

§4.51

18 CFR Ch. I (4-1-02 Edition)

dam would result in a significant change in the normal maximum surface area or the normal maximum surface elevation of an existing impoundment, or whether any proposed new development or change in project operation would result in a significant environmental impact.

[Order 59, 44 FR 67651, Nov. 27, 1979, as amended by Order 184, 46 FR 55942, Nov. 13, 1981; Order 413, 50 FR 11684, Mar. 25, 1985; Order 499, 53 FR 27002, July 18, 1988]

§ 4.51 Contents of application.

An application for license under this subpart must contain the following information in the form specified. As provided in paragraph (f) of this section, the appropriate Federal, state, and local resource agencies must be given the opportunity to comment on the proposed project, prior to filing of the application for license for major project—existing dam. Information from the consultation process must be included in this Exhibit E, as appropriate.

(a) Initial statement.

BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

Application for License for Major Project— Existing Dam

(1) (Name of applicant) applies to the Federal Energy Regulatory Commission for a (license or new license, as appropriate) for the (name of project) water power project, as described in the attached exhibits. (Specify any previous FERC project number designation.)

(2) The location of the project is:

State or territory: \_\_\_\_\_
County: \_\_\_\_\_
Township or nearby town: \_\_\_\_\_
Stream or other body of water: \_\_\_\_\_

(3) The exact name and business address of the applicant are:

\_\_\_\_\_
\_\_\_\_\_

The exact name and business address of each person authorized to act as agent for the applicant in this application are:

\_\_\_\_\_
\_\_\_\_\_

(4) The applicant is a [citizen of the United States, association of citizens of the United States, domestic corporation, municipality,

or state, as appropriate] and (is/is not) claiming preference under section 7(a) of the Federal Power Act. See 16 U.S.C. 796.

(5)(i) The statutory or regulatory requirements of the state(s) in which the project would be located that affect the project as proposed, with respect to bed and banks and to the appropriation, diversion, and use of water for power purposes, and with respect to the right to engage in the business of developing, transmitting, and distributing power and in any other business necessary to accomplish the purposes of the license under the Federal Power Act, are: [Provide citation and brief identification of the nature of each requirement; if the applicant is a municipality, the applicant must submit copies of applicable state and local laws or a municipal charter, or, if such laws or documents are not clear, other appropriate legal authority, evidencing that the municipality is competent under such laws to engage in the business of developing, transmitting, utilizing, or distributing power.]

(ii) The steps which the applicant has taken or plans to take to comply with each of the laws cited above are: (provide brief description for each law).

(6) The applicant must provide the name and address of the owner of any existing project facilities. If the dam is federally owned or operated, provide the name of the agency.

(b) Exhibit A is a description of the project. This exhibit need not include information on project works maintained and operated by the U.S. Army Corps of Engineers, the Bureau of Reclamation, or any other department or agency of the United States, except for any project works that are proposed to be altered or modified. If the project includes more than one dam with associated facilities, each dam and the associated component parts must be described together as a discrete development. The description for each development must contain:

(1) The physical composition, dimensions, and general configuration of any dams, spillways, penstocks, powerhouses, tailraces, or other structures, whether existing or proposed, to be included as part of the project;

(2) The normal maximum surface area and normal maximum surface elevation (mean sea level), gross storage capacity, and usable storage capacity of any impoundments to be included as part of the project;

(3) The number, type, and rated capacity of any turbines or generators,

whether existing or proposed, to be included as part of the project;

(4) The number, length, voltage, and interconnections of any primary transmission lines, whether existing or proposed, to be included as part of the project (see 16 U.S.C. 796(11));

(5) The specifications of any additional mechanical, electrical, and transmission equipment appurtenant to the project; and

(6) All lands of the United States that are enclosed within the project boundary described under paragraph (h) of this section (Exhibit G), identified and tabulated by legal subdivisions of a public land survey of the affected area or, in the absence of a public land survey, by the best available legal description. The tabulation must show the total acreage of the lands of the United States within the project boundary.

