Date Prepared	No. Pages
A	General Conditions, Form 25A262		7
B	Statement of Services		
C	Compensation, Form 25A280, plus Exhibits:		
D	Indemnification & Insurance, Form 25A269, plus Certificates of Insurance (for the prime CONTRACTOR)		
E	Certification of Compliance (Alaska Licenses/Registrations and Insurance)		1

ARTICLE 5 - CONTRACTING AGENCY DATA

Office Address

Street:
PO Box:
City, State, Zip:
Phone-Voice:
Phone-FAX:

Appeals Officer: Deputy Commissioner, DOT&PF
Authorization: AS 36.30.005

Funding Source: **CC:**
LC:

☐ State ☐ FHWA
☐ FAA ☐ Other: _____

(Check all that apply)

ARTICLE 6 - CONTRACTOR DATA

Manager:
Title:

Alaska Business License No.:
Federal Tax Identification No.:

Office Address

Street:
PO Box:
City, State, Zip:
Phone-Voice:
Phone-FAX:
Email:

Type of Firm

☐ Individual ☐ Partnership
☐ Corporation in state of:
☐ Other (specify):

ARTICLE 7 - SUBCONTRACTORS

7.1 CONTRACTOR shall perform all professional services required under this Agreement except as may be performed by the Subcontractors listed below or as may be allowed under Appendix A, Article A19.

Service or Engineering Discipline	Subcontractor

AEA GENERAL CONDITIONS
APPENDIX A

Agreement No:
Project No:
Date Prepared:

INDEX

ARTICLE A1
DEFINITIONS

A1.1 Additional or Extra Services - Services, work products or actions required of the CONTRACTOR above and beyond provisions of the Agreement.

A1.2 Agreement – This Professional Services Agreement and its appendices that outline the terms and conditions regarding Contractor's services during the authorized period of performance.

A1.3 Amendment - A written change to this Agreement.

A1.4 Change - A revision in services, complexity, character, or duration of the services or provisions of this Agreement.

A1.5 Executive Director – Executive Director of the Alaska Energy Authority (AEA).

A1.6 CONTRACTING AGENCY – Alaska Energy Authority (AEA).

A1.7 Procurement Officer - The individual or a duly appointed successor designated as the official representative to administer contracts for the CONTRACTING AGENCY.

A1.8 CONTRACTOR - The firm (person or any business combination) providing services.

A1.9 Contractor's Manager - The CONTRACTOR's representative in responsible charge of the project(s) and directly answerable for the required services.

A1.10 Project Manager – CONTRACTING AGENCY's representative and the CONTRACTOR's primary point of contract with the CONTRACTING AGENCY.

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A1.11 Funding Agency - An agency of a Federal, State, Political subdivision, or Local Government which furnishes funds for the CONTRACTOR's compensation under this Agreement and which may have established regulations and requirements binding upon the CONTRACTING AGENCY and the CONTRACTOR.

A1.12 Notice to Proceed (NTP) - Written authorization from the CONTRACTING AGENCY to the CONTRACTOR to provide all or specified services in accordance with an existing Agreement.

A1.13 Statement of Services - Services and work products required of the CONTRACTOR by this Agreement.

A1.14 Subcontractor - CONTRACTOR engaged to provide a portion of the services by subcontract with the firm which is a party to this Agreement.

ARTICLE A2
INFORMATION AND SERVICES FROM OTHERS

A2.1 The CONTRACTING AGENCY may, at its election or in response to a request from the CONTRACTOR, furnish information or services from other contractors. If, in the CONTRACTOR's opinion, such information or services is inadequate, the CONTRACTOR must notify the CONTRACTING AGENCY of the specific service or material deemed inadequate and the extent of the inadequacy prior to use in the performance of this Agreement. The CONTRACTING AGENCY will then evaluate and resolve the matter in writing. Unless so notified by the CONTRACTOR, the CONTRACTING AGENCY may assume the information or services provided are adequate.

ARTICLE A3
HOLD HARMLESS

A3.1 See Appendix D, "Indemnification and Insurance".

ARTICLE A4
INSURANCE

A4.1 See Appendix D, "Indemnification and Insurance".

ARTICLE A5
OCCUPATIONAL SAFETY AND HEALTH

A5.1 The CONTRACTOR and its Subcontractors shall observe and comply with the Federal Occupational Safety and Health act of 1970 and with all safety and health standards promulgated by the Secretary of Labor under authority thereof and with all State of Alaska Occupational Safety and Health Laws and regulations.

ARTICLE A6
EQUAL EMPLOYMENT OPPORTUNITY

A6.1 The CONTRACTOR shall comply with the following applicable laws and directives and regulations of the CONTRACTING AGENCY which effectuate them; all of which are incorporated herein by reference:

Title VI of Federal Civil Rights Act of 1964;

Federal Executive Order 11625 (Equal Employment Opportunity);

Title 41, Code of Federal Regulations, Part 60 (Equal Employment Opportunity);

Title 49 Code of Federal Regulations, Part 21 (Discrimination);

Title 49, Code of Federal Regulations, Part 26 (Minority Business Enterprises);

Office of Management and Budget (OMB) circular 102, Attachment O (Procurement Standards);

Alaska Statute (AS) 18.80.200-300 (Discrimination).

A6.2 The CONTRACTOR may not discriminate against any employee or applicant for employment because of race, religion, color, national origin, age, physical disability, sex, or marital status, change in marital status, pregnancy or parenthood when the reasonable demands of the position do not require distinction on such basis. The CONTRACTOR shall take affirmative action to insure that applicants are employed and that employees are treated during employment without regard to their race, religion, color, national origin, age, physical disability, sex, or marital status. This action must include, but need not be limited to, the following: employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training including apprenticeship. The CONTRACTOR shall post in conspicuous places, available employees and applicants for employment, notices setting out the provisions of this paragraph.

A6.3 The CONTRACTOR shall state, in all solicitations or advertisements for employees to work in performance of this Agreement, that it is an equal opportunity employer and that all qualified applicants will receive consideration for employment without regard to race, religion, color, national origin, age, physical disability, sex, or marital status.

A6.4 The CONTRACTOR shall send to each labor union or representative or workers with which the CONTRACTOR has a collective bargaining Agreement or other contract or understanding a notice advising the labor union or workers' representative of the CONTRACTOR's commitments under this article and post copies of the notice in conspicuous places available to all employees and applicants for employment.

A6.5 In the event the CONTRACTOR subcontracts any part of the services to be performed under this Agreement, the CONTRACTOR agrees to make good faith efforts to utilize Disadvantaged Business Enterprises, to affirmatively solicit their interest, capability and prices and to furnish documentation of the results of all such direct contacts on forms provided by or acceptable to the CONTRACTING AGENCY.

A6.6 The CONTRACTOR shall make, keep and preserve such records necessary to determine compliance with equal employment opportunity obligations and shall furnish required information and reports. All records must be retained and made available in accordance with Article A9, Audits and Records.

