

Agreement for Public Water Supply and
Energy Generation from Eklutna Lake, Alaska

Supplemental Agreement No. 2

Compensation, Allocation
and Operating Procedure

1. Purpose. Supplemental Agreement No. 2 (SA-2) supersedes Supplemental Agreement No. 1, dated August 24, 1988, as a supplement to the February 17, 1984 "Agreement for Public Water Supply and Energy Generation from Eklutna Lake, Alaska". Supplemental Agreement No. 2 extends the period allowing for a dual compensation for lake energy depletion through energy recovered and returned to Alaska Power Administration (APA) and cash. These arrangements recognize that the compensation methods contemplated in Section III.4, and Exhibit C of the 1984 Agreement are, and will continue to be inappropriate because water diversions for Eklutna Water Project (EWP) constitute a very small fraction of the available water supply.
 2. Agreement Period. For the period beginning December 31, 1993, this agreement will continue in full force and effect until the year 2025, unless MOA earlier permanently ceases to divert water from Eklutna Lake to the Water Facility, or the Power Plant earlier permanently ceases to generate electricity, the compensation requirements in paragraph III.4. for the return of energy "in kind" is suspended and Exhibit C (except for paragraph IV.8. and 9. of Exhibit C concerning unused portions of Municipality of Anchorage (MOA) water allocations and reservoir spillage) will not be applicable, provided that this supplemental agreement will terminate on such date before the year 2025 on which water diversions for the Eklutna Water Project, over a 12 month period, will have exceeded 18,000 acre-feet or an amount mutually agreed to annually by the Municipality of Anchorage/Anchorage Water and Wastewater Utility (AWWU) and the Municipality of Anchorage/Municipal Light & Power (MLP) that does not exceed MLP annual allocation of Firm Energy from the Eklutna Project. Upon its expiration, this Agreement may be extended or renegotiated by agreement between the parties. During this period, the compensation and allocation provisions described below will apply.
 3. Allocation Procedures.
 - a. Prior to August 1 of each year, AWWU will furnish to APA its estimate of monthly diversions for the next water year (October 1 - September 30).
 - b. Prior to September 1 of each year, APA will establish a water allocation from Eklutna Lake equal to the AWWU estimates and so advise AWWU.
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APA will operate the Power Project in a manner to assure that the AWWU allocation is available for use by Eklutna Water Project.

- c. AWWU shall, when possible, give notice to APA of any unusual increase or decrease of its demands for water not included in the daily schedule or annual diversion plan.

4. Metering.

- a. AWWU will furnish APA such information as is necessary for making any computation required for the purposes of the contract. AWWU and APA will cooperate in exchanging other additional information as may be reasonable useful for their operations.
- b. The metered value of each meter shall be the measurement automatically recorded by the meter, but if not so recorded, shall be the measurement as determined by APA. (See paragraph 5d.)
- c. If any measurements are to be adjusted for losses, the adjustments shall be made by using factors, or by compensating meters, as agreed upon by APA and AWWU. If changes in conditions occur which substantially affect any such loss factor or compensation, it will be changed to conform to the changed condition.
- d. APA may at any time install a meter to make the measurements required for any computation or determination mentioned in the contract and if such a meter is installed, its measurements shall be used for the computations or determinations.
- e. AWWU will, at its expense, test its meters mentioned in this agreement at least once every year using industry standard calibrating and test equipment, and if requested to do so by APA, will make additional tests or inspections of the meters. The expense of additional tests or inspections shall be paid by APA unless they show the meters to be inaccurate. AWWU will give 20 working days notice of the time when any test or inspection is to be made so APA may have representatives present. Meters found to be defective or inaccurate shall be adjusted, repaired, or replaced to provide accurate metering within thirty days of detecting an error.