(c) *Exhibit B* is a statement of project operation and resource utilization. If the project includes more than one dam with associated facilities, the information must be provided separately for each such discrete development. The exhibit must contain:

(1) A statement whether operation of the powerplant will be manual or automatic, an estimate of the annual plant factor, and a statement of how the project will be operated during adverse, mean, and high water years;

(2) An estimate of the dependable capacity and average annual energy production in kilowatt-hours (or a mechanical equivalent), supported by the following data:

(i) The minimum, mean, and maximum recorded flows in cubic feet per second of the stream or other body of water at the powerplant intake or point of diversion, with a specification of any adjustments made for evaporation, leakage, minimum flow releases (including duration of releases), or other reductions in available flow; a flow duration curve indicating the period of record and the gauging stations used in deriving the curve; and a specification of the period of critical streamflow used to determine the dependable capacity;

(ii) An area-capacity curve showing the gross storage capacity and usable storage capacity of the impoundment,

with a rule curve showing the proposed operation of the impoundment and how the usable storage capacity is to be utilized;

(iii) The estimated hydraulic capacity of the powerplant (maximum flow through the powerplant) in cubic feet per second;

(iv) A tailwater rating curve; and

(v) A curve showing powerplant capability versus head and specifying maximum, normal, and minimum heads;

(3) A statement, with load curves and tabular data, if necessary, of the manner in which the power generated at the project is to be utilized, including the amount of power to be used on-site, if any, the amount of power to be sold, and the identity of any proposed purchasers; and

(4) A statement of the applicant's plans, if any, for future development of the project or of any other existing or proposed water power project on the stream or other body of water, indicating the approximate location and estimated installed capacity of the proposed developments.

(d) *Exhibit C* is a construction history and proposed construction schedule for the project. The construction history and schedules must contain:

(1) If the application is for an initial license, a tabulated chronology of construction for the existing projects structures and facilities described under paragraph (b) of this section (Exhibit A), specifying for each structure or facility, to the extent possible, the actual or approximate dates (approximate dates must be identified as such) of:

(i) Commencement and completion of construction or installation;

(ii) Commencement of commercial operation; and

(iii) Any additions or modifications other than routine maintenance; and

(2) If any new development is proposed, a proposed schedule describing the necessary work and specifying the intervals following issuance of a license when the work would be commenced and completed.

(e) *Exhibit D* is a statement of costs and financing. The statement must contain:

#### §4.51

#### 18 CFR Ch. I (4-1-02 Edition)

(1) If the application is for an initial license, a tabulated statement providing the actual or approximate original cost (approximate costs must be identified as such) of:

(i) Any land or water right necessary to the existing project; and

(ii) Each existing structure and facility described under paragraph (b) of this section (Exhibit A).

(2) If the applicant is a licensee applying for a new license, and is not a municipality or a state, an estimate of the amount which would be payable if the project were to be taken over pursuant to section 14 of the Federal Power Act upon expiration of the license in effect [see 16 U.S.C. 807], including:

(i) Fair value;

(ii) Net investment; and

(iii) Severance damages.

(3) If the application includes proposals for any new development, a statement of estimated costs, including:

(i) The cost of any land or water rights necessary to the new development; and

(ii) The cost of the new development work, with a specification of:

(A) Total cost of each major item;

(B) Indirect construction costs such as costs of construction equipment, camps, and commissaries;

(C) Interest during construction; and

(D) Overhead, construction, legal expenses, taxes, administrative and general expenses, and contingencies.

(4) A statement of the estimated average annual cost of the total project as proposed, specifying any projected changes in the costs over the estimated financing or licensing period if the applicant takes such changes into account, including:

(i) Cost of capital (equity and debt);

(ii) Local, state, and Federal taxes;

(iii) Depreciation or amortization, and

(iv) Operation and maintenance expenses, including interim replacements, insurance, administrative and general expenses, and contingencies.

(5) A statement of the estimated annual value of project power, based on a showing of the contract price for sale of power or the estimated average annual cost of obtaining an equivalent

amount of power (capacity and energy) from the lowest cost alternative source, specifying any projected changes in the cost of power from that source over the estimated financing or licensing period if the applicant takes such changes into account.

(6) A statement specifying the sources and extent of financing and annual revenues available to the applicant to meet the costs identified in paragraphs (e) (3) and (4) of this section.