A6.7 The CONTRACTOR shall include the provisions of this article in every contract, and shall require the inclusion of these provisions in every contract entered into by any of its Subcontractors, so that these provisions will be binding upon each Subcontractor.

ARTICLE A7
PAYMENTS TO THE CONTRACTOR

A7.1 Payments shall be based on approved CONTRACTOR's invoices submitted in accordance with this article and the provisions of Appendix C. The sum of payments shall not exceed allowable compensation stated in Notice(s) to Proceed and no payments shall be made in excess of the maximum allowable total for this Agreement.

A7.2 The CONTRACTING AGENCY will exert every effort to obtain required Funding Agency approvals and to issue authorizations in a timely manner. CONTRACTOR shall not perform any services without a Notice to Proceed. Accordingly, the CONTRACTING AGENCY will not pay the CONTRACTOR for services or associated reimbursable costs performed outside those which are authorized by a Notice to Proceed.

A7.3 CONTRACTOR's invoices shall be submitted when services are completed or monthly, for months during which services are performed, as applicable, in a format provided by or acceptable to the CONTRACTING AGENCY.

A7.4 In the event items on an invoice are disputed, payment on those items will be held until the dispute is resolved. Undisputed items will not be held with the disputed items.

A7.5 The CONTRACTOR shall submit a final invoice and required documentation within 90 days after final acceptance of services by the CONTRACTING AGENCY. The CONTRACTING AGENCY will not be held liable for payment of invoices submitted after this time unless prior written approval has been given by the Procurement Officer. Total payment of all Subcontractors and satisfactory compliance with Article A22, Taxes, are conditions precedent to final payment.

ARTICLE A8
CHANGES

A8.1 Changes (including "Supplemental Agreements") in the period of performance, general conditions, statement of services, or other provisions established by this Agreement may be made by written Amendment only. If such changes cause an increase or a decrease in the CONTRACTOR's cost, an equitable adjustment shall be made and specified in the Amendment. The CONTRACTOR shall not perform any additional or extra services prior to receiving a fully executed copy

of an Amendment and a Notice to Proceed, except as the CONTRACTOR may be directed under the provisions of Article A20, Claims and Disputes.

A8.2 If at any time the CONTRACTING AGENCY through its authorized representatives, either verbally or in writing, requests or issues instructions for Additional or Extra Services or otherwise directs actions which conflict with any provision of this Agreement, the CONTRACTOR shall, within 30 days of receipt and prior to pursuing such instructions, so notify the CONTRACTING AGENCY in writing, and to the extent possible, describe the services and estimated cost of any Additional or Extra Services. The CONTRACTING AGENCY will then evaluate and, if appropriate, negotiate an Amendment. Unless so notified by the CONTRACTOR, the CONTRACTING AGENCY will conclude such instructions have not changed any provisions of this Agreement nor require additional compensation. No additional payments shall be made to the CONTRACTOR without such notice.

ARTICLE A9
AUDITS AND RECORDS

A9.1 The CONTRACTOR shall maintain records of performances, communications, documents, correspondence and costs pertinent to this Agreement and the Funding or CONTRACTING AGENCY's authorized representatives shall have the right to examine such records and accounting procedures and practices.

A9.2 The Funding or CONTRACTING AGENCY's authorized representatives shall have the right to examine all books, records, documents and other data of the CONTRACTOR related to the negotiation, pricing and performance of this Agreement and any modification or change for the purpose of evaluating the accuracy, completeness and currency of the data submitted. The right of examination shall extend to all documents necessary to permit adequate evaluation of the data, computations and projections used.

A9.3 The materials described in this article shall be made available at a business office of the CONTRACTOR at all reasonable times for inspection, audit or reproduction, for a minimum of 3 years from the date of any resulting final settlement.

A9.3.1 If this Agreement is completely or partially terminated, records relating to the services terminated shall be made available for a minimum of 3 years from the date of any termination or resulting final settlement, whichever is later.

A9.3.2 Records which relate to appeals under Article A20, Claims and Disputes, or litigation or the settlement of Claims arising out of the performance of this Agreement shall be made available until such appeals, litigation or Claims have been concluded.*

ARTICLE A10
CONTRACTING AGENCY INSPECTIONS

A10.1 The CONTRACTING AGENCY has the right to inspect, in the manner and at reasonable times it considers appropriate during the period of this Agreement, all facilities and activities of the CONTRACTOR as may be engaged in the performance of this Agreement.

ARTICLE A11
TERMINATION OR SUSPENSION

A11.1 This Agreement may be terminated by either party upon 10 days written notice if the other party fails substantially to perform in accordance with its terms through no fault of the party initiating the termination (default termination). If the CONTRACTING AGENCY terminates this Agreement, the CONTRACTING AGENCY will pay the CONTRACTOR a sum equal to the percentage of work completed that can be substantiated in whole or in part either by the CONTRACTOR to the satisfaction of the CONTRACTING AGENCY or by the CONTRACTING AGENCY. If the CONTRACTING AGENCY becomes aware of any non-conformance with this Agreement by the CONTRACTOR, the CONTRACTING AGENCY will give prompt written notice thereof to the CONTRACTOR. Should the CONTRACTOR's services remain in non-conformance, the percentage of total compensation attributable to the nonconforming work may be withheld.

A11.2 The CONTRACTING AGENCY may at any time terminate (convenience termination) or suspend this Agreement for its needs or convenience. In the event of a convenience termination, or suspension for more than 3 months, the CONTRACTOR will be compensated for authorized services and authorized expenditures performed to the date of receipt of written notice of termination or suspension plus reasonable expenses. No fee or other compensation for the uncompleted portion of the services will be paid except for already incurred indirect costs which the CONTRACTOR can establish and which would have been compensated for over the life of this Agreement, but because of the termination or suspension would have to be absorbed by the CONTRACTOR without further compensation.

A11.3 If federal funds support this Agreement, settlement for default or convenience termination must be approved by the Funding Agency.

A11.4 In the event of termination or suspension, the CONTRACTOR shall deliver all work products, reports, estimates, schedules and other documents and data prepared pursuant to this Agreement to the CONTRACTING AGENCY.

ARTICLE A12
OFFICIALS NOT TO BENEFIT

A12.1 No member of or delegate to Congress, United States Commissioner or other officials of the Federal, State, Political subdivision or Local Government shall be admitted to any share or part of this Agreement or any benefit to arise therefrom.

ARTICLE A13
INDEPENDENT CONTRACTOR

A13.1 The CONTRACTOR and its agents and employees shall act in an independent capacity and not as officers or agents of the CONTRACTING AGENCY in the performance of this Agreement except that the CONTRACTOR may function as the CONTRACTING AGENCY's agent as may be specifically set forth in this Agreement.

A13.2 Any and all employees of the CONTRACTOR, while engaged in the performance of any work or services required by the CONTRACTOR under this Agreement, shall be considered employees of the CONTRACTOR only and not of the CONTRACTING AGENCY and any and all Claims that may or might arise under the Worker's Compensation Act on behalf of said employees, while so engaged and any and all Claims made by a third party as a consequence of any negligent act or omission on the part of the CONTRACTOR's employees, while so engaged on any of the services to be rendered herein, shall be the sole obligation and responsibility of the CONTRACTOR.

