

## Rural Utilities Service, USDA

## § 1724.3

body for extending the maturity of existing debt and for the additional debt service payment incurred.

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## PART 1724—ELECTRIC ENGINEERING, ARCHITECTURAL SERVICES AND DESIGN POLICIES AND PROCEDURES

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AUTHORITY: 7 U.S.C. 901 *et seq.*, 1921 *et seq.*, 6941 *et seq.*

SOURCE: 63 FR 35314, June 29, 1998, unless otherwise noted.

### Subpart A—General

#### § 1724.1 Introduction.

(a) The policies, procedures and requirements in this part implement certain provisions of the standard form of loan documents between the Rural Utilities Service (RUS) and its electric borrowers.

(b) All borrowers, regardless of the source of financing, shall comply with RUS' requirements with respect to design, construction standards, and the use of RUS accepted material on their electric systems.

(c) Borrowers are required to use RUS contract forms only if the facilities are financed by RUS.

#### § 1724.2 Waivers.

The Administrator may waive, for good cause on a case-by-case basis, requirements and procedures of this part.

#### § 1724.3 Definitions.

Terms used in this part have the meanings set forth in §1710.2 of this chapter. References to specific RUS forms and other RUS documents, and to specific sections or lines of such forms and documents, shall include the corresponding forms, documents, sections and lines in any subsequent revisions of these forms and documents. In addition to the terms defined in §1710.2 of this chapter, the following terms have the following meanings for the purposes of this part:

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*Architect* means a registered or licensed person employed by the borrower to provide architectural services for a project and duly authorized assistants and representatives.

*Engineer* means a registered or licensed person, who may be a staff employee or an outside consultant, to provide engineering services and duly authorized assistants and representatives.

*Force account construction* means construction performed by the borrower's employees.

*GPO* means Government Printing Office.

*NESC* means the National Electrical Safety Code.

*RE Act* means the Rural Electrification Act of 1936 as amended (7 U.S.C. 901 *et seq.*).

*Repowering* means replacement of the steam generator or the prime mover or both at a generating plant.

*RUS* means Rural Utilities Service.

*RUS approval* means written approval by the Administrator or a representative with delegated authority. RUS approval must be in writing, except in emergency situations where RUS approval may be given orally followed by a confirming letter.

*RUS financed* means financed or funded wholly or in part by a loan made or guaranteed by RUS, including concurrent supplemental loans required by §1710.110 of this chapter, loans to reimburse funds already expended by the borrower, and loans to replace interim financing.

[63 FR 35314, June 29, 1998, as amended at 63 FR 58284, Oct. 30, 1998]

## § 1724.4 Qualifications.

The borrower shall ensure that:

(a) All selected architects and engineers meet the applicable registration and licensing requirements of the States in which the facilities will be located;

(b) All selected architects and engineers are familiar with RUS standards and requirements; and

(c) All selected architects and engineers have had satisfactory experience with comparable work.

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### § 1724.5 Submission of documents to RUS.

(a) *Where to send documents.* Documents required to be submitted to RUS under this part are to be sent to the office of the borrower's respective RUS Regional Director, the Power Supply Division Director, or such other office of RUS as designated by RUS. (See part 1700 of this chapter.)

(b) *Contracts requiring RUS approval.* The borrower shall submit to RUS three copies of each contract that is subject to RUS approval under subparts B and C of this part. At least one copy of each contract must be an original signed in ink (i.e., no facsimile signature). Each contract submittal must be accompanied by a certified copy of the board resolution awarding the contract.

(c) *Contract amendments requiring RUS approval.* The borrower shall submit to RUS three copies of each contract amendment (at least one copy of which must be an original signed in ink) which is subject to RUS approval. Each contract amendment submittal to RUS must be accompanied by a certified copy of the board resolution approving the amendment.

### § 1724.6 Insurance requirements.

(a) Borrowers shall ensure that all architects and engineers working under contract with the borrower have insurance coverage as required by part 1788 of this chapter.

(b) Borrowers shall also ensure that all architects and engineers working under contract with the borrower have insurance coverage for Errors and Omissions (Professional Liability Insurance) in an amount at least as large as the amount of the architectural or engineering services contract but not less than \$500,000.

### § 1724.7 Debarment and suspension.

Borrowers shall comply with the requirements on debarment and suspension in connection with procurement activities as set forth in part 3017 of this title, particularly with respect to lower tier transactions, e.g., procurement contracts for goods or services.