(f) *Exhibit E* is an Environmental Report. Information provided in the report must be organized and referenced according to the itemized subparagraphs below. See §4.38 for consultation requirements. The Environmental Report must contain the following information, *commensurate with the scope of the proposed project*:

(1) *General description of the locale.* The applicant must provide a general description of the environment of the project and its immediate vicinity. The description must include general information concerning climate, topography, wetlands, vegetative cover, land development, population size and density, the presence of any floodplain and the occurrence of flood events in the vicinity of the project, and any other factors important to an understanding of the setting.

(2) *Report on water use and quality.* The report must discuss the consumptive use of project waters and the impact of the project on water quality. The report must be prepared in consultation with the state and Federal agencies with responsibility for management of water quality in the affected stream or other body of water. Consultation must be documented by appending to the report a letter from each agency consulted that indicates the nature, extent, and results of the consultation. The report must include:

(i) A description (including specified volume over time) of existing and proposed uses of project waters for irrigation, domestic water supply, steam-electric plant, industrial, and other consumptive purposes;

(ii) A description of existing water quality in the project impoundment and downstream water affected by the

project and the applicable water quality standards and stream segment classifications;

(iii) A description of any minimum flow releases specifying the rate of flow in cubic feet per second (cfs) and duration, changes in the design of project works or in project operation, or other measures recommended by the agencies consulted for the purposes of protecting or improving water quality, including measures to minimize the short-term impacts on water quality of any proposed new development of project works (for any dredging or filling, refer to 40 CFR part 230 and 33 CFR 320.3(f) and 323.3(e))<sup>1</sup>;

(iv) A statement of the existing measures to be continued and new measures proposed by the applicant for the purpose of protecting or improving water quality, including an explanation of why the applicant has rejected any measures recommended by an agency and described under paragraph (f)(2)(iii) of this section.

(v) A description of the continuing impact on water quality of continued operation of the project and the incremental impact of proposed new development of project works or changes in project operation; and

(3) *Report on fish, wildlife, and botanical resources.* The report must discuss fish, wildlife, and botanical resources in the vicinity of the project and the impact of the project on those resources. The report must be prepared in consultation with any state agency with responsibility for fish, wildlife, and botanical resources, the U.S. Fish and Wildlife Service, the National Marine Fisheries Service (if the project may affect anadromous fish resources subject to that agency's jurisdiction), and any other state or Federal agency with managerial authority over any part of the project lands. Consultation must be documented by appending to the report a letter from each agency consulted that indicates the nature, extent, and results of the consultation. The report must include:

(i) A description of the fish, wildlife, and botanical resources of the project and its vicinity, and of downstream

areas affected by the project, including identification of any species listed as threatened or endangered by the U.S. Fish and Wildlife Service (See 50 CFR 17.11 and 17.12);

(ii) A description of any measures or facilities recommended by the agencies consulted for the mitigation of impacts on fish, wildlife, and botanical resources, or for the protection or improvement of those resources;

(iii) A statement of any existing measures or facilities to be continued or maintained and any measures or facilities proposed by the applicant for the mitigation of impacts on fish, wildlife, and botanical resources, or for the protection or improvement of such resources, including an explanation of why the applicant has rejected any measures or facilities recommended by an agency and described under paragraph (f)(3)(ii) of this section.

(iv) A description of any anticipated continuing impact on fish, wildlife, and botanical resources of continued operation of the project, and the incremental impact of proposed new development of project works or changes in project operation; and

(v) The following materials and information regarding the measures and facilities identified under paragraph (f)(3)(iii) of this section:

(A) Functional design drawings of any fish passage and collection facilities, indicating whether the facilities depicted are existing or proposed (these drawings must conform to the specifications of §4.39 regarding dimensions of full-sized prints, scale, and legibility);

(B) A description of operation and maintenance procedures for any existing or proposed measures or facilities;

(C) An implementation or construction schedule for any proposed measures or facilities, showing the intervals following issuance of a license when implementation of the measures or construction of the facilities would be commenced and completed;

(D) An estimate of the costs of construction, operation, and maintenance, of any proposed facilities, and of implementation of any proposed measures, including a statement of the sources and extent of financing; and

<sup>1</sup>33 CFR part 323 was revised at 47 FR 31810, July 22, 1982, and §323.3(e) no longer exists.

