BRADLEY LAKE HYDROELECTRIC PROJECT
SOLDOTNA STATIC VAR COMPENSATION SYSTEM
OPERATION AND MAINTENANCE AGREEMENT

Between

ALASKA ELECTRIC AND ENERGY COOPERATIVE, INC.

AND

ALASKA ENERGY AUTHORITY

January 1, 2018
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Definitions</td>
<td>2</td>
</tr>
<tr>
<td>2.</td>
<td>Effective Date, Term, and Termination</td>
<td>4</td>
</tr>
<tr>
<td>3.</td>
<td>General Provisions and Incorporation of Exhibit A of the Master</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Maintenance and Operation Agreement</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Operational Requirements</td>
<td>5</td>
</tr>
<tr>
<td>5.</td>
<td>Operation and Maintenance Plan, Schedule and Budgets</td>
<td>5</td>
</tr>
<tr>
<td>6.</td>
<td>Payment</td>
<td>7</td>
</tr>
<tr>
<td>7.</td>
<td>Emergency Expenditures</td>
<td>7</td>
</tr>
<tr>
<td>8.</td>
<td>Extraordinary Maintenance and Equipment Replacement</td>
<td>8</td>
</tr>
<tr>
<td>9.</td>
<td>Modifications and Additions</td>
<td>8</td>
</tr>
<tr>
<td>10.</td>
<td>Authorized Representative</td>
<td>8</td>
</tr>
<tr>
<td>11.</td>
<td>Access to Facilities</td>
<td>8</td>
</tr>
<tr>
<td>12.</td>
<td>Force Majeure</td>
<td>9</td>
</tr>
<tr>
<td>13.</td>
<td>Dispute Resolution</td>
<td>10</td>
</tr>
<tr>
<td>14.</td>
<td>Notices</td>
<td>10</td>
</tr>
<tr>
<td>15.</td>
<td>Third Party Beneficiaries</td>
<td>10</td>
</tr>
<tr>
<td>16.</td>
<td>Indemnity and Loss</td>
<td>10</td>
</tr>
<tr>
<td>Ex. 1</td>
<td>Communications Circuits to Soldotna Network Topology</td>
<td>13</td>
</tr>
</tbody>
</table>
This Static Var Compensation System Operation and Maintenance Agreement for the Bradley Lake Hydroelectric Project ("Agreement"), is dated effective as of the first day of January, 2018, by and between ALASKA ENERGY AUTHORITY, a public corporation of the State of Alaska ("Authority"), and ALASKA ELECTRIC AND ENERGY COOPERATIVE, INC., ("AEEC"), a non-profit electric cooperative membership corporation of the State of Alaska.

RECITALS

1. The Power Sales Agreement governing the sales of energy from the Bradley Lake Hydroelectric Project provides that the Bradley Lake Project Management Committee ("BPMC") shall arrange for the operation and maintenance of the Bradley Lake Hydroelectric Project and Project-related facilities ("Project");

2. The BPMC is authorized, under its Bylaws adopted pursuant to the terms of the Power Sales Agreement, to approve agreements for the operation and maintenance of the Project;

3. The BPMC has arranged for and authorized Chugach Electric Association, Inc. ("CEA") to perform dispatch services for the Project.

4. The Static VAR Compensation System ("Soldotna SVS") directly connects to AEEC’s Soldotna Substation and is a Project-related facility dispatched by the Project Dispatcher;

5. The BPMC and the Authority entered into the Bradley Lake Hydroelectric Project Master Maintenance and Operation Agreement on May 24, 1994 ("Master Maintenance and Operation Agreement"), to, among other things, establish a contract administration and budgeting procedure for contracting for the maintenance and operation of the Project and related services, facilities, and equipment;

6. The Authority, before executing a contract or contract amendment for operation or maintenance of the Project, must submit the contract or amendment to the BPMC for its review and approval pursuant to the Master Maintenance and Operation Agreement;
7. Pursuant to BPMC approval, the Authority and CEA also entered into the Bradley Lake Hydroelectric Project Static VAR Compensation System Operation and Maintenance Agreement dated August 20, 1996 ("1996 O&M Agreement");

