unless some other date is fixed in the license.

[51 FR 24318, July 3, 1986]

### §11.8 Adjustment of annual charges.

All annual charges imposed under this subpart continue in effect as fixed unless changed as authorized by law.

[51 FR 24318, July 3, 1986]

## Subpart B—Charges for Headwater Benefits

Source: Order 453, 51 FR 24318, July 3, 1986, unless otherwise noted.

# §11.10 General provision; waiver and exemptions; definitions.

- (a) Headwater benefits charges. (1) The Commission will assess or approve charges under this subpart for direct derived from headwater benefits projects constructed by the United States, a licensee, or a pre-1920 permittee. Charges under this subpart will amount to an equitable part of the annual costs of interest, maintenance, and depreciation expenses of such headwater projects and the costs to the Commission of determining headwater benefits charges. Except as provided in paragraph (b) of this section, the owner of any non-Federal downstream project that receives headwater benefits must pay charges determined under this subpart.
- (2) Headwater benefits are the additional electric generation at a downstream project that results from regulation of the flow of the river by the headwater, or upstream, project, usually by increasing or decreasing the release of water from a storage reservoir.
- (b) Waiver and exemptions. The owner of a downstream project with installed generating capacity of 1.5 MW (2000 horsepower) or less or for which the Commission has granted an exemption from section 10(f) is not required to pay headwater benefits charges.
- (c) Definitions. For purposes of this subpart:
- (1) Energy gains means the difference between the number of kilowatt-hours of energy produced at a downstream project with the headwater project and that which would be produced without the headwater project.

- (2) Generation means gross generation of electricity at a hydroelectric project, including generation needed for station use or the equivalent for direct drive units, measured in kilowatthours. It does not include energy used for or derived from pumping in a pumped storage facility.
- (3) Headwater project costs means the total costs of an upstream project constructed by the United States, a licensee, or pre-1920 permittee.
- (4) Separable cost means the difference between the cost of a multiple-function headwater project with and without any particular function.
- (5) Remaining benefits means the difference between the separable cost of a specific function in a multiple-function project and the lesser of:
- (i) The benefits of that function in the project, as determined by the responsible Federal agency at the time the project or function was authorized; or
- (ii) The cost of the most likely alternative single-function project providing the same benefits.
- (6) Joint-use cost means the difference between the total project cost and the total separable costs. Joint-use costs are allocated among the project functions according to each function's percentage of the total remaining benefits.
- (7) Specific power cost means that portion of the headwater project costs that is directly attributable to the function of power generation at the headwater project, including, but not limited to, the cost of the electric generators, turbines, penstocks, and substation.
- (8) *Joint-use power cost* means the portion of the joint-use cost allocated to the power function of the project.
- (9) Section 10(f) costs means the annual interest, depreciation, and maintenance expense portion of the jointuse power cost, including costs of nonpower functions required by statute to be paid by revenues from the power function.

# (10) Party means:

(i) The owner of a non-Federal downstream hydroelectric project which is directly benefited by a headwater project constructed by the United

#### §11.11

States, a licensee, or a pre-1920 permittee:

- (ii) The owner of a headwater project constructed by the United States, a licensee, or a pre-1920 permittee;
- (iii) An operating agency of, or an agency marketing power from, a headwater project constructed by the United States; or
- (iv) Any party, as defined in §385.102(c) of this chapter.
- (11) Final charge means a charge assessed on an annual basis to recover section 10(f) costs and which represents the final determination of the charge for the period for which headwater benefits are assessed. Final charges may be established retroactively, to finalize an interim charge, or prospectively.
- (12) Interim charge means a charge assessed to recover section 10(f) costs for a specified period of headwater benefits pending determination of a final charge for that period.
- (13) Investment cost means the sum of:
  (i) Project construction costs, including cost of land, labor and materials, cost of pre- and post-authorization investigations, and cost of engineering, supervision, and administration during construction of the project; and
  - (ii) Interest during construction.

[Order 453, 51 FR 24318, July 3, 1986, as amended by Order 699, 72 FR 45324, Aug. 14, 2007]

# §11.11 Energy gains method of determining headwater benefits charges.

- (a) Applicability. This section applies to any determination of headwater benefits charges, unless:
- (1) The Commission has approved headwater benefits charges pursuant to an existing coordination agreement among the parties;
- (2) The parties reach, and the Commission approves, a settlement with respect to headwater benefits charges, pursuant to §11.14(a) of this subpart; or
- (3) Charges may be assessed under §11.14(b).
- (b) General rule—(1) Summary. Except as provided in paragraph (b)(3) of this section, a headwater benefits charge for a downstream project is determined under this subpart by apportioning the section 10(f) costs of the headwater project among the headwater project and all downstream projects that are

not exempt from or waived from headwater benefits charges under §11.10(b) of this chapter, according to each project's share of the total energy benefits to those projects resulting from the headwater project.

(2) Calculation; headwater benefits formula. The annual headwater benefits charge for a downstream project is derived by multiplying the section 10(f) cost by the ratio of the energy gains received by the downstream project to the sum of total energy gains received by all downstream projects (except those projects specified in §11.10(b) of this chapter) plus the energy generated at the headwater project that is assigned to the joint-use power cost, as follows:

$$P = C_p \times \frac{E_n}{E_i + E_d}$$

In which:

- P = annual payment to be made for headwater benefits received by a downstream project,
- $C_p$  = annual section 10(f) cost of the headwater project,
- E<sub>n</sub> = annual energy gains received at a downstream project, or group of projects if owned by one entity,
- E<sub>d</sub> = annual energy gains received at all downstream projects (except those specified in §11.10(b) of this chapter), and
- ${f E}_j$  = portion of the annual energy generated at the headwater project assigned to the joint-use power cost.
- (3) If power generation is not a function of the headwater project, section 10(f) costs will be apportioned only among the downstream projects.
- (4) If the headwater project is constructed after the downstream project, liability for headwater benefits charges will accrue beginning on the day on which any energy losses at the downstream project due to filling the headwater reservoir have been offset by subsequent energy gains. If the headwater project is constructed prior to the downstream project, liability for headwater benefits charges will accrue beginning on the day on which benefits are first realized by the downstream project.
- (5) No final charge assessed by the Commission under this subpart may exceed 85 percent of the value of the energy gains. If a party demonstrates,