A13.3 This Agreement will be declared null and void should the CONTRACTING AGENCY determine that by Internal Revenue Service definitions the CONTRACTOR is an employee of the CONTRACTING AGENCY.

ARTICLE A14
PROSELYTIZING

A14.1 The CONTRACTOR agrees that it will not engage on a full or part time basis, during the period of this Agreement, any person or persons who are or have been employed by the CONTRACTING AGENCY during the period of this Agreement or during the 90 days immediately preceding the date of this Agreement except those who have been regularly retired or approved in writing by the CONTRACTING AGENCY.

ARTICLE A15
COVENANT AGAINST CONTINGENT FEES

A15.1 The CONTRACTOR shall comply with the Copeland "Anti-Kickback" Act (18 USC 874) as supplemented in Federal Department of Labor regulations (29 CFR, part 3), which are incorporated by reference and made a part of this Agreement.

A15.2 The CONTRACTOR warrants that it has not employed or retained any organization or person, other than a bona fide employee, to solicit or secure this Agreement and that it has not paid or agreed to pay any organization or person, other than a bona fide employee, any fee, commission, percentage, brokerage fee, gift or other consideration contingent upon or resulting from the award or making of this Agreement. For breach or violation of this warranty, the CONTRACTING AGENCY has the right to annul this Agreement without liability or, in its discretion, to deduct from the allowable compensation the full amount of such commission, percentage, brokerage or contingent fee.

A15.3 The CONTRACTING AGENCY warrants that the CONTRACTOR or the CONTRACTOR's representative has not been required, directly or indirectly as an express or implied condition in obtaining or carrying out this Agreement, to employ or retain, or agree to employ or retain, any organization or person or to make a contribution, donation or consideration of any kind.

ARTICLE A16
PRECEDENCE OF DOCUMENTS

A16.1 Components of this Agreement shall stand and prevail in the following order: Agreement over General Conditions; General Conditions over Statement of Services: Statement of Services over Basis of Compensation; Basis of Compensation over any appendices beyond Appendix C.

A16.2 If a "Request for Proposal" (RFP) and/or a proposal are appended to this Agreement, the components described in paragraph A16.1 shall stand and prevail over the proposal and the proposal over the RFP.

ARTICLE A17
ENDORSEMENT ON DOCUMENTS

A17.1 Endorsements and professional seals, if applicable, must be included on all final drawings, specifications, cost estimates and reports prepared by the CONTRACTOR. Preliminary copies of such documents submitted for review must have seals affixed without endorsement (signature).

ARTICLE A18
OWNERSHIP OF WORK PRODUCTS

A18.1 Work products produced under this Agreement, except items which have pre-existing copyrights, are the property of the CONTRACTING AGENCY. Payments to the CONTRACTOR for services hereunder include full compensation for all work products produced by the CONTRACTOR and its Subcontractors and the CONTRACTING AGENCY shall have royalty free non-exclusive and irrevocable right to reproduce, publish, or otherwise use, and to authorize others to use, such work products.

A18.2 Should the CONTRACTING AGENCY elect to reuse work products provided under this Agreement for other than the original project and/or purpose, the CONTRACTING AGENCY will indemnify the CONTRACTOR and its Subcontractors against any responsibilities or liabilities arising from such reuse. Additionally, any reuse of design drawings or specifications provided under this Agreement must be limited to conceptual or preliminary use for adaptation and the original CONTRACTOR's or Subcontractor's signature, professional seals and dates removed. Such reuse of drawings and specifications, which require professional seals and dates removed, will be signed, sealed and dated by the professional who is in direct supervisory control and responsible for all adaptation.

ARTICLE A19
SUBCONTRACTORS, SUCCESSORS AND ASSIGNS

A19.1 The CONTRACTING AGENCY must concur in the selection of any person or firm that may be engaged in performance of this Agreement to provide negotiable professional or technical services, products, etc., (vs. commodity items available to the general public in stores at market prices).

A19.2 If this Agreement includes named firms or individuals, then such firms or individuals shall be employed for the designated services, unless the Agreement is changed by Amendments.

A19.3 The CONTRACTOR shall not assign, sublet or transfer any interest in this Agreement without the prior written consent of the Procurement Officer.

A19.4 The CONTRACTOR binds itself, its partners, its Subcontractors, assignees and legal representatives to this Agreement and to the successors, assignees and legal representatives of the CONTRACTING AGENCY with respect to all covenants of this Agreement.

A19.5 The CONTRACTOR shall include provisions appropriate to effectuate the purposes of this Appendix A in all subcontracts executed to perform services under this Agreement which may exceed a cost of $25,000.

ARTICLE A20
CLAIMS AND DISPUTES

A20.1 If the CONTRACTOR becomes aware of any act or occurrence which may form the basis of a Claim by the CONTRACTOR for additional compensation or an extension of time for performance, or if any dispute arises regarding a question of fact or interpretation of this Agreement, the CONTRACTOR shall immediately inform the Procurement Officer. If the matter cannot be resolved within 7 days, the CONTRACTOR shall, within the next 14 days, submit an "Intent to Claim" in writing to the Procurement Officer.

A20.1.1 If the CONTRACTOR believes additional compensation is warranted, the CONTRACTOR shall immediately begin to keep and maintain complete, accurate and specific daily records concerning every detail of the potential Claim including actual costs incurred. The CONTRACTOR shall give the CONTRACTING AGENCY access to any such record and, when so requested, shall forthwith furnish the CONTRACTING AGENCY copies thereof.

A20.1.2 The Claim, if not resolved, shall be presented to the Procurement Officer, in writing, within 60 days following receipt of the "Intent to Claim". Receipt of the Claim will be acknowledged in writing by the Procurement Officer.
A20.1.3 The CONTRACTOR agrees that unless these written notices are provided, the CONTRACTOR will have no entitlement to additional time or compensation for such act, event or condition. The CONTRACTOR shall in any case continue diligent performance under this Agreement.

A20.2 The Claim shall specifically include the following:

A20.2.1 The act, event or condition giving rise to the Claim.

A20.2.2 The provisions of the Agreement which apply to the Claim and under which relief is provided.

A20.2.3 The item or items of project work affected and how they are affected.

A20.2.4 The specific relief requested, including Contract Time if applicable, and the basis upon which it was calculated.

A20.3 The Claim, in order to be valid, must not only show that the CONTRACTOR suffered damages or delay but that those conditions were actually a result of the act, event or condition complained of and that the Agreement provides entitlement to relief to the CONTRACTOR for such act, event, or condition.

A20.3.1 The Procurement Officer reserves the right to make written requests to the CONTRACTOR at any time for additional information which the CONTRACTOR may possess relative to the Claim. The CONTRACTOR agrees to provide the Procurement Officer such additional information within 30 days of receipt of such a request. Failure to furnish such additional information may be regarded as a waiver of the Claim.