8. The 1996 O&M Agreement by its terms automatically terminates as to the Soldotna SVS upon the termination or expiration of an Agreement for Lease of Facilities dated September 25, 1985, between CEA and Homer Electric Association, Inc. ("Lease");

9. The Lease has terminated, but the Authority and CEA, with AEEC's consent, have extended the term of the 1996 O&M Agreement as to the Soldotna SVS for an additional period of time;

10. AEEC owns and operates electric transmission facilities and is engaged in the transmission, purchase, and sale of electric power and energy;

11. AEEC agrees to be the Field SVS Operator and perform Field SVS Operations and Maintenance for the benefit of the Project;

12. The Authority, the BPMC, and AEEC desire a contract be entered for AEEC to perform Field SVS Operations and maintain the Soldotna SVS;

13. Pursuant to the Power Sales Agreement, the BPMC has approved the terms of this Agreement.

AGREEMENT

NOW THEREFORE, in consideration of the mutual covenants herein contained the Parties hereto agree as follows:

SECTION 1 - DEFINITIONS

The terms used in this Agreement shall be as defined in the Power Sales Agreement, except as specified below. For the purposes of this Agreement, the following definitions and abbreviations apply:

A. "AEEC" means the Alaska Electric and Energy Cooperative, Inc.

B. "Agreement" means this Agreement.

C. "Annual Soldotna SVS Facilities Budget" shall have the meaning set forth in Section 5.B. of this Agreement.

D. "Authority" means the Alaska Energy Authority or any successor agency.

E. "BPMC" means the Bradley Lake Project Management Committee.
F. “Construction” has the meaning given in AS 36.90.300(c).

G. “Effective Date” means at 12:00 a.m. on January 1, 2018.

H. “Emergency” means an unforeseen circumstance or the resulting state that requires immediate action to protect or preserve the Soldotna SVS, SVS Field Operator personnel, public health and safety, or operation of the interconnected electric utility system.

I. “Fiscal Year” means July first (1\textsuperscript{st}) to June thirtieth (30\textsuperscript{th}) of each year.


K. "Party" or "Parties" means the signatories to this Agreement.

L. "Power Sales Agreement" means the Agreement For The Sale And Purchase of Electric Power, dated December 8, 1987, by and among the Alaska Power Authority and the Chugach Electric Association, Inc., the Golden Valley Electric Association, Inc., the Municipality of Anchorage (d.b.a. Municipal Light and Power), the City of Seward (d.b.a. Seward Electric System) and ; the Alaska Electric Generation and Transmission Cooperative, Inc. and the Homer Electric Association, Inc. and the Matanuska Electric Association, Inc.

M. “Professional Services” has the meaning given in AS 36.30.990.

N. “Project” means the Bradley Lake Hydroelectric Project and Project-related facilities.

O. "Soldotna SVS" means the Project’s Static VAR Compensation System located adjacent to the Soldotna Substation and related Project-owned equipment located within the Soldotna Substation, including the power system recorder.

P. "Soldotna Substation" means AEEC’s substation at Soldotna, Alaska.

Q. "SVS Field Operator" means AEEC.

R. “Field SVS Operations and Maintenance” means operation maintenance of the Soldotna SVS excluding Remote SVS Operations, and includes operations performed at the Soldotna SVS site such as high voltage switching, establishment of working clearances, and Soldotna SVS local equipment troubleshooting performed by the SVS Field Operator.

S. The “Project Dispatcher” or “Dispatcher” means the entity the BPMC has arranged for and authorized to perform dispatch services for the Project.
T. “Remote SVS Operations” means power system operations performed by the Project Dispatcher to facilitate the transfer of Project energy and capacity (e.g., establishing and changing voltage setpoints, slope settings, and data acquisition for power system level analysis and troubleshooting, etc.).

U. "SVS" means a Static VAR Compensation System.

SECTION 2 - EFFECTIVE DATE, TERM, AND TERMINATION

A. Effective Date and Term of Agreement.

This Agreement shall become effective on the Effective Date and shall continue in effect until terminated as provided in Section 2.B. of this Agreement.

