- (B) have not been or are likely not to be generally equitable to all consumers in the region; or
- (C) have impaired or are likely to impair the ability of the Administrator to carry out his obligations under this chapter and other laws, consistent with sound business practices.
- (2) The Administrator may determine that section 839a(4)(D) of this title shall not apply to any proposed conservation measure or resource if the Administrator finds after receipt of such analysis from the Council that such measure or resource would have any result or effect described in subparagraph (A), (B) or (C) of paragraph (1).

(Pub. L. 96–501, §4, Dec. 5, 1980, 94 Stat. 2700; Pub. L. 103–437, §6(u), Nov. 2, 1994, 108 Stat. 4587; Pub. L. 104–206, title V, §512, Sept. 30, 1996, 110 Stat. 3005; Pub. L. 106–60, title VI, §610, Sept. 29, 1999, 113 Stat. 502; Pub. L. 112–74, div. B, title III, §307, Dec. 23, 2011, 125 Stat. 877.)

Editorial Notes

References in Text

The Ethics in Government Act of 1978, referred to in subsec. (b)(3), is Pub. L. 95–521, Oct. 26, 1978, 92 Stat. 1824. Title II of the Ethics in Government Act of 1978 was set out in the Appendix to Title 5, Government Organization and Employees, prior to repeal by Pub. L. 101–194, title II, §201, Nov. 30, 1989, 103 Stat. 1724. For complete classification of this Act to the Code, see Short Title note set out under section 101 of Pub. L. 95–521 in the Appendix to Title 5 and Tables.

The Federal Columbia River Transmission System Act, referred to in subsecs. (c)(10)(A) and (h)(10)(B), is Pub. L. 93-454, Oct. 18, 1974, 88 Stat. 1376, which is classified generally to chapter 12G (§838 et seq.) of this title. For complete classification of this Act to the Code, see Short Title note set out under section 838 of this title and Tables.

The Federal Advisory Committee Act, referred to in subsec. (h)(10)(D)(iii), is Pub. L. 92–463, Oct. 6, 1972, 86 Stat. 770, which is set out in the Appendix to Title 5, Government Organization and Employees.

CODIFICATION

September 30, 1996, referred to in subsec. (h)(10)(D)(i), (ii), was in the original "the date of this enactment", which was translated as meaning the date of enactment of Pub. L. 104–206, which enacted subsec. (h)(10)(D), to reflect the probable intent of Congress.

AMENDMENTS

2011—Subsec. (h)(10)(B). Pub. L. 112–74, which directed amendment of "section 839b(h)(10)(B) of title 16, United States Code" by substituting "\$2,500,000" for "\$1,000,000", was executed by making the substitution in subsec. (h)(10)(B) of this section, which is section 4 of the Pacific Northwest Electric Power Planning and Conservation Act, to reflect the probable intent of Congress.

1999—Subsec. (h)(10)(D)(vii), (viii). Pub. L. 106-60 added cl. (vii) and struck out former cls. (vii) and (viii) which read as follows:

"(vii) Cost Limitation.—The cost of this provision shall not exceed \$2,000,000 in 1997 dollars.

''(viii) EXPIRATION.—This paragraph shall expire on September $30,\,2000.$ "

1996—Subsec. (h)(10)(D). Pub. L. 104–206, which directed that subpar. (D) be inserted after subsec. (h)(10)(C) of the Northwest Power Planning and Conservation Act, was executed by adding subsec. (h)(10)(D) to this section, which is from the Pacific Northwest Electric Power Planning and Conservation Act, to reflect the probable intent of Congress.

1994—Subsec. (h)(12)(A). Pub. L. 103–437 substituted "Committees on Energy and Commerce and on Natural Resources" for "Committees on Interstate and Foreign Commerce and on Interior and Insular Affairs".

Statutory Notes and Related Subsidiaries

CHANGE OF NAME

Committee on Energy and Commerce of House of Representatives treated as referring to Committee on Commerce of House of Representatives by section 1(a) of Pub. L. 104–14, set out as a note preceding section 21 of Title 2, The Congress. Committee on Commerce of House of Representatives changed to Committee on Energy and Commerce of House of Representatives, and jurisdiction over matters relating to securities and exchanges and insurance generally transferred to Committee on Financial Services of House of Representatives by House Resolution No. 5, One Hundred Seventh Congress, Jan. 3, 2001.

