

(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, within the time specified in §11.17(b)(3) for response to a preliminary assessment, that any final charge assessed under this subpart, not including the cost of the investigation assessed under §11.17(c), exceeds 85 percent of the value of the energy gains provided to the downstream project for the period for which the charge is assessed, the Commission will reduce the charge to not more than 85 percent of the value. For purposes of this paragraph, the *value of the energy gains* is the cost of obtaining an equivalent amount of electricity from the most likely alternative source during the period for which the charge is assessed.

#### § 11.12 Determination of section 10(f) costs.

(a) *for non-Federal headwater projects.* If the headwater project was constructed by a licensee or pre-1920 permittee and a party requests the Commission to determine charges, the Commission will determine on a case-by-case basis what portion of the annual interest, maintenance, and depreciation costs of the headwater project constitutes the section 10(f) costs, for purposes of this subpart.

(b) *For Federal headwater projects.* (1) If the headwater project was constructed or is operated by the United States, and the Commission has not approved a settlement between the downstream project owner and the head-

water project owner, the section 10(f) cost will be determined by deriving, from information provided by the headwater project owner pursuant to §11.16 of this subpart, the joint-use power cost and the portion of the annual joint-use power cost that represents the interest, maintenance, and depreciation costs of the project.

(2) If power is not an authorized function of the headwater project, the section 10(f) cost is the annual interest, maintenance, and depreciation portion of the headwater project costs designated as the joint-use power cost, derived by deeming a power function at the project. The value of the benefits assigned to the deemed power function, for purposes of determining the value of remaining benefits of the joint-use power cost, is the total value of downstream energy gains included in the headwater benefits formula.

(3) For purposes of this paragraph, *total value of downstream energy gains* means the lesser of:

(i) The cost of generating an equivalent amount of electricity at the most likely alternative facility at the time the headwater project became operational; or

(ii) The incremental cost of installing electrical generation at the headwater project at the time the project became operational.

#### § 11.13 Energy gains calculations.

(a) *Energy gains at a downstream project.* (1) Energy gains at a downstream project are determined by simulating operation of the downstream project with and without the effects of the headwater project. Except for determinations which are not complex or in which headwater benefits are expected to be small, calculations will be made by application of the Headwater Benefits Energy Gains Model, as presented in *The Headwater Benefits Energy Gains (HWBEG) Model Description and Users Manual*, which is available for the National Technical Information Service, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, VA 22161.

(2) If more than one headwater project provide energy gains to a downstream project, the energy gains at the downstream project are attributed to the headwater projects according to

§ 11.14

the time sequence of commencement of operation in which each headwater project provided energy gains at the downstream project, by:

(i) Crediting the headwater project that is first in time with the amount of energy gains that it provided to the downstream project prior to operation of the headwater project that is next in time; and

(ii) Crediting any subsequent headwater project with the additional increment of energy gains provided by it to the downstream project.

(3) Annual energy losses at a downstream project, or group of projects owned by the same entity, that are attributable to the headwater project will be subtracted from energy gains for the same annual period at the downstream project or group of projects. A net loss in one calendar year will be subtracted from net gains in subsequent years until no net loss remains.

(b) *Energy generated at the headwater project.* (1) Except as provided in paragraphs (b)(2) and (b)(3) of this section, the portion of the total annual energy generation at the headwater project that is to be attributed to the joint-use power cost is derived by multiplying the total annual generation at the headwater project and the ratio of the project investment cost assigned to the joint-use power cost to the sum of the investment cost assigned to both the specific power cost and the joint-use power cost of the headwater project, as follows:

$$E_j = E \times \frac{C_j}{C_s + C_j}$$

In which:

$E_j$ =annual energy generated at the headwater project to be attributed to the joint-use power cost,

$E$ =total annual generation at the headwater project,

$C_j$ =project investment costs assigned to the joint-use power cost, and

$C_s$ =project investment costs assigned to specific power costs.

(2) If the headwater project contains a pumped storage facility, calculation of the portion of the total annual energy generation at the headwater project that is attributable to the

joint-use power cost will be determined on a case-by-case basis.

(3) If no power is generated at the headwater project, the amount of energy attributable to the joint-use power cost under this section is the total of all downstream energy gains included in the headwater benefits formula.

**§ 11.14 Procedures for establishing charges without an energy gains investigation.**

(a) *Settlements.* (1) Owners of downstream and headwater projects subject to this subpart may negotiate a settlement for headwater benefits charges. Settlements must be filed with the Commission for its approval, according to the provisions of § 385.602.

(2) If the headwater project is a Federal project, any settlement under this section must result in headwater benefits payments that approximate those that would result under the energy gains method.

(b) *Continuation of previous headwater benefits determinations.* (1) For any downstream project being assessed headwater benefit charges on or before September 16, 1986, the Commission will continue to assess charges to that project on the same basis until changes occur in the river basin, including hydrology or project development, that affect headwater benefits.

(2) Any procedures that apply to § 11.17(b)(5) of this subpart will apply to any prospectively fixed charges that are continued under this paragraph.

**§ 11.15 Procedures for determining charges by energy gains investigation.**

(a) *Purpose of investigations; limitation.* Except as permitted under § 11.14, the Commission will conduct an investigation to obtain information for establishing headwater benefits charges under this subpart. The Commission will investigate and determine charges for a project downstream from a non-Federal headwater project only if the parties are unable to agree to a settlement and one of the parties requests the Commission to determine charges.

(b) *Notification.* The Commission will notify each downstream project owner and each headwater project owner