B. Termination of Agreement.

1. This Agreement may be terminated under the following conditions:
   a. In the event of a material breach of this Agreement by a Party, the other Party shall give the breaching Party written notice of the breach and an opportunity to cure the breach within a reasonable time considering the circumstances of the breach. In the event the breach is not cured within a reasonable time, the non-breaching Party, except as provided in Section 2.B.2. of this Agreement, may terminate its obligations, duties and all rights it has under this Agreement. Any dispute as to a reasonable time to cure the breach shall be adjudicated by the BPMC.
   
   b. By the SVS Field Operator delivering written notice to the Authority and BPMC as provided in Section 5.B.3. of this Agreement.
   
   c. By either Party with notice of termination given two years in advance of date of termination.

2. In the event this Agreement is terminated, the Authority, or its contractors, shall have the right to enter upon the Soldotna Substation facilities to operate and maintain the Soldotna SVS. Upon termination of this Agreement, the SVS Field Operator shall release all relevant records to the Authority.

3. All liabilities accruing under this Agreement prior to its termination shall be and are hereby preserved until satisfied and the rights of the Authority under Section 2.B.2 shall continue.
SECTION 3 - GENERAL PROVISIONS AND INCORPORATION OF EXHIBIT A OF THE MASTER OPERATING AGREEMENT

This Agreement is subject to the terms of the Master Maintenance and Operating Agreement. Except for paragraphs (h) Indemnity, (o) Notice and Communications and (t) Third Party Beneficiaries, the provisions of Exhibit A, Master Contract Provisions of the Master Maintenance and Operating Agreement are expressly incorporated in this Agreement. Paragraphs (h), (o) and (t) of the Master Maintenance and Operating Agreement are modified and included as Sections 14, 15, and 16 of this Agreement.

Nothing in this Agreement is intended to alter the rights and obligations of the Authority and the Purchaser(s) under the Power Sales Agreement. In the event the terms of this Agreement and the Power Sales Agreement or Master Maintenance and Operating Agreement are found to be in conflict, the terms of the Power Sales Agreement shall have first priority with the Master Maintenance and Operating Agreement having second priority. The provisions of this Agreement are not intended, nor shall they be construed, to alter or modify any previous contracts or agreements of any Party or preclude any Party from performing existing obligations.

In their performance of this Agreement, the Parties will comply with the terms and provisions of the Power Sales Agreement.

SECTION 4 - OPERATIONAL REQUIREMENTS

A. Systems Operation.

    AEEC agrees to operate its electric utility system in accordance with the provisions of Section 10(c) of the Power Sales Agreement.

B. Soldotna SVS Operation and Maintenance.

    In accordance with the provisions of this Agreement, the SVS Field Operator shall be responsible for the Field SVS Operations and Maintenance of the Soldotna SVS on behalf of the BPMC and the Authority and for coordination with the Project Dispatcher to provide increased transfer capacity resulting from operation of the Soldotna SVS for the Purchasers in proportion to their Project shares.

SECTION 5 - OPERATION AND MAINTENANCE PLAN, SCHEDULE AND BUDGETS

A. Maintenance Plan and Schedule Requirements.

    1. The SVS Field Operator shall develop annually and submit to the BPMC a plan and schedule for operation and maintenance of the Soldotna SVS facilities. This plan and schedule shall be used for planning and tracking maintenance activities and as the basis and support for budget submittals.
2. The plan and schedule shall function on a Fiscal Year basis.

B. Annual SVS Facilities Budget.

1. After the Effective Date, and in accordance with schedules provided by the Authority, the SVS Field Operator shall prepare and submit each year to the Authority and to the BPMC a draft Annual Soldotna SVS Facilities Budget for the following Fiscal Year as provided in Section 5.D. of this Agreement. The draft budget shall be prepared in a format and schedule provided to the Authority by the BPMC.

2. The draft Annual Soldotna SVS Facilities Budget shall be based upon the anticipated operation and maintenance expenditure needs and reflect appropriate accounting and budgetary principles for utilities.