TERMINATION OF REPORTING REQUIREMENTS

For termination, effective May 15, 2000, of provisions in subsec. (h)(12)(A) of this section relating to submitting annually a detailed report to the Committee on Energy and Natural Resources of the Senate and to the Committees on Energy and Commerce and on Natural Resources of the House of Representatives, see section 3003 of Pub. L. 104-66, as amended, set out as a note under section 1113 of Title 31, Money and Finance, and page 188 of House Document No. 103-7.

REFERENCES IN OTHER LAWS TO GS-16, 17, OR 18 PAY RATES

References in laws to the rates of pay for GS-16, 17, or 18, or to maximum rates of pay under the General Schedule, to be considered references to rates payable under specified sections of Title 5, Government Organization and Employees, see section 529 [title I, §101(c)(1)] of Pub. L. 101-509, set out in a note under section 5376 of Title 5.

OPERATION AND MAINTENANCE OF FISH PASSAGE
FACILITIES WITHIN THE YAKIMA RIVER BASIN: FUNDING

Pub. L. 98–381, title I, §109, Aug. 17, 1984, 98 Stat. 1340, provided that: "The Secretary of the Interior, acting pursuant to Federal reclamation law (Act of June 17, 1902, 32 Stat. 388 [see Short Title note under section 371 of Title 43, Public Lands], and Acts amendatory thereof and supplementary thereto) and in accordance with the Pacific Northwest Electric Power Planning and Conservation Act (94 Stat. 2697) [16 U.S.C. 839 et seq.] is authorized to design, construct, operate, and maintain fish passage facilities within the Yakima River Basin, and to accept funds from any entity, public or private, to design, construct, operate, and maintain such facilities."

Executive Documents

CHANGE OF NAME

The Water and Power Resources Service, referred to in subsec. (h)(10)(C), changed to the Bureau of Reclamation on May 18, 1981. See 155 Dep't of the Interior, Departmental Manual 1.1 (2008 repl.); Sec'y James G. Watt, Dep't of the Interior, Secretarial Order 3064, §§ 3, 5 (May 18, 1981).

§839c. Sale of power

(a) Preferences and priorities

All power sales under this chapter shall be subject at all times to the preference and priority provisions of the Bonneville Project Act of 1937 (16 U.S.C. 832 and following) and, in particular, sections 4 and 5 thereof [16 U.S.C. 832c and 832d]. Such sales shall be at rates established pursuant to section 839e of this title.

(b) Sales to public bodies, cooperatives, and Federal agency customers

- (1) Whenever requested, the Administrator shall offer to sell to each requesting public body and cooperative entitled to preference and priority under the Bonneville Project Act of 1937 [16 U.S.C. 832 et seq.] and to each requesting investor-owned utility electric power to meet the firm power load of such public body, cooperative or investor-owned utility in the Region to the extent that such firm power load exceeds—
 - (A) the capability of such entity's firm peaking and energy resources used in the year prior to December 5, 1980, to serve its firm load in the region, and
 - (B) such other resources as such entity determines, pursuant to contracts under this chapter, will be used to serve its firm load in the region.

In determining the resources which are used to serve a firm load, for purposes of subparagraphs (A) and (B), any resources used to serve a firm load under such subparagraphs shall be treated as continuing to be so used, unless such use is discontinued with the consent of the Administrator, or unless such use is discontinued because of obsolescence, retirement, loss of resource, or loss of contract rights.

- (2) Contracts with investor-owned utilities shall provide that the Administrator may reduce his obligations under such contracts in accordance with section 5(a) of the Bonneville Project Act of 1937 [16 U.S.C. 832d(a)].
- (3) In addition to his authorities to sell electric power under paragraph (1), the Administrator is also authorized to sell electric power to Federal agencies in the region.
- (4) Sales under this subsection shall be made only if the public body, cooperative, Federal agency or investor-owned utility complies with the Administrator's standards for service in effect on December 5, 1980, or as subsequently revised.
- (5) The Administrator shall include in contracts executed in accordance with this subsection provisions that enable the Administrator to restrict his contractual obligations to meet the loads referred to in this subsection in the future if the Administrator determines, after a reasonable period of experience under this chapter, that the Administrator cannot be assured on a planning basis of acquiring sufficient resources to meet such loads during a specified period of insufficiency. Any such contract with a public body, cooperative, or Federal agency shall specify a reasonable minimum period between a notice of restriction and the earliest date such restriction may be imposed.
- (6) Contracts executed in accordance with this subsection with public body, cooperative, and Federal agency customers shall—
 - (A) provide that the restriction referred to in paragraph (5) shall not be applicable to any such customers until the operating year in which the total of such customers' firm loads to be served by the Administrator equals or exceeds the firm capability of the Federal base system resources:
 - (B) not permit restrictions which would reduce the total contractual entitlement of such