**§ 1724.8 Restrictions on lobbying.**

Borrowers shall comply with the restrictions and requirements in connection with procurement activities as set forth in part 3018 of this title.

**§ 1724.9 Environmental compliance.**

Borrowers shall comply with the requirements of part 1794 of this chapter, Environmental Policies and Procedures for Electric and Telephone Borrowers.

**§ 1724.10 Standard forms of contracts for borrowers.**

The standard loan agreement between RUS and its borrowers provides that, in accordance with applicable RUS regulations in this chapter, the borrower shall use standard forms of contracts promulgated by RUS for construction, procurement, engineering services, and architectural services financed by a loan made or guaranteed by RUS. This part implements these provisions of the RUS loan agreement. Subparts A through E of this part prescribe when and how borrowers are required to use RUS standard forms of contracts for engineering and architectural services. Subpart F of this part prescribes the procedures that RUS follows in promulgating standard contract forms and identifies those contract forms that borrowers are required to use for engineering and architectural services.

[63 FR 58284, Oct. 30, 1998]

**§§ 1724.11–1724.19 [Reserved]****Subpart B—Architectural Services****§ 1724.20 Borrowers' requirements—architectural services.**

The provisions of this section apply to all borrower electric system facilities regardless of the source of financing.

(a) Each borrower shall select a qualified architect to perform the architectural services required for the design and construction management of headquarters facilities. The selection of the architect is not subject to RUS approval unless specifically required by RUS on a case by case basis. Architect's qualification information need not be submitted to RUS unless

specifically requested by RUS on a case by case basis.

(b) The architect retained by the borrower shall not be an employee of the building supplier or contractor, except in cases where the building is prefabricated and pre-engineered.

(c) The architect's duties are those specified under the Architectural Services Contract and under subpart E of this part, and, as applicable, those duties assigned to the "engineer" for competitive procurement procedures in part 1726 of this chapter.

(d) If the facilities are RUS financed, the borrower shall submit or require the architect to submit one copy of each construction progress report to RUS upon request.

(e) Additional information concerning RUS requirements for electric borrowers' headquarters facilities are set forth in subpart E of this part. See also RUS Bulletin 1724E-400, Guide to Presentation of Building Plans and Specifications, for additional guidance. This bulletin is available from Program Development and Regulatory Analysis, Rural Utilities Service, U.S. Department of Agriculture, Stop 1522, 1400 Independence Ave., SW., Washington, DC 20250-1522.

**§ 1724.21 Architectural services contracts.**

The provisions of this section apply only to RUS financed electric system facilities.

(a) RUS Form 220, Architectural Services Contract, must be used by electric borrowers when obtaining architectural services.

(b) The borrower shall ensure that the architect furnishes or obtains all architectural services related to the design and construction management of the facilities.

(c) Reasonable modifications or additions to the terms and conditions in the RUS contract form may be made to define the exact services needed for a specific undertaking. Such modifications or additions shall not relieve the architect or the borrower of the basic responsibilities required by the RUS contract form, and shall not alter any terms and conditions required by law.

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All substantive changes must be approved by RUS prior to execution of the contract.

(d) Architectural services contracts are not subject to RUS approval and need not be submitted to RUS unless specifically requested by RUS on a case by case basis.

(e) *Closeout.* Upon completion of all services and obligations required under each architectural services contract, including, but not limited to, submission of final documents, the borrower must closeout that contract. The borrower shall obtain from the architect a final statement of cost, which must be supported by detailed information as appropriate. For example, out-of-pocket expense and per diem types of compensation should be listed separately with labor, transportation, etc., itemized for each service involving these types of compensation. RUS Form 284, Final Statement of Cost for Architectural Service, may be used. All computations of the compensation must be made in accordance with the terms of the architectural services contract. Closeout documents need not be submitted to RUS unless specifically requested by RUS on a case by case basis.

§§ 1724.22–1724.29 [Reserved]

**Subpart C—Engineering Services**

**§ 1724.30 Borrowers’ requirements—engineering services.**

The provisions of this section apply to all borrower electric system facilities regardless of the source of financing.

(a) Each borrower shall select one or more qualified persons to perform the engineering services involved in the planning, design, and construction management of the system.