5. Meter Readings and Billings.

- a. On the first working day of each month, APA will read flow and watt-hour meters and report the meter readings showing water flow from the

lake and recovered energy delivered to APA and/or taken from the system. APA shall receive meter readings from the water flow meters and watt-hours meters shown in Exhibit A (delivery points). The electrical energy recovered and delivered to APA shall be metered by revenue accuracy equipment, i.e., CT, PT, and kwh meters, at the Matanuska Electric Association, Inc. (MEA) metering point of the MOA system. The total amount of energy put into the MEA distribution system shall be credited as power recovered and returned to APA.

- b. APA will submit information to AWWU on or before the tenth day of the month, reporting the total amount of energy diverted, the amount of energy returned to the system, and the net energy diverted from APA.
- c. If any meter mentioned in this contract fails to register, or if the measurement made by such meter during a test made as provided in this exhibit varies by more than one percent from the measurement made by the standard meter used in such test, adjustment shall be made correcting all measurements made by such inaccurate meter for (a) the actual period during which such inaccurate measurement were made if such period can be determined; or (b) if not, the period immediately preceding the test of such meter which is equal to one-half the time for the date of the last preceding test of such meter; provided, however, that the period during which such correction is to be made shall not exceed six months. Such corrected measurements shall be used to recompute the amounts due from MOA for the water made available under this contract during such period and shall be used, when applicable, in future billings to MOA. If the total amount due from MOA for such period as recomputed varies from the total amount due as previously computed, the amount of the variance shall be paid within 30 days after the recomputation is made.
- d. Each party shall have the right to read, at all reasonable times, any and all meters mentioned in this contract which are installed on the property of the other. APA shall have the right to inspect the AWWU installation. The inspection will be conducted during normal working hours.
- e. Except as otherwise expressly provided, ownership of any equipment installed by APA or AWWU on the property of the other shall be and remain the property of the installing party.

6. Compensation Arrangements.

- a. On the basis of the data furnished in 5(a) above, and the actual average kilowatt-hours per acre-foot will determine the net reduction in electrical energy generation because of the water used for the Water Project.
- b. AWWU will compensate MLP for such net reductions in generation. The rate of compensation for reduced energy generation shall be set in accordance with MLP's effective tariff approved by the Alaska Public Utilities Commission (APUC).

7. Maintenance Scheduling.

- a. By October 1 of each year, AWWU will provide APA an annual maintenance schedule of major equipment outages affecting water delivery or energy recovery. AWWU will provide APA notification three days in advance of scheduled equipment outages affecting water delivery or energy recovery which becomes necessary during the year. Notification to APA shall be given within 24 hours of an emergency equipment failure which affects water deliveries or energy recovery.
- b. By October 1 of each year, APA will provide AWWU an annual maintenance schedule of major equipment outages affecting water delivery.
- c. Maintenance on the AWWU water system which requires operation or maintenance of the ring follower valve, butterfly valve or bypass valve at the intake shall require an interconnected system clearance from APA. Switching or tagging this equipment for outages shall adhere to the procedures outlined in the "Power System Clearance Procedure" manual published by the Alaska Power Administration. APA will place, verify, operate equipment (if required) and remove the clearance for maintenance following the procedures of the "Power System Clearance Procedure" manual.
- d. Maintenance of the APA or AWWU tunnel requiring the APA intake structure bulkhead gate to shut off water shall be scheduled a minimum of 6 months in advance unless it is an emergency. The party requesting maintenance shall provide for the installation of the bulkhead gate.
- e. APA may temporarily interrupt or reduce deliveries of water to AWWU in case of system emergencies, or in order to perform maintenance work on the APA system. Except in case of emergency APA will give AWWU

notice of any such interruption or reduction including the reason and probable duration of the interruption.

8. Acceptance.


MOA and APA have executed this Supplemental Agreement on this 30th day of November, 1993.

Municipality of Anchorage



Mark Premo, P.E.
General Manager
Anchorage Water and Wastewater Utility

**United States Department of Energy
Alaska Power Administration**



Michael A. Deihl
Administrator