- customers to an amount less than the firm capability of the Federal base system resources; and
- (C) contain a formula for determining annually, on a uniform basis, each such customer's contractual entitlement to firm power during such a period of restriction, which formula shall not consider customer resources other than those the customer has determined, as of December 5, 1980, to be used to serve its own firm loads.

The formula referred to in subparagraph (C) shall obligate the Administrator to provide on an annual basis only firm power needed to serve the portion of such customer's firm load in excess of the capability of such customer's own firm resources determined by such customer under paragraph (1) of this subsection to be used to serve its firm load.

- (7) REQUIRED SALE.—
- (A) DEFINITION OF A JOINT OPERATING ENTITY.—In this section, the term "joint operating entity" means an entity that is lawfully organized under State law as a public body or cooperative prior to September 22, 2000, and is formed by and whose members or participants are two or more public bodies or cooperatives, each of which was a customer of the Bonneville Power Administration on or before January 1, 1999.
- (B) SALE.—Pursuant to paragraph (1), the Administrator shall sell, at wholesale to a joint operating entity, electric power solely for the purpose of meeting the regional firm power consumer loads of regional public bodies and cooperatives that are members of or participants in the joint operating entity.
- (C) No RESALE.—A public body or cooperative to which a joint operating entity sells electric power under subparagraph (B) shall not resell that power except to retail customers of the public body or cooperative or to another regional member or participant of the same joint operating entity, or except as otherwise permitted by law.

(c) Purchase and exchange sales

- (1) Whenever a Pacific Northwest electric utility offers to sell electric power to the Administrator at the average system cost of that utility's resources in each year, the Administrator shall acquire by purchase such power and shall offer, in exchange, to sell an equivalent amount of electric power to such utility for resale to that utility's residential users within the region.
- (2) The purchase and exchange sale referred to in paragraph (1) of this subsection with any electric utility shall be limited to an amount not in excess of 50 per centum of such utility's Regional residential load in the year beginning July 1, 1980, such 50 per centum limit increasing in equal annual increments to 100 per centum of such load in the year beginning July 1, 1985, and each year thereafter.
- (3) The cost benefits, as specified in contracts with the Administrator, of any purchase and exchange sale referred to in paragraph (1) of this subsection which are attributable to any electric utility's residential load within a State shall be passed through directly to such utility's

residential loads within such State, except that a State which lies partially within and partially without the region may require that such cost benefits be distributed among all of the utility's residential loads in that State.

- (4) An electric utility may terminate, upon reasonable terms and conditions agreed to by the Administrator and such utility prior to such termination, its purchase and sale under this subsection if the supplemental rate charge provided for in section 839e(b)(3) of this title is applied and the cost of electric power sold to such utility under this subsection exceeds, after application of such rate charge, the average system cost of power sold by such utility to the Administrator under this subsection.
- (5) Subject to the provisions of sections 839b and 839d of this title, in lieu of purchasing any amount of electric power offered by a utility under paragraph (1) of this subsection, the Administrator may acquire an equivalent amount of electric power from other sources to replace power sold to such utility as part of an exchange sale if the cost of such acquisition is less than the cost of purchasing the electric power offered by such utility.
- (6) Exchange sales to a utility pursuant to this subsection shall not be restricted below the amounts of electric power acquired by the Administrator from, or on behalf of, such utility pursuant to this subsection.

 (7) The "average system cost" for electric
- (7) The "average system cost" for electric power sold to the Administrator under this subsection shall be determined by the Administrator on the basis of a methodology developed for this purpose in consultation with the Council, the Administrator's customers, and appropriate State regulatory bodies in the region. Such methodology shall be subject to review and approval by the Federal Energy Regulatory Commission. Such average system cost shall not include—
 - (A) the cost of additional resources in an amount sufficient to serve any new large single load of the utility;
 - (B) the cost of additional resources in an amount sufficient to meet any additional load outside the region occurring after December 5, 1980; and
 - (C) any costs of any generating facility which is terminated prior to initial commercial operation.