A20.3.2 If the Claim is not resolved by Agreement within 90 days of its receipt, the Procurement Officer will issue a written decision to the CONTRACTOR.

A20.3.3 The CONTRACTOR shall certify that the Claim is made in good faith, that the supporting cost and pricing data are accurate and complete to the best of the CONTRACTOR's knowledge and belief, and that the amount requested accurately reflects the adjustment to the Agreement for which the CONTRACTOR believes the CONTRACTING AGENCY is liable.

A20.4 The CONTRACTOR will be furnished a written signed copy of the Procurement Officer’s decision within 90 days, unless additional information is requested by the Procurement Officer. The Procurement Officer’s decision is final unless, within 14 days of receipt of the decision, the CONTRACTOR delivers a written Notice of Appeal to the Executive Director.

A20.5 Procedures for appeals and hearings are covered under 3 AAC 100.590.

ARTICLE A21
EXTENT OF AGREEMENT

A21.1 This Agreement including appendices represents the entire and integrated Agreement between the CONTRACTING AGENCY and the CONTRACTOR and supersedes all prior negotiations, representations or Agreements, written or oral.

A21.2 Nothing contained herein may be deemed to create any contractual relationship between the CONTRACTING AGENCY and any Subcontractors or material suppliers; nor may anything contained herein be deemed to give any third party Claim or right of action against the CONTRACTING AGENCY or the CONTRACTOR which does not otherwise exist without this Agreement.

A21.3 This Agreement may be changed only by written Amendment executed by both the CONTRACTING AGENCY and the CONTRACTOR.

A21.4 All communications that affect this Agreement must be made or confirmed in writing and must be sent to the addresses designated in this Agreement.

A21.5 The CONTRACTOR on receiving final payment will execute a release, if required, in full of all Claims against the CONTRACTING AGENCY arising out of or by reason of the services and work products furnished and under this Agreement.

ARTICLE A22
TAXES

A22.1 As a condition of performance of this Agreement, the CONTRACTOR shall pay all Federal, State and Local taxes incurred by the CONTRACTOR and shall require their payment by any Subcontractor or any other persons in the performance of this Agreement.

ARTICLE A23
GOVERNING LAW

A23.1 This Agreement is governed by the laws of the State of Alaska and Federal and Local Laws and Ordinances applicable to the work performed. The CONTRACTOR shall be cognizant and shall at all times observe and comply with

such laws which in any manner affect those engaged or employed in the performance, or which in any way affects the manner of performance, of this Agreement.

ARTICLE A24
FEDERAL AID CERTIFICATION (HIGHWAYS)
(For Agreements exceeding $100,000)

A24.1 The CONTRACTOR certifies, by executing this Agreement, to the best of his or her knowledge and belief, that:

A24.1.1 No federal appropriated funds have been paid or will be paid, by or on behalf of the CONTRACTOR, to any person for influencing or attempting to influence an officer or employees of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative Agreement, and at the extension, continuation, renewal, Amendment, or modification of any Federal contract, grant, loan, or cooperative Agreement.

A24.1.2 If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress in connection with this Federal contract, grant, loan, or cooperative Agreement, the undersigned shall complete and submit Standard Form LLL, Disclosure of Lobbying Activities, in accordance with its instructions. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

A24.2 This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code.

A24.3 The CONTRACTOR also agrees by executing this Agreement that the CONTRACTOR shall require that the language of this certification be included in all lower tier subcontracts, which exceed $100,000 and that all such subrecipients shall certify and disclose accordingly.

ARTICLE A25
TRADE RESTRICTIONS

The contractor or subcontractor, by submission of an offer and/or execution of a contract, certifies that it:

a. is not owned or controlled by one or more citizens of a foreign country included in the list of countries that discriminate against U.S. firms published by the Office of the United States Trade Representative (USTR);
b. Has not knowingly entered into any contract or subcontract for this project with a person that is a citizen or national of a foreign country on said list, or is owned or controlled directly or indirectly by one or more citizens or nationals of a foreign country on said list;
c. Has not procured any product nor subcontracted for the supply of any product for use on the project that is produced in a foreign country on said list.

Unless the restrictions of this clause are waived by the Secretary of Transportation in accordance with 49 CFR 30.17, no contract shall be awarded to a contractor or subcontractor who is unable to certify to the above. If the contractor knowingly procures or subcontracts for the supply of any product or service of a foreign country on said list for use on the project, the Federal Aviation Administration may direct through the Sponsor cancellation of the contract at no cost to the Government.

Further, the contractor agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification without modification in each contract and in all lower tier subcontracts. The contractor may rely on the certification of a prospective subcontractor unless it has knowledge that the certification is erroneous.

The contractor shall provide immediate written notice to the sponsor if the contractor learns that its certification or that of a subcontractor was erroneous when submitted by reason of changed circumstances.

This certification is a material representation of fact upon which reliance was placed when making the award. If it is later determined that the contractor or subcontractor knowingly rendered an erroneous certification, the Federal Aviation Administration may direct through the Sponsor cancellation of the contract or subcontract for default at no cost to the Government.

Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by this provision. The knowledge and information of a contractor is not required to exceed that which is normally posed by a prudent person in the ordinary course of business dealings.

This certification concerns a matter within the jurisdiction of an agency of the United States of America and the making of a false, fictitious or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code, Section 1001.

ARTICLE A26
SUSPENSION AND DEBARMENT

The bidder/offeror certifies, by submission of this proposal or acceptance of this contract, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency. It further agrees by submitting this proposal that it will include this clause without modification in all lower tier transactions, solicitations, proposals, contracts, and subcontracts. Where the bidder/offeror/contractor or any lower tier participant is unable to certify to this statement, it shall attach an explanation to this solicitation/ proposal.

ARTICLE A27
ADDITIONAL PROVISIONS

(Any deletion or modification of Articles A1 through A26 shall be approved "as to form" by the CONTRACTING AGENCY's legal section, acknowledged in writing, and attached as an Exhibit to this Appendix.)

A27.1

COMPENSATION
APPENDIX C

Project No:
Date Prepared:

C1. Payments will be made on approved invoices submitted for months during which costs are incurred. Except for Fixed Price(s) and Fixed Fees, compensation shall be cost-based on actual costs to the Contractor for providing services. Provisions for Audit are contained in Appendix A.

C2. EXCEPT WHEN PAYMENT IS BY FIXED PRICE, PRIME CONTRACTOR'S LABOR AND ASSOCIATED INDIRECT COST SHALL BE INVOICED TO THE CONTRACTING AGENCY WITHIN 45 DAYS OF PERFORMANCE. SUBCONTRACTORS' LABOR AND ASSOCIATED INDIRECT COST SHALL BE INVOICED TO THE CONTRACTING AGENCY WITHIN 60 DAYS OF PERFORMANCE. ALL OF THE CONTRACTOR'S AND SUBCONTRACTORS' OTHER DIRECT COSTS (EXPENSES) SHALL BE INVOICED TO THE CONTRACTING AGENCY WITHIN 90 DAYS OF BEING INCURRED. ***CHARGES SUBMITTED AFTER THE ABOVE STATED TIMES WILL, AT THE CONTRACTING AGENCY'S DISCRETION, NOT BE PAID*****.**

C3. Price proposals and Notices-to-Proceed (NTPs) for this Agreement must conform to the Labor Rates, Indirect Cost Rate(s), Unit Prices, Fee/Profit Arrangements, Estimated Costs, and Price Caps contained in the Exhibits attached to this Appendix C.