(b) Each borrower shall retain or employ one or more qualified engineers to inspect and certify all new construction in accordance with §1724.32. The engineer must not be the borrower’s manager.

(c) The selection of the engineer is not subject to RUS approval unless specifically required by RUS on a case by case basis. Engineer’s qualification information need not be submitted to

RUS unless specifically requested by RUS on a case by case basis.

(d) The engineer’s duties are specified under the Engineering Services Contract and under part 1726 of this chapter. The borrower shall ensure that the engineer executes all certificates and other instruments pertaining to the engineering details required by RUS.

(e) Additional requirements related to appropriate seismic safety measures are contained in part 1792, subpart C, of this chapter, Seismic Safety of Federally Assisted New Building Construction.

(f) If the facilities are RUS financed, the borrower shall submit or require the engineer to submit one copy of each construction progress report to RUS upon RUS’ request.

EFFECTIVE DATE NOTE: At 78 FR 73371, Dec. 5, 2013, §1724.30 was amended by revising paragraph (a), effective Feb. 3, 2014. For the convenience of the user, the revised text is set forth as follows:

**§ 1724.30 Borrowers’ requirements—engineering services.**

\* \* \* \* \*

(a) Each borrower shall select one or more qualified persons to perform the engineering services involved in the planning (including the development of an EE Program eligible for financing pursuant to subpart H of part 1710 of this chapter, design, and construction management of the system.

\* \* \* \* \*

**§ 1724.31 Engineering services contracts.**

The provisions of this section apply only to RUS financed electric system facilities.

(a) RUS contract forms for engineering services shall be used. Reasonable modifications or additions to the terms and conditions in the RUS contract form may be made to define the exact services needed for a specific undertaking. Any such modifications or additions shall not relieve the engineer or the borrower of the basic responsibilities required by the RUS contract form, and shall not alter any terms and conditions required by law. All substantive changes to the RUS contract form shall be approved by RUS prior to execution of the contract.

(b) RUS Form 236, Engineering Service Contract—Electric System Design and Construction, shall be used for all distribution, transmission, substation, and communications and control facilities. These contracts are not subject to RUS approval and need not be submitted to RUS unless specifically requested by RUS on a case by case basis.

(c) RUS Form 211, Engineering Service Contract for the Design and Construction of a Generating Plant, shall be used for all new generating units and repowering of existing units. These contracts require RUS approval.

(d) Any amendments to RUS approved engineering services contracts require RUS approval.

(e) *Closeout.* Upon completion of all services and obligations required under each engineering services contract, including, but not limited to, submission of final documents, the borrower must closeout the contract. The borrower shall obtain from the engineer a completed final statement of engineering fees, which must be supported by detailed information as appropriate. RUS Form 234, Final Statement of Engineering Fee, may be used. All computations of the compensation shall be made in accordance with the terms of the engineering services contract. Closeout documents need not be submitted to RUS unless specifically requested by RUS on a case by case basis.

**§ 1724.32 Inspection and certification of work order construction.**

The provisions of this section apply to all borrower electric system facilities regardless of the source of financing.

(a) The borrower shall ensure that all field inspection and related services are performed within 6 months of the completion of construction, and are performed by a licensed engineer, except that a subordinate of the licensed engineer may make the inspection, provided the following conditions are met:

(1) The inspection by the subordinate is satisfactory to the borrower;

(2) This practice is acceptable under applicable requirements of the States in which the facilities are located;

(3) The subordinate is experienced in making such inspections;

(4) The name of the person making the inspection is included in the certification; and

(5) The licensed engineer signs such certification which appears on the inventory of work orders.

(b) The inspection shall include a representative and sufficient amount of construction listed on each RUS Form 219, Inventory of Work Orders (or comparable form), being inspected to assure the engineer that the construction is acceptable. Each work order that was field inspected shall be indicated on RUS Form 219 (or comparable form.) The inspection services shall include, but not be limited to, the following:

(1) Determination that construction conforms to RUS specifications and standards and to the requirements of the National Electrical Safety Code (NESC), State codes, and local codes;

(2) Determination that the staking sheets or as-built drawings represent the construction completed and inspected;

(3) Preparation of a list of construction clean-up notes and staking sheet discrepancies to be furnished to the owner to permit correction of construction, staking sheets, other records, and work order inventories;

(4) Reinspection of construction corrected as a result of the engineer's report;

(5) Noting, initialing, and dating the staking or structure sheets or as-built drawings and noting the corresponding work order entry for line construction; and

(6) Noting, initialing, and dating the as-built drawings or sketches for generating plants, substations, and other major facilities.