(E) A map or drawing that conforms to the size, scale, and legibility requirements of §4.39 showing by the use of shading, cross-hatching, or other symbols the identity and location of any measures or facilities, and indicating whether each measure or facility is existing or proposed (the map or drawings in this exhibit may be consolidated).

(4) *Report on historical and archeological resources.* The report must discuss the historical and archeological resources in the project area and the impact of the project on those resources. The report must be prepared in consultation with the State Historic Preservation Officer and the National Park Service. Consultation must be documented by appending to the report a letter from each agency consulted that indicates the nature, extent, and results of the consultation. The report must contain:

(i) Identification of any sites either listed or determined to be eligible for inclusion in the National Register of Historic Places that are located in the project area, or that would be affected by operation of the project or by new development of project facilities (including facilities proposed in this exhibit);

(ii) A description of any measures recommended by the agencies consulted for the purpose of locating, identifying, and salvaging historical or archeological resources that would be affected by operation of the project, or by new development of project facilities (including facilities proposed in this exhibit), together with a statement of what measures the applicant proposes to implement and an explanation of why the applicant rejects any measures recommended by an agency.

(iii) The following materials and information regarding the survey and salvage activities described under paragraph (f)(4)(ii) of this section:

(A) A schedule for the activities, showing the intervals following issuance of a license when the activities would be commenced and completed; and

(B) An estimate of the costs of the activities, including a statement of the sources and extent of financing.

(5) *Report on recreational resources.* The report must discuss existing and proposed recreational facilities and opportunities at the project. The report must be prepared in consultation with local, state, and regional recreation agencies and planning commissions, the National Park Service, and any other state or Federal agency with managerial authority over any part of the project lands. Consultation must be documented by appending to the report a letter from each agency consulted indicating the nature, extent, and results of the consultation. The report must contain:

(i) A description of any existing recreational facilities at the project, indicating whether the facilities are available for public use;

(ii) An estimate of existing and potential recreational use of the project area, in daytime and overnight visits;

(iii) A description of any measures or facilities recommended by the agencies consulted for the purpose of creating, preserving, or enhancing recreational opportunities at the project and in its vicinity (including opportunities for the handicapped), and for the purpose of ensuring the safety of the public in its use of project lands and waters;

(iv) A statement of the existing measures or facilities to be continued or maintained and the new measures or facilities proposed by the applicant for the purpose of creating, preserving, or enhancing recreational opportunities at the project and in its vicinity, and for the purpose of ensuring the safety of the public in its use of project lands and waters, including an explanation of why the applicant has rejected any measures or facilities recommended by an agency and described under paragraph (f)(5)(iii) of this section; and

(v) The following materials and information regarding the measures and facilities identified under paragraphs (f)(5) (i) and (iv) of this section:

(A) Identification of the entities responsible for implementing, constructing, operating, or maintaining any existing or proposed measures or facilities;

(B) A schedule showing the intervals following issuance of a license at which implementation of the measures or

construction of the facilities would be commenced and completed;

(C) An estimate of the costs of construction, operation, and maintenance of any proposed facilities, including a statement of the sources and extent of financing;

(D) A map or drawing that conforms to the size, scale, and legibility requirements of §4.39 showing by the use of shading, cross-hatching, or other symbols the identity and location of any facilities, and indicating whether each facility is existing or proposed (the maps or drawings in this exhibit may be consolidated); and

(vi) A description of any areas within or in the vicinity of the proposed project boundary that are included in, or have been designated for study for inclusion in, the National Wild and Scenic Rivers System, or that have been designated as wilderness area, recommended for such designation, or designated as a wilderness study area under the Wilderness Act.