C4. Payments are limited to the amount(s) cited in each Notice-to-Proceed (NTP) issued for this Agreement. The Contractor expressly has no right to any payment in excess of each NTP amount.

C5. Final payment to the Contractor may be withheld until a Release from Agreement, on a form prescribed by the Contracting Agency, is executed by the Contractor.

C6. Payments for this Agreement and any Amendment, including Costs and Fee, will be adjusted to exclude any significant sums by which the Contracting Agency finds that payments are increased because the cost or pricing data furnished by the Contractor or prospective Contractor is inaccurate, incomplete, or not current on the date of the Agreement or subsequent submittal date of pricing data (AS 36.30.400).

C7. The following terminology and explanations are applicable to this Agreement; any inconsistencies appearing in this Agreement must be resolved in accordance with the terminology in paragraphs C7.1-C7.6 and C8.

C7.1 Direct Costs of Direct Labor - Base salary and/or wages paid to employees charged directly to this Agreement exclusive of Fringe Benefits or other Indirect Costs and Fees (including profit).

C7.2 Other Direct Costs ("Expenses") - PRE-***APPROVED*** unit priced items, actual costs for specific subcontracts identified in this Agreement, and actual costs for the following:

Transportation (economy rate/air-coach);
Food and lodging (Generally, not to exceed agency per diem rates);
Incidental travel expenses; and
- If not recovered in the Indirect Cost Rate - the following:

Equipment & computer use at ***PRE-APPROVED*** rates;
Specific materials and supplies; and
Other ***PRE-APPROVED*** direct expenses.

Each Expense is limited to reasonable costs which do not exceed that which would be incurred by an ordinarily prudent person in the conduct of competent business.

C7.3 Indirect Costs - Allowable expenses that, because of their incurrence for common or joint cost objectives, must be allocated to this Agreement using a specified Indirect Cost Rate. A cost objective is a function, organizational subdivision, contract, project or work unit for which cost data is accumulated under the Contractor's accounting system. Generally, the Contracting Agency requires Indirect Costs to be segregated into the following categories: Fringe Benefits, Overhead (General & Administrative Expenses - including Indirect Labor), and Allocated Home Office Overhead (if applicable).

C7.3.1 Fringe Benefits - Costs for items such as:

Vacation time, holidays and authorized leave;
Group and Worker's Compensation Insurance;
Deferred Compensation/Retirement plans;
Social Security and Unemployment Taxes; and
Group Medical plan and Life Insurance Premiums.

C7.3.2 Overhead - Costs for items such as the following, if they are not included in Direct Costs:

Indirect Labor (Supervisory, Administrative, etc., base salary or wages)
Recruiting expenses, travel, food and lodging;
Rent, heat, power, light and janitorial services;
Office supplies, reproduction costs, communications;
Upkeep and depreciation of equipment and computers;
Rentals of equipment and computers; and,
Business Insurance premiums not billed to clients;

C7.3.3 Allocated Home Office Overhead (if applicable) - Costs for management, supervisory, and administrative functions which benefit separate unit operations.

C7.3.4 Indirect Cost Rate – An established percentage of incurred expenses for Direct Costs of Direct Labor which is used as a basis of compensation for Indirect Costs. Fees or Profit are not included in the Indirect Cost Rate.

C7.4.1 If this Agreement wholly or partially allocates Indirect Costs on other than a Direct Labor dollar basis, a description of the Indirect Cost pools or service centers used, and the Indirect Cost Rates(s) and base(s), shall be attached in an Exhibit to this Appendix C; otherwise, such an allocation shall not be allowed for this contract.

C7.4.2 Indirect Cost Rates may be fixed or provisional and will be established for the duration of the Agreement, fiscal year, or other time period.

C7.4.3 Provisional Indirect Cost Rates or "Fixed/ Provisional" Rates require a Contracting Agency approved audit of accounting records after each of the Contractor's or Subcontractor's fiscal years during which they perform work under the Agreement.

C7.5 Non-allowable Costs - Payments for the following items and certain other costs defined in 48 CFR Part 31 and related regulations are not allowable. Such costs shall not be included as billable Direct or Indirect Costs or in the calculation of the Indirect Cost Rate.

Interest and other financial costs
Contributions and donations
Federal income taxes & tax return preparation fees
Deferred state income taxes
Bad debts
Fines and penalties
Entertainment, social club memberships, etc.
Goodwill
Provisions for contingencies
Losses on other contracts and related legal fees
Legal fees, etc., related to contract claims

C7.6 Fee - Profit plus any costs not allocable to this contract. The amount of Fee may be fixed or variable, depending on the method of payment used. Non allocable costs shall not be considered by the Contracting Agency when negotiating Fee.

C8. Markup of any costs as compensation for administration, management or handling, etc., is prohibited. Costs of such efforts are included within the elements of Direct Labor and/or Indirect Labor. Compensation for any risk associated with incurring costs is included within Fee (Profit).

C9. The following Exhibits complete this Appendix C (Components of Appendix C - Compensation, shall stand and prevail in the following order: DOT&PF Form 25A280, Exhibit C-1, Exhibit C-2, et al, in the order of their number):

Edit the following choices to delete the inappropriate choice and then delete this instruction.

Choice #1, for a Fixed Price Contract of any amount or a Cost Reimbursement Contract <$250k, exhibits shall include the following:

Exhibit C-1 Method(s) of Payment
Exhibit C-2 NTP & Invoice Summary

OR

Choice #2, for a Cost Reimbursement Contract >$250k, exhibits shall include the following:

Exhibit C-1 Method(s) of Payment
Exhibit C-2 Cost Reimbursement Price Estimate
Exhibit C-3 Cost Reimbursement NTP & Billing Summary
Exhibit C-4 Cost Reimbursement Billing Detail Form

COMPENSATION
APPENDIX C *EXHIBIT C-1, METHOD(S) OF PAYMENT*

AKSAS Project No:
Federal Project No:
Date Prepared:

1. Payments will be made in accordance with Article A7 (Basic Agreement), Articles C1 - C9 (Appendix C), the following, and the applicable discussions of Methods of Payment presented below.

CONTRACTOR & SUBCONTRACTORS	SUBCONTRACTOR TO: (FIRM)	METHOD OF PAYMENT	ESTIMATED COST	FEE	ESTIMATED PRICE

Total Agreement Amount:

Note: If a Method of Payment is "Fixed Price", then the amount listed under "Estimated Price" is the Fixed Price.