(c) *Certification.* (1) The following certification must appear on all inventories of work orders:

I hereby certify that sufficient inspection has been made of the construction reported by this inventory to give me reasonable assurance that the construction complies with applicable specifications and standards and meets appropriate code requirements as to strength and safety. This certification is in accordance with acceptable engineering practice.

(2) A certification must also include the name of the inspector, name of the

firm, signature of the licensed engineer, the engineer's State license number, and the date of signature.

§§ 1724.33–1724.39 [Reserved]

### Subpart D—Electric System Planning

#### § 1724.40 General.

Borrowers shall have ongoing, integrated planning to determine their short-term and long-term needs for plant additions, improvements, replacements, and retirements for their electric systems. The primary components of the planning system consist of long-range engineering plans and construction work plans. Long-range engineering plans identify plant investments required over a long-range period, 10 years or more. Construction work plans specify and document plant requirements for a shorter term, 2 to 4 years. Long-range engineering plans and construction work plans shall be in accordance with part 1710, subpart F, of this chapter. See also RUS Bulletins 1724D–101A, Electric System Long-Range Planning Guide, and 1724D–101B, System Planning Guide, Construction Work Plans, for additional guidance. These bulletins are available from Program Development and Regulatory Analysis, Rural Utilities Service, U.S. Department of Agriculture, Stop 1522, 1400 Independence Ave., SW., Washington, DC 20250–1522.

§§ 1724.41–1724.49 [Reserved]

### Subpart E—Electric System Design

#### § 1724.50 Compliance with National Electrical Safety Code (NESC).

The provisions of this section apply to all borrower electric system facilities regardless of the source of financing.

(a) A borrower shall ensure that its electric system, including all electric distribution, transmission, and generating facilities, is designed, constructed, operated, and maintained in accordance with all applicable provisions of the most current and accepted criteria of the National Electrical Safety Code (NESC) and all applicable and current electrical and safety re-

quirements of any State or local governmental entity. Copies of the NESC may be obtained from the Institute of Electrical and Electronic Engineers, Inc., 445 Hoes Lane, Piscataway, NJ 08855. This requirement applies to the borrower's electric system regardless of the source of financing.

(b) Any electrical standard requirements established by RUS are in addition to, and not in substitution for or a modification of, the most current and accepted criteria of the NESC and any applicable electrical or safety requirements of any State or local governmental entity.

(c) Overhead distribution circuits shall be constructed with not less than the Grade C strength requirements as described in Section 26, Strength Requirements, of the NESC when subjected to the loads specified in NESC Section 25, Loadings for Grades B and C. Overhead transmission circuits shall be constructed with not less than the Grade B strength requirements as described in NESC Section 26.

#### § 1724.51 Design requirements.

The provisions of this section apply to all borrower electric system facilities regardless of the source of financing.

(a) *Distribution.* All distribution facilities must conform to the applicable RUS construction standards and utilize RUS accepted materials.

(b) *Transmission lines.* (1) All transmission line design data must be approved by RUS.

(2) Design data consists of all significant design features, including, but not limited to, transmission line design data summary, general description of terrain, right-of-way calculations, discussion concerning conductor and structure selection, conductor sag and tension information, design clearances, span limitations due to clearances, galloping or conductor separation, design loads, structure strength limitations, insulator selection and design, guying requirements, and vibration considerations. For lines composed of steel or concrete poles, or steel towers, in which load information will be used to purchase the structures, the design data shall also include loading trees, structure configuration and selection,

and a discussion concerning foundation selection.

(3) Line design data for uprating transmission lines to higher voltage levels or capacity must be approved by RUS.

(4) Transmission line design data which has received RUS approval in connection with a previous transmission line construction project for a particular borrower is considered approved by RUS for that borrower, provided that:

(i) The conditions on the project fall within the design data previously approved; and

(ii) No significant NESC revisions have occurred.

(c) *Substations.* (1) All substation design data must be approved by RUS.