(d) Sales to existing direct service industrial customers

- (1)(A) The Administrator is authorized to sell in accordance with this subsection electric power to existing direct service industrial customers. Such sales shall provide a portion of the Administrator's reserves for firm power loads within the region.
- (B) After December 5, 1980, the Administrator shall offer in accordance with subsection (g) of this section to each existing direct service industrial customer an initial long term contract that provides such customer an amount of power equivalent to that to which such customer is entitled under its contract dated January or April 1975 providing for the sale of "industrial firm power."
- (2) The Administrator shall not sell electric power, including reserves, directly to new direct service industrial customers.

- (3) The Administrator shall not sell amounts of electric power, including reserves, to existing direct service industrial customers in excess of the amount permitted under paragraph (1) unless the Administrator determines, after a plan has been adopted pursuant to section 839b of this title, that such proposed sale is consistent with the plan and that—
 - (A) additional power system reserves are required for the region's firm loads,
 - (B) the proposed sale would provide a costeffective method of supplying such reserves,
 - (C) such loads or loads of similar character cannot provide equivalent operating or planning benefits to the region if served by an electric utility under contractual arrangements providing reserves, and
 - (D) the Administrator has or can acquire sufficient electric power to serve such loads, and

unless the Council has determined such sale is consistent with the plan. After such determination by the Administrator and by the Council, the Administrator is authorized to offer to existing direct service industrial customers power in such amounts in excess of the amount permitted under paragraph (1) of this subsection as the Administrator determines to be necessary to provide additional power system reserves to meet the region's firm loads.

- (4)(A) As used in this section, the term "existing direct service industrial customer" means any direct service industrial customer of the Administrator which has a contract for the purchase of electric power from the Administrator on December 5, 1980.
- (B) The term "new direct service industrial customer" means any industrial entity other than an existing direct service industrial customer.
- (C)(i) Where a new contract is offered in accordance with subsection (g) to any existing direct service industrial customer which has not received electric power prior to December 5, 1980, from the Administrator pursuant to a contract with the Administrator existing on December 5, 1980, electric power delivered under such new contract shall be conditioned on the Administrator reasonably acquiring, in accordance with this chapter and within such estimated period of time (as specified in the contract) as he deems reasonable, sufficient resources to meet, on a planning basis, the load requirement of such customer. Such contract shall also provide that the obligation of the Administrator to acquire such resources to meet such load requirement shall, except as provided in clause (ii) of this subparagraph, apply only to such customer and shall not be sold or exchanged by such customer to any other person.
- (ii) Rights under a contract described in clause (i) of this subparagraph may be transferred by an existing direct service industrial customer referred to in clause (i) to a successor in interest in connection with a reorganization or other transfer of all major assets of such customer. Following such a transfer, such successor in interest (or any other subsequent successor in interest) may also transfer rights under such a contract only in connection with a reorganization or other transfer of all assets of such successor in interest.

(iii) The limitations of clause (i) of this subparagraph shall not apply to any customer referred to in clause (i) whenever the Administrator determines that such customer is receiving electric power pursuant to a contract referred to in such clause (ii).

(e) Contractual entitlements to firm power

- (1) The contractual entitlement to firm power of any customer from whom, or on whose behalf, the Administrator has acquired electric power pursuant to section 839d of this title may not be restricted below the amount of electric power so acquired from, or on behalf of, such customer. If in any year such customer's requirements are less than such entitlement, any excess of such entitlement shall be first made available to increase the entitlement of other customers of the same class before being available for the entitlement of other customers. For purposes of this paragraph, the following entities shall each constitute a class:
 - (A) public bodies and cooperatives;
 - (B) Federal agencies:
 - (C) direct service industrial; and
 - (D) investor owned utilities.
- (2) Any contractual entitlement to firm power which is based on electric power acquired from, or on behalf of, a customer pursuant to section 839d of this title shall be in addition to any other contractual entitlement to firm power not subject to restriction that such customer may have under this section. For the purposes of this subsection, references to amounts of power acquired by the Administrator pursuant to section 839d of this title shall be deemed to mean the amounts specified in the resource acquisition contracts exclusive of any amounts recognized in such contracts as replacement for Federal base system resources.
- (3) The Administrator shall, consistent with the provisions of this chapter, insure that any restrictions upon any particular customer class made pursuant to this subsection and subsection (b) of this section are distributed equitably throughout the region.