2. ***FIXED PRICE(S)*** payments will be a single lump sum payment equal to the Fixed Price upon acceptable completion of this Agreement, or progress payments not to exceed the Fixed Price.

3. ***FIXED PRICE(S) PLUS EXPENSES*** payments will be as follows:

3.1 Payments of the ***FIXED PRICE*** will be a single lump sum payment equal to the Fixed Price upon acceptable completion of services, or progress payments not to exceed the Fixed Price(s).

3.2 Payments for Other Direct Costs ***(EXPENSES)*** will be made for actual substantiated costs not to exceed the total specified amount for expenses that are directly chargeable to and necessary for performance of the services assuming they are not recovered through the Indirect Cost Rate.

4. ***COST PLUS FIXED FEE*** payments will be made according to the following:

4.1 Payments for ***DIRECT COST OF DIRECT LABOR*** will be equivalent to the number of hours expended by each job classification multiplied by the applicable Direct Labor Rate. Job Classifications, Labor Hours and Direct Hourly Rates are estimated for this contract. Work shall be performed by the lowest paid qualified personnel. Further, when performing work for which they are over qualified, individuals will charge time at rates equivalent to skill levels commensurate with the work they perform. Contract payments will be based on the actual Direct Labor Rates paid to employees in any direct labor job classification who work on the contract, except that no Direct Hourly Rate shall exceed **$ PER HOUR** except for the following individuals whose rates are capped (fixed) as listed below for the duration of this Agreement:

FIRM	JOB CLASSIFICATION	PERSON'S NAME	DIRECT RATE ($/HR)

4.2 Payments for ***INDIRECT COSTS*** shall be equivalent to the amounts for Direct Cost of Direct Labor multiplied by the following applicable ***INDIRECT COST RATES (IDCR):***

CONTRACTOR/ SUBCONTRACTOR	IDCR (%)	IDCR TYPE (F, F/P, P)

4.2.1 IDCR with "F" is Fixed for the duration of this Agreement.

4.2.2 IDCR with "F/P" is Fixed for the last half of the firm's current fiscal year plus not to exceed six months of its next fiscal year, after which the IDCR becomes a Provisional Rate until an audit is completed and a Fixed IDCR is established for each successive twelve month interval.

4.2.3 IDCR with "P" is Provisional until completion of post performance audit to establish actual incurred rate which is used to establish a final IDCR for the period covered by the audit. Post performance audits may be done

after each fiscal year of a multi-year contract or once after completion of the contract. Audit findings and other rationale will be used to establish a final IDCR that appropriately allocates Indirect Costs to this Agreement for each fiscal year.

4.2.4 Revisions to any IDCR may be implemented only by a contract Amendment. Further, adjustment of any payments made based on Provisional IDCRs will not be done without a contract Amendment that fully explains the amount of the adjustments.

4.3 Payments for ***OTHER DIRECT COSTS*** (Expenses) will be made for actual substantiated costs which are directly chargeable to and necessary for performance of services assuming they are not recovered through the Indirect Cost Rate. "Markup" of Other Direct Costs is prohibited (reference paragraph C8).

4.4 If not defined elsewhere in this Appendix C, progress payments for a firm's (Contractor or any Subcontractor) ***FIXED FEE*** will be equivalent to the ratio of the firm's Direct Cost of Direct Labor to date, divided by the firm's total estimated Direct Cost of Direct Labor, multiplied by the total amount of the firm's Fixed Fee. The Fee amount for each firm participating in this Agreement was determined as follows:

5. ***TIME AND EXPENSES*** payments will be made according to the following:

5.1 Payments for ***TIME*** will be equivalent to the number of hours expended by each job classification multiplied by the applicable Billing Rate. Work will be performed by personnel with the lowest reasonable skill levels and hourly rates. Further, when performing work for which they are over qualified, individuals will charge time at rates equivalent to skill levels commensurate with the work they perform.

5.1.1 ***BILLING RATEs*** for persons who work on this contract shall be the sum of the person's actual Direct Labor Rate plus an allowance for Indirect Cost at the then current Agency approved Indirect Cost Rate for the person's employer (firm) plus a fee (profit) of ten percent; e.g.: $25 + (1.50 x $25) + (.10 x [$25+(1.50 x $25)] = $68.75, however, not to exceed **$ PER HOUR** except for the following individuals whose rates are capped (fixed) as listed below for the duration of this Agreement.

FIRM	JOB CLASSIFICATION	PERSON'S NAME	BILLING RATE ($/HR)

5.1.2 ***BILLING RATES*** are negotiated hourly labor rates which include compensation for all Costs (Direct Cost of Direct Labor and all Indirect Costs) plus Fee, except for allowable direct Expenses.

5.1.3 ***Time & Expenses Overtime*** shall be calculated at 1.5 times the base labor rate (DL & IDCR) and then the profit factor added.

5.2 Payments for Other Direct Costs ***(EXPENSES)*** will be made for actual substantiated costs that are directly chargeable to and necessary for performance of services assuming they are not recovered through the Indirect Cost Rate. "Markup" of Expenses is prohibited (reference paragraph C8).

6. ***SPECIAL CONSIDERATIONS:***
Items 6.1, 6.2, 6.3 and 6.4 are optional contingent upon travel being part of the contract. Edit as required.

6.1 Travelers are permitted actual costs, or an allowance, for lodging (as negotiated and detailed below) and an allowance for meal and incidental expenses (M&IE). Refer to AAM 60.250 for policies regarding travel.

6.2 Employees shall be considered in travel status from the time an authorized trip begins until it ends. An authorized trip is a trip approved in accordance with a NTP issued under the contract. The duty station of the employee is the city, town, or village, or within a 50-mile radius thereof, where the employee spends the majority of their working time.

6.3 M& IE allowances shall be limited to the State rate of $60.00 per day. The duration of the trip must be more than 12 hours in order for the traveler to be eligible for M & IE allowances. Additionally the traveler must be in travel status at least three consecutive hours during a meal period to be entitled to the M&IE for that meal.

6.4 If paying actuals for Lodging, Lodging shall be at the hotel's "government" rate (when applicable) and for single occupancy, not to exceed $300.00 per day. Lodging receipts are required.

NOTICE TO PROCEED & BILLING SUMMARY

NTP No:	
Agreement No:	
AKSAS Project No:	
Federal No:	
PSA Expiration Date:	

(This form is for any COST REIMBURSEMENT Agreement, generally one that will exceed $250,000.)

Contractor:

Project Title:

NOTICE TO PROCEED

Provide services for the Tasks Group(s) and specific Tasks enumerated below in the Billing Summary. Any services beyond the written scope and/or any costs above the price estimate for ***each Task Group*** in our Agreement, require prior Agency approval and a contract Amendment. Actual cost underrun of Contract Amount for any Task Group shall not routinely accumulate for other Groups. The Contracting Agency reserves the right to retain or reallocate any remaining funds resulting from such cost underruns.

This NTP is cumulative and it supersedes all prior NTPs for this Agreement.