(6) *Report on land management and aesthetics.* The report must discuss the management of land within the proposed project boundary, including wetlands and floodplains, and the protection of the recreational and scenic values of the project. The report must be prepared following consultation with local and state zoning and land management authorities and any Federal or state agency with managerial authority over any part of the project lands. Consultation must be documented by appending to the report a letter from each agency consulted indicating the nature, extent, and results of the consultation. The report must contain:

(i) A description of existing development and use of project lands and all other lands abutting the project impoundment;

(ii) A description of the measures proposed by the applicant to ensure that any proposed project works, rights-of-way, access roads, and other topographic alterations blend, to the extent possible, with the surrounding environment; (*see, e.g.*, 44 F.P.C. 1496, *et seq.*);

(iii) A description of wetlands or floodplains within, or adjacent to, the project boundary, any short-term or

long-term impacts of the project on those wetlands or floodplains, and any mitigative measures in the construction or operation of the project that minimize any adverse impacts on the wetlands or floodplains;

(iv) A statement, including an analysis of costs and other constraints, of the applicant's ability to provide a buffer zone around all or any part of the impoundment, for the purpose of ensuring public access to project lands and waters and protecting the recreational and aesthetic values of the impoundment and its shoreline;

(v) A description of the applicant's policy, if any, with regard to permitting development of piers, docks, boat landings, bulkheads, and other shoreline facilities on project lands and waters; and

(vi) Maps or drawings that conform to the size, scale and legibility requirements of §4.39, or photographs, sufficient to show the location and nature of the measures proposed under paragraph (f)(6)(ii) of this section (maps or drawings in this exhibit may be consolidated).

(7) *List of literature.* The report must include a list of all publications, reports, and other literature which were cited or otherwise utilized in the preparation of any part of the environmental report.

(g) *Exhibit F* consists of general design drawings of the principal project works described under paragraph (b) of this section (Exhibit A) and supporting information used to demonstrate that existing project structures are safe and adequate to fulfill their stated functions.

(1) The drawings must show all major project structures in sufficient detail to provide a full understanding of the project, including:

- (i) Plans (overhead view);
- (ii) Elevations (front view); and
- (iii) Sections (side view).

(2) *Supporting design report.* The applicant must furnish, at a minimum, the following supporting information to demonstrate that existing structures are safe and adequate to fulfill their stated functions, and must submit such information in a separate report at the time the application is filed. The report must include:

(i) A description of the physical condition or state of maintenance and repair of any existing and proposed structures or equipment; and

(ii) Information relating to composition and competency of foundations and other structures, gradation of filter and riprap material, design strength and ultimate strength of concrete and steel, stress and stability analysis, spillway rating curves, water levels, and other appropriate data.

(3) The applicant must submit two copies of the supporting design report as described in paragraph (g)(2) of this section at the time general design drawings are submitted to the Commission for review.

(h) *Exhibit G* is a map of the project. The map must conform to the specifications of §4.39. If more than one sheet is used, the sheets must be numbered consecutively and each sheet must bear a small inset sketch showing the entire project (or development) and indicating the portion depicted on the sheet. The map must show:

(1) *Location of the project and principal features.* The map must show the location of the project as a whole with reference to the affected stream or other body of water and, if possible, to a nearby town or any permanent monuments or objects, such as roads, transmission lines or other structures, that can be noted on the map and recognized in the field. The map must also show the relative locations and physical interrelationships of the principal project works and other features described under paragraph (b) of this section (Exhibit A).

(2) *Project boundary.* The map must show a project boundary enclosing all of the principal project works and other features described under paragraph (b) of this section (Exhibit A) that are to be licensed. If accurate survey information is not available at the time the license application is filed, the applicant must so state, and a tentative boundary may be submitted. The boundary must enclose only those lands necessary for operation and maintenance of the project and for other project purposes, such as recreation, shoreline control, or protection of environmental resources (see paragraph (f) of this section (Exhibit E)).

Existing residential, commercial, or other structures may be included within the boundary only to the extent that underlying lands are needed for project purposes (e.g., for flowage, public recreation, shoreline control, or protection of environmental resources). If the boundary is on land covered by a public land survey, ties must be shown on the map at sufficient points to permit accurate platting of the position of the boundary relative to the lines of the public land survey. If the lands are not covered by a public land survey, the best available legal description of the position of the boundary must be provided, including distances and directions from fixed monuments or physical features. The boundary must be described as follows:

(i) *Impoundments.* (A) The boundary around a project impoundment may be described by any of the following:

(1) Contour lines, including the contour elevation (preferred method);

(2) Specified courses and distances (metes and bounds);

(3) If the project lands are covered by a public land survey, lines upon or parallel to the lines of the survey; or

(4) Any combination of the above methods.