3. The SVS Field Operator shall perform its duties in a manner consistent with the Annual Soldotna SVS Facilities Budget except as provided in Sections 7 and 8 below. If the SVS Field Operator makes a determination during any Fiscal Year that it cannot perform its obligations under this Agreement without an increase in the expenditures authorized under the Annual Project Budget, the SVS Field Operator shall timely report such finding to the Authority and the BPMC and shall submit a revised budget with explanations and analyses where appropriate for the Authority's and the BPMC's review and approval. In the event the revised budget is not adopted by the BPMC and the Authority, or in the event the Authority, pursuant to Section 13(e) of the Power Sales Agreement does not authorize and agree to fund such expenditures, and the SVS Field Operator determines that it cannot perform its obligations under this Agreement, the SVS Field Operator may terminate this Agreement upon 90 days written notice to the Authority and the BPMC.

C. Three-Year Major Maintenance and Improvements Plan and Budget.

Annually the SVS Field Operator shall prepare and submit a three-year plan and budget for proposed major maintenance and improvements, (e.g., major equipment replacement) and other projects deemed by the SVS Field Operator to be required to insure continued safe and economical operation of the Soldotna SVS that are not included in the proposed annual maintenance plan for that Fiscal Year or require more than one year to complete. The three-year plan shall be revised annually and submitted together with the proposed annual maintenance plan that is part of the Annual Soldotna SVS Facilities Budget.
D. **Budget and Plan Submittal.**

The SVS Field Operator shall submit the annual maintenance plan, schedule, and budget, and the three-year plan and budget to the Authority and the BPMC no later than February 1 for the next Fiscal Year. The plans, schedules, and budgets may be modified through negotiations between the SVS Field Operator and the Authority, subject to approval by BPMC.

**SECTION 6 - PAYMENT**

A. The SVS Field Operator shall advance the ordinary costs of performing under this Agreement, including station service costs, and submit such costs for reimbursement by the Authority per Section 6.B. of this Agreement.

B. The SVS Field Operator shall prepare an invoice each month identifying the actual and reasonable costs incurred in a format mutually agreeable to the Authority and the SVS Field Operator. The invoice shall be furnished to the Authority by the twenty-first (21st) of the month following the month in which the costs are incurred. All such invoices shall be subject to audit and approval by the Authority; such approval shall not be unreasonably be withheld.

C. Subject to the availability of funds, the Authority shall reimburse the SVS Field Operator for all costs reasonably incurred, properly invoiced, and approved under this Agreement.

D. An appropriate invoice properly submitted to the Authority under Section 6.B. of this Agreement shall be due within thirty (30) days of receipt. Any amount not paid when due shall accrue simple interest at the legal rate of interest beginning at the time payment was due.

E. The Authority shall authorize payment for the full amount of the SVS Field Operator charges pending the resolution of any cost dispute, except for those costs expressly disapproved in writing. Within thirty (30) days after the SVS Field Operator submits a charge, the Authority shall notify the SVS Field Operator in writing of the amount of the charge in dispute and the basis for the dispute. If the Parties cannot settle the dispute informally, the dispute shall be submitted to the BPMC for resolution. In the event a resolution of the dispute through the BPMC fails, either Party may file an action in the Alaska Superior Court for the Third Judicial District to obtain a decision resolving such dispute and to obtain any other remedy permitted by law. Pending final resolution of any such dispute the Parties shall continue to perform under this Agreement.

**SECTION 7 - EMERGENCY EXPENDITURES**

The SVS Field Operator shall take such actions as it reasonably believes are necessary
in an Emergency. If in the reasonable judgment of the SVS Field Operator, the Emergency requires the SVS Field Operator to incur costs prior to obtaining written approval from the Authority, the SVS Field Operator shall declare an Emergency and notify the Authority and the BPMC within seventy-two (72) hours after discovery and declaration of the Emergency.