The Agency Contract Manager for this NTP is: Tel Nos (voice/fax):

Issued for the Contracting Agency per ADOT&PF Policy #01.01.050 by:	Accepted for the Contractor by:
Signature Date Name:	Signature Date Name:

BILLING SUMMARY

This Invoice is for **[ ]** Progress OR **[ ]** Final Payment. ***Sequential Invoice # for this Agreement is:*** **[ ].**

Total Contract Amounts	Authorized Task Groups and Tasks Number(s)	Authorized To - Date	Prior Aprv'd Payments	This Billing	Total To - Date
	A, Tasks No(s):				
	B, Tasks No(s):				
	C, Tasks No(s):				
	D, Tasks No(s):				
	Total Authorized Amount for All Groups				
	Sum of Prior APPROVED Payments				
	Sum for THIS INVOICE				
	Sum of Prior Payments and this Invoice				
	Balance of Authorized Amount				

Collocation Code Program Code Ledger Code Account Code	PAYMENT REQUEST (Contractor): Signature Date Name:

APPROVAL FOR PAYMENT

PAYMENT RECOMMENDED: I certify this Invoice to be valid and accurate and that services were performed substantially in conformance with the contract requirements and schedule.	PAYMENT APPROVED: Based upon the Contract Manager's recommendation and certification, I hereby approve payment.
Signature Date Name:	Signature Date Name:

INSTRUCTIONS TO CONTRACTOR
for
COST REIMBURSEMENT NOTICE TO PROCEED (NTP)
& BILLING SUMMARY

1. ***RETAIN AN UNMARKED***, as issued, ***COPY OF THIS FORM*** to be used for reproduction and billing.

2. If this NTP is unacceptable, notify the Contracting Agency immediately. If acceptable, acknowledge by signature where indicated *on a copy* of this NTP and return it within ten days after your receipt.

3. Submit monthly Invoices to the Agency Contract Manager named in this NTP. **Provide a copy of page one of this form as the FACE PAGE of each invoice submitted and with the following entries accurately completed:**

    a) Indicate if the Invoice is for Progress or Final Payment and show the Sequential Invoice Number for this NTP.

    b) Entries in the following columns: Prior Aprv'd Payments, This Billing, and Total to Date for each Task Group; plus the SUM TOTALS for: Authorized To - Date, Prior APPROVED Payments, THIS INVOICE, Prior Payments plus this Invoice, and Balance of Authorized Amount.

Note "Prior APPROVED Payments" amounts may NOT be the same as the total of all your prior invoices if some items were disallowed or adjustments were made. If a prior billing has not been acknowledged with any payment, or a different amount from your billing was paid without notification to you of the reason(s), attach a request for an explanation and remedial action.

4. Sign, date and enter printed or typed name under "PAYMENT REQUEST (Contractor)" thereby attesting to the following:

    "By signature on this form, the Contractor certifies entries to be true and correct for the services performed to date under or by virtue of said Agreement and in accordance with AS 36.30.400. The Contractor further certifies that all applicable Federal, State and Local taxes incurred by the Contractor in the performance of the services have been paid and that all Subcontractors engaged by the Contractor for the services included in any invoice shall be fully compensated by the Contractor for such services."

5. **ATTACH A CURRENT COPY OF EXHIBIT C-4, COST REIMBURSEMENT BILLING DETAIL FORM (from Appendix C of the Agreement) to each invoice. Internally check the form and correct mathematical extensions. The Contracting Agency may return erroneous invoices for correction before processing for payment.**

6. Substantiate all charges in each billing, other than for Fixed Prices or Fixed Fees, by attaching a summary of hours expended and hourly labor rate per employee; summary of units completed; subcontractor invoices; expense receipts, etc.; or other proof of expenditures.

7. ***Prime Contractor's Labor and Indirect Cost shall be billed to the Contracting Agency within 45 days of performance. Subcontractors' Labor and Indirect Cost shall be billed to the Contracting Agency within 60 days of performance. All of the Contractor's and Subcontractors' Other Direct Costs (Expenses) shall be billed to the Contracting Agency within 90 days of being incurred. Charges submitted after the above stated times will, at the Contracting Agency's discretion, not be paid.***

8. When each NTP is approximately 75% complete, the Contractor shall determine if the Authorized Amount(s) might be exceeded; and, if so, shall provide an estimate of cost to complete. The Contracting Agency will determine after discussion with the Contractor if additional cost is reasonable and does not include costs that should be absorbed by the Contractor. If additional cost is validated, a negotiated Amendment will be executed which either (1) reduces the scope of services/work products required commensurate with the Authorized Amount(s), or (2) increases the Authorized Amount(s) to that required for completion of the original contract scope.

INDEMNIFICATION AND INSURANCE
Appendix D in Professional Services Agreements

AKSAS Project No:
Federal Project No:
Date Prepared:

CONTRACTOR shall include the provisions of this form in all subcontracts which exceed $25,000 and shall ensure Subcontractor's compliance with such provisions.

ARTICLE D1
INDEMNIFICATION

D1.1 The CONTRACTOR shall indemnify, hold harmless, and defend the CONTRACTING AGENCY from and against any claim of, or liability for negligent acts, errors or omissions of the CONTRACTOR under this Agreement. The CONTRACTOR shall not be required to indemnify the CONTRACTING AGENCY for a claim of, or liability for, the independent negligence of the CONTRACTING AGENCY. If there is a claim of, or liability for, the joint negligent error or omission of the CONTRACTOR and the independent negligence of the CONTRACTING AGENCY, the indemnification and hold harmless obligation shall be apportioned on a comparative fault basis. "CONTRACTOR" and "CONTRACTING AGENCY", as used within this article, include the employees, agents and other contractors who are directly responsible, respectively, to each. The term "Independent Negligence" is negligence other than in the CONTRACTING AGENCY's selection, administration, monitoring, or controlling of the CONTRACTOR and in approving or accepting the CONTRACTOR's Work.

D1.2 The CONTRACTOR shall exercise that degree of skill, care and judgment commensurate with the professional standards for the services of a similar nature. When such standards are in dispute, they shall be established by a panel of three qualified, impartial professionals objectively selected and appointed by the Appeals Officer.

D1.3 The CONTRACTOR shall correct, through re-performance at its expense, any services which are deficient or defective because of the CONTRACTOR's failure to perform said services in accordance with professional standards, provided the CONTRACTING AGENCY has notified the CONTRACTOR in writing within a reasonable time, not to exceed 60 days, of the discovery of any such deficiency during the performance of the services and within 12 months of the date of final payment under this Agreement.