(f) Surplus power

The Administrator is authorized to sell, or otherwise dispose of, electric power, including power acquired pursuant to this and other Acts, that is surplus to his obligations incurred pursuant to subsections (b), (c), and (d) of this section in accordance with this and other Acts applicable to the Administrator, including the Bonneville Project Act of 1937 (16 U.S.C. 832 and following), the Federal Columbia River Transmission System Act (16 U.S.C. 838 and following), and the Act of August 31, 1964 (16 U.S.C. 837–837h).

(g) Long-term contracts

- (1) As soon as practicable within nine months after December 5, 1980, the Administrator shall commence necessary negotiations for, and offer, initial long-term contracts (within the limitations of the third sentence of section 5(a) of the Bonneville Project Act [16 U.S.C. 832d(a)]) simultaneously to—
 - (A) existing public body and cooperative customers and investor-owned utility customers under subsection (b) of this section;

- (B) Federal agency customers under subsection (b) of this section;
- (C) electric utility customers under subsection (c) of this section; and
- (D) direct service industrial customers under subsection (d)(1).
- (2) Each customer offered a contract pursuant to this subsection shall have one year from the date of such offer to accept such contract. Such contract shall be effective as provided in this subsection.
- (3) An initial contract with a public body, cooperative or investor-owned electric utility customer or a Federal agency customer pursuant to subsection (b) of this section shall be effective on the date executed by such customer, unless another effective date is otherwise agreed to by the Administrator and the customer.
- (4) An initial contract with an electric utility customer pursuant to subsection (c) of this section shall be effective on the date executed by such customer, but no earlier than the first day of the tenth month after December 5, 1980.
- (5) An initial contract with a direct service industrial customer pursuant to subsection (d)(1), shall be effective on the date agreed upon by the Administrator and such customer, but no later than the first day of the tenth month after December 5, 1980. When such contract is executed, it may for rate purposes be given retroactive effect to such first day.
- (6) Initial contracts offered public body, cooperative and Federal agency customers in accordance with this subsection shall provide that during a period of insufficiency declared in accordance with subsection (b) of this section each customer's contractual entitlement shall, to the extent of its requirements on the Administrator, be no less than the amount of firm power received from the Administrator in the year immediately preceding the period of insufficiency.
- (7) The Administrator shall be deemed to have sufficient resources for the purpose of entering into the initial contracts specified in paragraph (1)(A) through (D).

(Pub. L. 96–501, §5, Dec. 5, 1980, 94 Stat. 2712; Pub. L. 106–273, §1, Sept. 22, 2000, 114 Stat. 802.)

Editorial Notes

References in Text

The Bonneville Project Act of 1937, referred to in subsecs. (a), (b)(1), and (f), is act Aug. 20, 1937, ch. 720, 50 Stat. 731, which is classified generally to chapter 12B (§832 et seq.) of this title. For complete classification of this Act to the Code, see Short Title note set out under section 832 of this title and Tables.

The Federal Columbia River Transmission System Act, referred to in subsec. (f), is Pub. L. 93–454, Oct. 18, 1974, 88 Stat. 1376, which is classified generally to chapter 12G (§838 et seq.) of this title. For complete classification of this Act to the Code, see Short Title note set out under section 838 of this title and Tables.

Act of August 31, 1964, referred to in subsec. (f), is Pub. L. 88–552, Aug. 31, 1964, 78 Stat. 756, which is classified generally to chapter 12F (§837 et seq.) of this title. For complete classification of this Act to the Code, see Tables.

AMENDMENTS

2000—Subsec. (b)(7). Pub. L. 106-273 added par. (7).