(B) The boundary must be located no more than 200 feet (horizontal measurement) from the exterior margin of the reservoir, defined by the normal maximum surface elevation, except where deviations may be necessary in describing the boundary according to the above methods, or where additional lands are necessary for project purposes, such as public recreation, shoreline control, or protection of environmental resources.

(ii) *Continuous features.* The boundary around linear (*continuous*) project features such as access roads, transmission lines, and conduits may be described by specified distances from center lines or offset lines of survey. The width of such corridors must not exceed 200 feet, unless good cause is shown for a greater width. Several sections of a continuous feature may be shown on a single sheet, with information showing the sequence of contiguous sections.

(iii) *Noncontinuous features.* (A) the boundary around noncontinuous

## Federal Energy Regulatory Commission

## § 4.60

project works such as dams, spillways, and powerhouses may be described by:

- (1) Contour lines;
- (2) Specified courses and distances;
- (3) If the project lands are covered by a public land survey, lines upon or parallel to the lines of the survey; or
- (4) Any combination of the above methods.

(B) The boundary must enclose only those lands that are necessary for safe and efficient operation and maintenance of the project, or for other specified project purposes, such as public recreation or protection of environmental resources.

(3) *Federal lands.* Any public lands and reservations of the United States (see 16 U.S.C. 796(1) and (2)) (*Federal lands*) that are within the project boundary, e.g., lands administered by the U.S. Forest Service, Bureau of Land Management, National Park Service, or Indian tribal lands, and the boundaries of those Federal lands, must be identified on the map:

- (i) By legal subdivisions of a public land survey of the affected area (a protraction of identified township and section lines is sufficient for this purpose);
- (ii) By the Federal agency, identified by symbol or legend if desired, that maintains or manages each identified subdivision of the public land survey within the project boundary; and
- (iii) In the absence of a public land survey, by the location of the Federal lands according to the distances and directions from fixed monuments or physical features. When a Federal survey monument or a Federal bench mark will be destroyed or rendered unusable by the construction of project works, at least two permanent, marked, witness monuments or bench marks must be established at accessible points. The maps must show the location (and elevation, for bench marks) of the survey monument or bench mark which will be destroyed or rendered unusable, as well as of the witness monuments or bench marks. Connecting courses and distances from the witness monuments or bench marks to the original must also be shown.

(4) *Non-Federal lands.* For those lands within the project boundary not identified under paragraph (h)(3) of this sec-

tion, the map must identify by legal subdivision:

- (i) Lands owned in fee by the applicant and lands that the applicant plans to acquire in fee; and
- (ii) Lands over which the applicant has acquired or plans to acquire rights to occupancy and use other than fee title, including rights acquired or to be required by easement or lease.

[Order 141, 12 FR 8485, Dec. 19, 1947, as amended by Order 123, 46 FR 9029, Jan. 28, 1981; Order 183, 46 FR 55251, Nov. 9, 1981; Order 184, 46 FR 55942, Nov. 13, 1981; Order 413, 50 FR 11684, Mar. 25, 1985; Order 464, 52 FR 5449, Feb. 23, 1987; Order 540, 57 FR 21737, May 22, 1992]

### Subpart G—Application for License for Minor Water Power Projects and Major Water Power Projects 5 Megawatts or Less

#### § 4.60 Applicability and notice to agencies.

(a) *Applicability.* The provisions of this subpart apply to any application for an initial license or a new license for:

- (1) A minor water power project, as defined in § 4.30(b)(17);
- (2) Any major project—existing dam, as defined in § 4.30(b)(16), that has a total installed capacity of 5 MW or less; or
- (3) Any major unconstructed project or major modified project, as defined in § 4.30 (b) (15) and (14) respectively, that has a total installed capacity of 5 MW or less.

(b) *Notice to agencies.* The Commission will supply interested Federal, state, and local agencies with notice of any application for license for a water power project 5 MW or less and request comment on the application. Copies of the application will be available for inspection at the Commission's Division of Public Information. The applicant shall also furnish copies of the filed application to any Federal, state, or local agency that so requests.

(c) Unless an applicant for a license for a minor water power project requests in its application that the Commission apply the following provisions of Part I of the Federal Power Act when it issues a minor license for a