ARTICLE D2
INSURANCE

D2.1 Without limiting the CONTRACTOR's indemnification, it is agreed that CONTRACTOR shall purchase at its own expense and maintain in force at all times for the duration of this Agreement, plus one year following the date of final payment, the following policies of insurance. Where specific limits are shown, it is understood that they shall be the minimum acceptable limits. If the CONTRACTOR's policy contains higher limits, the CONTRACTING AGENCY shall be entitled to coverage to the extent of such higher limits. Certificates of insurance must be furnished to the CONTRACTING AGENCY and incorporated into this Agreement with copies attached to this document. Certificates must provide for the CONTRACTING AGENCY to receive notice of any policy cancellation or reduction per AS 21.36 Sections 210-310. Failure to furnish certificates of insurance or lapse of the policy is a material breach and grounds for termination of the CONTRACTOR's services and may preclude other Agreements between the CONTRACTOR and the CONTRACTING AGENCY.

D2.1.1 Worker's Compensation Insurance: The CONTRACTOR shall provide and maintain, for all employees engaged in work under this Agreement, coverage as required by AS 23.30.045, and; where applicable, any other statutory obligations including but not limited to Federal USL&H and Jones Act requirements. The policy(s) must waive subrogation against the State of Alaska.

D2.1.2 Commercial General Liability Insurance: Such policy shall have ***minimum*** coverage limits of $300,000 combined single limit per occurrence, covering all business premises and operations used by the Contractor in the performance of services under this agreement. The policy shall be written on an "occurrence" form and shall not be written as a "claims-made" form unless specifically reviewed and agreed to by the CONTRACTING AGENCY.

D2.1.3 Comprehensive Automobile Liability Insurance: Such policy shall have ***minimum*** coverage of $300,000 combined single limit per occurrence covering all vehicles used by the Contractor in the performance of services under this agreement.

D2.1.4 Professional Liability (E&O) Insurance: Covering all negligent errors or omissions, and negligent acts, which the CONTRACTOR, Subcontractor or anyone directly or indirectly employed by them, make in the performance of this Agreement which result in financial loss to the State of Alaska. Limits required are per the following schedule:

MINIMUM LIMITS OF E&O INSURANCE

Contract Amount	Combined Single Limit, Per Occurrence & Annual Aggregate
Under $25,000	As Available
$25,000 to $100,000	$300,000
$100,000 to $499,999	$500,000
$500,000 to $999,000	$1,000,000
$1,000,000 and over	Negotiable

D2.1.5 Professional Liability Insurance required for this Agreement is $ _____

ARTICLE D3
MODIFICATION OF INSURANCE REQUIREMENTS

(Article D3 is completed only when some of the standard insurance coverages are not applicable.)

CONTRACTOR RELATED MODIFICATIONS

D3.1 ☐ **Workers Compensation Insurance** is not required because the CONTRACTOR is an Independent Contractor, Sole Proprietor or Self-Employed Person having no employees in any sense of AS 23.30.045.

D3.2 ☐ **Comprehensive or Commercial General Liability Insurance** is not required because the general public and clients do not have any business access to a place of business or home office maintained by the CONTRACTOR.

D3.3 ☐ **Comprehensive Automobile Liability Insurance** is not required because only public transportation, or a rented passenger vehicle with business use insurance, will be used to accomplish requirements of this Agreement.

PROJECT RELATED MODIFICATIONS FOR E&O COVERAGE

When services may apply to fire, life safety or structural aspects and/or wherever the services should safeguard life, limb, health or property, Professional Liability Insurance shall be required.

(E&O Coverage may be waived only if it was specifically not required within the solicitation for proposals.)

D3.4 ☐ **Professional Liability (E&O) Insurance** is not required because: 1) the CONTRACTING AGENCY's use of the services or Work products obtained from the CONTRACTOR will not result in significant exposure to any third party claims for loss or damage; and 2), the CONTRACTOR services will not apply to any construction, alteration, demolition, repair or direct use of any highway, airport, harbor, building or other structure.

D3.5 ☐ **Professional Liability (E&O) Insurance** is not required because this Agreement is for one of the following applicable (*checked*) services for which E&O coverage is not needed:

- ☐ Right-of-Way Fee Appraisals
- ☐ Photogrammetric Mapping Services
- ☐ Architectural/Engineering review of Construction Bid Documents wherein design responsibility clearly remains with the designer of record.

OTHER BASIS FOR MODIFICATIONS

(Requires written concurrence from Division of Risk Management)

D3.6 ☐ Attached Exhibit D-1 identifies and provides justification for insurance modifications.

Above *checked* modifications of the insurance requirements specified in Article D2 are hereby approved:

CONTRACTING OFFICER Signature: _____ Date: _____
Name:
Title:

CERTIFICATION OF COMPLIANCE
APPENDIX E

AKSAS Project No:
Federal Project No:
Date Prepared:

ALASKA LICENSES/REGISTRATIONS AND INSURANCE

Contractor and all Subcontractors shall comply with the following applicable requirements of Alaska Statutes:

1. For Procurements over the Small Procurement Limits, **Alaska Business License** (Form 08-070 issued under AS 43.70) at the time designated for award as required by AS 36.30.210(e) for Contractor and all Subcontractors.

2. **Certificate of Registration** for each individual to be in "responsible charge" (AS 08.48.341(14)) for Architecture, Engineering or Land Surveying (Form 08-2407 issued under AS 08.48.211) issued prior to submittal of proposal. Associates, consultants, or specialists under the supervision of a registered individual in "responsible charge" are exempt from registration requirements (AS 08.48.331).

3. **Certificate of Incorporation (Alaska firms) or Certificate of Authorization** for Foreign Firm ("Out-of-State" firms). All corporations, regardless of type of services provided, must have one of the certificates (AS 10.06.218 and other sections of Title 10.06 - Alaska Corporations Code).

4. **Current Board of Director's Resolution** for incorporated Contractors and incorporated Subcontractors for Architecture, Engineering or Land Surveying (reference AS 08.48.241) which names the person(s) designated in "responsible charge" for each discipline. Such persons shall be licensed in Alaska and shall participate as project staff in the Contract/Subcontracts.

5. **Corporations, limited liability companies, and limited liability partnerships** shall have a valid Certificate of Authorization under 08.48.241 prior to award.

6. **All partners** in a Partnership to provide Architectural, Engineering, or Land Surveying **must be legally registered in Alaska** prior to submittal of proposal for at least one of those disciplines (AS 08.48.251) which the Partnership offers.

7. **Joint Ventures**, regardless of type of services provided, must be licensed/registered in the legal name of the Joint Venture as used in this proposal (AS 43.70.020 and 43.70.110(4)).

Contractor will ensure that it and all Subcontractors have insurance coverage to effectuate the requirements of Appendix D, "Indemnification and Insurance", DOT&PF Form 25A269, as prepared for this Agreement.

I certify that I am a duly authorized representative of the Contractor and that the above requirements for Alaska Licenses, Registrations and Insurance will be complied with in full. This certification is a material representation of fact upon which reliance will be placed if the proposed contract is awarded.

Signature Date
Name ..... :
Title ..... :

[For information about licensing, Offerors may contact the Alaska Department of Commerce and Economic Development, Division of Occupational Licensing at P.O. Box 110806, Juneau, AK 99811-0806, or at Telephone (907) 465-2550, or at Internet address: http://www.dced.state.ak.us/occ/home.htm.]