SECTION 8 - EXTRAORDINARY MAINTENANCE AND EQUIPMENT REPLACEMENT

When the SVS Field Operator learns of an equipment failure or other contingency that, in the SVS Field Operator's judgment, necessitates incurring an extraordinary maintenance and equipment replacement cost, the SVS Field Operator shall promptly notify the Authority and the BPMC of the circumstances. Except as provided in Section 7 of this Agreement, the SVS Field Operator shall obtain the Authority's written approval prior to incurring an extraordinary maintenance and equipment replacement cost. Except in an Emergency, the SVS Field Operator shall incur no extraordinary maintenance and equipment replacement cost for which the approval of the Authority has been requested and expressly denied in writing.

SECTION 9 - MODIFICATIONS AND ADDITIONS

Except in an Emergency, no modifications or additions shall be made to the Soldotna SVS without the prior written approval of the BPMC.

SECTION 10 - AUTHORIZED REPRESENTATIVE

The Parties shall each designate one representative to carry out the provisions of this Agreement. Within thirty (30) days after execution of this Agreement, each Party shall notify the other Party in writing of its designated representative. Any Party may change its representative at any time and shall promptly provide written notice of such change to the other Party.

SECTION 11 - ACCESS TO FACILITIES

A. Authority and BPMC personnel or agents shall be granted reasonable access to the Soldotna SVS, including those facilities located within the Soldotna Substation, upon reasonable notice and subject to all safety and security measures, if and to the extent necessary for Soldotna SVS inspection and testing.

B. Project Dispatcher personnel or agents shall be granted reasonable access to the Soldotna SVS to enable Project Dispatcher to maintain SCADA term servers, firewall equipment, engineering access to the Soldotna SVS, related Soldotna SVS system recorders, communications circuits and associated communication network equipment as shown in area outlined in a cloud on drawing identified as COMM-SY-0040 (Sheet 2 of 2) titled “COMMUNICATIONS CIRCUITS TO SOLDOTNA NETWORK TOPOLOGY” attached hereto as Exhibit 1. Note: The
drawings contained in Sheet Nos. 1 of 2 and 2 of 2 constituting the drawing identified as COMM-SY-0040 are provided for explanatory purposes by CEA, the current Project Dispatcher.

SECTION 12 - FORCE MAJEURE

A. No Party to the Agreement shall be liable to the other Party for, or be in breach of or default under this Agreement because of, any delay in performance or any delay or failure to deliver, receive or accept delivery of energy due to any of the following events:

1. Any cause or condition beyond such Party's reasonable control which such Party is unable to overcome by the exercise of reasonable diligence, including but not limited to: fire, flood, earthquake, volcanic activity, wind, drought and other acts of the elements; court order and act of civil, military or governmental authority; riot, insurrection, sabotage and war; breakdown of or damage to facilities or equipment; electrical disturbance originating in or transmitted through such Party's electric system or any electric system with which such Party's system is interconnected; and, any act or omission of any person or entity other than such Party, or Party's contractors or suppliers of any type or anyone acting on behalf of such Party. Strikes, lockouts, and other labor disturbances shall be considered Force Majeure events and nothing in this Agreement shall require either Party to settle a labor dispute against its best judgment; provided, that during any labor dispute each Party shall make all reasonable efforts under the circumstances, including, to the extent permitted by law and collective bargaining agreements, the use of replacement personnel and or management personnel and/or other personnel under the provisions of a mutual aid agreement to ensure, if possible, the continued ability of the Parties to carry out their obligations under this Agreement; or

2. Any action taken by such Party which is reasonably necessary or prudent to protect the operation, performance, integrity, reliability or stability of the Project or of such Party's electric system or any electric system with which such Party's electric system is interconnected, whether such actions occur automatically or manually.

B. In the event of any delay excused under this section, the time for performance thereby delayed shall be extended by a period of time reasonably necessary to compensate for such delay. No cost adjustment shall be allowed, only time extensions as appropriate. Nothing contained in this paragraph shall require any Party to settle any strike, lockout or other labor dispute. Each Party shall give the other Party prompt written notice of any delay which the Party giving notice considers to be an excusable delay of its performance.
SECTION 13 - DISPUTE RESOLUTION

Pending resolution of a disputed matter, the Parties shall continue performance of their respective obligations pursuant to this Agreement. If the Parties cannot reach a timely, mutual agreement on any matter in the administration of this Agreement, the SVS Field Operator shall, to the extent necessary for its continued performance, make a determination of such matter without prejudice to the rights of the other Party. Such determination shall not constitute a waiver of any other remedy belonging to any Party.