§839d. Conservation and resource acquisition

(a) Conservation measures; resources

(1) The Administrator shall acquire such resources through conservation, implement all such conservation measures, and acquire such renewable resources which are installed by a residential or small commercial consumer to reduce load, as the Administrator determines are consistent with the plan, or if no plan is in effect with the criteria of section 839b(e)(1) of this title and the considerations of section 839b(e)(2) of this title and, in the case of major resources, in accordance with subsection (c) of this section. Such conservation measures and such resources may include, but are not limited to—

(A) loans and grants to consumers for insulation or weatherization, increased system efficiency, and waste energy recovery by direct

(B) technical and financial assistance to, and other cooperation with, the Administrator's customers and governmental authorities to encourage maximum cost-effective voluntary conservation and the attainment of any cost-effective conservation objectives adopted by individual States or subdivisions thereof,

(C) aiding the Administrator's customers and governmental authorities in implementing model conservation standards adopted pursuant to section 839b(f) of this title, and

(D) conducting demonstration projects to determine the cost effectiveness of conservation measures and direct application of renewable energy resources.

(2) In addition to acquiring electric power pursuant to section 839c(c) of this title, or on a short-term basis pursuant to section 11(b)(6)(i) of the Federal Columbia River Transmission System Act [16 U.S.C. 838i(b)(6)(i)], the Administrator shall acquire, in accordance with this section, sufficient resources—

(A) to meet his contractual obligations that remain after taking into account planned savings from measures provided for in paragraph (1) of this subsection, and

(B) to assist in meeting the requirements of section 839b(h) of this title.

The Administrator shall acquire such resources without considering restrictions which may apply pursuant to section 839c(b) of this title.

(b) Acquisition of resources

(1) Except as specifically provided in this section, acquisition of resources under this chapter shall be consistent with the plan, as determined by the Administrator.

(2) The Administrator may acquire resources (other than major resources) under this chapter which are not consistent with the plan, but which are determined by the Administrator to be consistent with the criteria of section 839b(e)(1) of this title and the considerations of section 839b(e)(2) of this title.

(3) If no plan is in effect, the Administrator may acquire resources under this chapter which are determined by the Administrator to be consistent with the criteria of section 839b(e)(1) of this title and the considerations of section 839b(e)(2) of this title.

(4) The Administrator shall acquire any non-Federal resources to replace Federal base sys-

tem resources only in accordance with the provisions of this section. The Administrator shall include in the contracts for the acquisition of any such non-Federal replacement resources provisions which will enable him to ensure that such non-Federal replacement resources are developed and operated in a manner consistent with the considerations specified in section 839b(e)(2) of this title.

(5) Notwithstanding any acquisition of resources pursuant to this section, the Administrator shall not reduce his efforts to achieve conservation and to acquire renewable resources installed by a residential or small commercial consumer to reduce load, pursuant to subsection (a)(1) of this section.

(c) Procedure for acquiring major resources, implementing conservation measures, paying or reimbursing investigation and preconstruction expenses, or granting billing credits

(1) For each proposal under subsection (a), (b), (f), (h), or (l) of this section to acquire a major resource, to implement a conservation measure which will conserve an amount of electric power equivalent to that of a major resource, to pay or reimburse investigation and preconstruction expenses of the sponsors of a major resource, or to grant billing credits or services involving a major resource, the Administrator shall—

(A) publish notice of the proposed action in the Federal Register and provide a copy of such notice to the Council, the Governor of each State in which facilities would be constructed or a conservation measure implemented, and the Administrator's customers;

(B) not less than sixty days following publication of such notice, conduct one or more public hearings, presided over by a hearing officer, at which testimony and evidence shall be received, with opportunity for such rebuttal and cross-examination as the hearing officer deems appropriate in the development of an adequate hearing record;

(C) develop a record to assist in evaluating the proposal which shall include the transcript of the public hearings, together with exhibits, and such other materials and information as may have been submitted to, or developed by, the Administrator; and

(D) following completion of such hearings, promptly provide to the Council and make public a written decision that includes, in addition to a determination respecting the requirements of subsection (a), (b), (f), (h), (l), or (m) of this section, as appropriate—

(i) if a plan is in effect, a finding that the proposal is either consistent or inconsistent with the plan or, notwithstanding its inconsistency with the plan, a finding that it is needed to meet the Administrator's obligations under this chapter, or

(ii) if no plan is in effect, a finding that the proposal is either consistent or inconsistent with the criteria of section 839b(e)(1) of this title and the considerations of section 839b(e)(2) of this title or notwithstanding its inconsistency, a finding that it is needed to meet the Administrator's obligations under this chapter.