SECTION 14 - NOTICES

Notices shall be addressed as follows: Executive Director, Alaska Energy Authority, 813 West Northern Lights Boulevard, Anchorage, Alaska 99503. Notices to AEEC will be addressed to: General Manager, Alaska Electric and Energy Cooperative, Inc., 3977 Lake Street, Homer Alaska 99603. A Party may change the foregoing designations of its name or address to which notices or demands are to be directed at any time by written notice given to the other Party.

Any notice or request not otherwise provided for in this Agreement shall be given in such manner as the Parties agree.

SECTION 15 – THIRD-PARTY BENEFICIARIES

This Agreement gives no rights or benefits to anyone other than the Parties, AEEC and the Authority, and the BPMC as a third-party beneficiary. The BPMC is the only third-party beneficiary. In any action by the BPMC for damages, AEEC shall have the right to assert against the BPMC any defense which it could have asserted against the Authority. The raising of any such defense by AEEC shall not affect any right of a Purchaser or the BPMC under the Master Maintenance and Operating Agreement or Power Sales Agreement.

SECTION 16 - INDEMNITY AND LOSS

A. Indemnity.

The SVS Field Operator shall indemnify, defend, and hold the Authority harmless from and against any claim of, or liability for, negligent acts, errors, and omissions of the SVS Field Operator with respect to any Construction-related Professional Services provided by the SVS Field Operator under this Agreement. The SVS Field Operator is not required to indemnify, defend, or hold harmless the Authority for a claim of, or liability for, the independent negligent acts, errors, and omissions of the Authority or third-parties. If there is a claim of, or liability for, a joint negligent act, error, or omission of the SVS Field Operator and Authority, the indemnification, defense, and hold harmless obligation of this provision shall be apportioned on a
comparative fault basis. In this provision, "independent negligent acts, errors, and omissions" means negligence other than in the Authority's selection, administration, monitoring, or controlling of the SVS Field Operator, or in approving or accepting the SVS Field Operator's work.

B. **Uninsured Loss.**

The costs of any loss or damage to or arising out of the SVS Field Operator’s performance hereunder not covered by insurance, including uninsured deductibles and indemnity (including the SVS Field Operator's indemnity under Section 16.A, above), shall be included in the Annual Soldotna SVS Facilities Budget as an operating cost unless and to the extent caused by the willful act or gross negligence of the SVS Field Operator. The Operator shall be responsible for paying any such costs if and to the extent the loss or damage is determined to be caused by or arises out of the Operator's willful act or gross negligence. For the avoidance of doubt, the Operator acknowledges its responsibility, as a Participant, to pay its Percentage share of Annual Project Costs, including its Percentage Share of all amounts included in the Annual Soldotna SVS Facilities Budget.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed by their authorized officers or representatives as of the day and year first above written.

ALASKA ENERGY AUTHORITY

By: [Signature]
Janet Reiser
Executive Director

ALASKA ELECTRIC AND ENERGY COOPERATIVE, INC.

By: [Signature]
Bradley P. Janorschke
General Manager
STATE OF ALASKA     ) ss.
THIRD JUDICIAL DISTRICT     )

The foregoing Agreement was acknowledged before me this 6th day of March, 2018, by Janet Reiser, the Executive Director of the Alaska Energy Authority, an Alaska corporation, on behalf of the corporation.

__________________________
Webster
Notary Public in and for Alaska
My commission expires:

STATE OF ALASKA     ) ss.
THIRD JUDICIAL DISTRICT     )

The foregoing Agreement was acknowledged before me this 5th day of March, 2018, by Bradley P. Janorschke, the General Manager of the Alaska Electric and Energy Cooperative, Inc., an Alaska corporation, on behalf of the corporation.

__________________________
Webster
Notary Public in and for Alaska
My commission expires:
Exhibit 1

to

Soldotna Static Var Compensation System
Operation and Maintenance Agreement