(2) Design data consists of all significant design features, including, but not limited to, a discussion of site considerations, oil spill prevention measures, design considerations covering voltage, capacity, shielding, clearances, number of low and high voltage phases, major equipment, foundation design parameters, design loads for line support structures and the control house, seismic considerations, corrosion, grounding, protective relaying, and AC and DC auxiliary systems. Reference to applicable safety codes and construction standards are also to be included.

(3) Substation design data which has received RUS approval in connection with a previous substation construction project for a particular borrower is considered approved by RUS for that borrower, provided that:

(i) The conditions on the project fall within the design data previously approved; and

(ii) No significant NESC revisions have occurred.

(d) *Generating facilities.* (1) This section covers all portions of a generating plant including plant buildings, the generator step-up transformer, and the transmission switchyard at a generating plant. Warehouses and equipment service buildings not associated with generation plants are covered under paragraph (e) of this section. Generation plant buildings must meet the requirements of paragraph (e)(1) of this section.

(2) For all new generation units and for all repowering projects, the design outline shall be approved by RUS, unless RUS determines that a design outline is not needed for a particular project.

(3) The design outline will include all significant design criteria. During the early stages of the project, RUS will, in consultation with the borrower and its consulting engineer, identify the specific items which are to be included in the design outline.

(e) *Headquarters*—(1) *Applicable laws.* The design and construction of headquarters facilities shall comply with all applicable Federal, State, and local laws and regulations, including, but not limited to:

(i) Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. 794), which states that no qualified individual with a handicap shall, solely by reason of their handicap, be excluded from participation in, be denied the benefits of, or be subject to discrimination under any program or activity receiving Federal financial assistance. The Uniform Federal Accessibility Standards (41 CFR part 101-19, subpart 101-19.6, appendix A) are the applicable standards for all new or altered borrower buildings, regardless of the source of financing.

(ii) The Architectural Barriers Act of 1968 (42 U.S.C. 4151), which requires that buildings financed with Federal funds are designed and constructed to be accessible to the physically handicapped.

(iii) The Earthquake Hazards Reduction Act of 1977 (42 U.S.C. 7701 *et seq.*), and Executive Order 12699, Seismic Safety of Federal and Federally Assisted or Regulated New Building Construction (3 CFR 1990 Comp., p. 269). Appropriate seismic safety provisions are required for new buildings for which RUS provides financial assistance. (See part 1792, subpart C, of this chapter.)

(2) The borrower shall provide evidence, satisfactory in form and substance to the Administrator, that each building will be designed and built in compliance with all Federal, State, and local requirements.

(f) *Communications and control.* (1) This section covers microwave and

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powerline carrier communications systems, load control, and supervisory control and data acquisition (SCADA) systems.

(2) The performance considerations for a new or replacement master system must be approved by RUS. A master system includes the main controller and related equipment at the main control point. Performance considerations include all major system features and their justification, including, but not limited to, the objectives of the system, the types of parameters to be controlled or monitored, the communication media, alternatives considered, and provisions for future needs.

### § 1724.52 Permitted deviations from RUS construction standards.

The provisions of this section apply to all borrower electric system facilities regardless of the source of financing.

(a) *Structures for raptor protection.* (1) RUS standard distribution line structures may not have the extra measure of protection needed in areas frequented by eagles and other large raptors to protect such birds from electric shock due to physical contact with energized wires. Where raptor protection in the design of overhead line structures is required by RUS; a Federal, State or local authority with permit or license authority over the proposed construction; or where the borrower voluntarily elects to comply with the recommendations of the U.S. Fish and Wildlife Service or State wildlife agency, borrowers are permitted to deviate from RUS construction standards, provided:

(i) Structures are designed and constructed in accordance with “Suggested Practices for Raptor Protection on Powerlines: The State of the Art in 1996” (Suggested Practices for Raptor Protection); and,

(ii) Structures are in accordance with the NESC and applicable State and local regulations.

(2) Any deviation from the RUS construction standards for the purpose of raptor protection, which is not in accordance with the Suggested Practices for Raptor Protection, must be approved by RUS prior to construction. “Suggested Practices for Raptor Pro-

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tection on Powerlines: The State of the Art in 1996,” published by the Edison Electric Institute/Raptor Research Foundation, is hereby incorporated by reference. This incorporation by reference is approved by the Director of the Office of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies of this publication may be obtained from the Raptor Research Foundation, Inc., c/o Jim Fitzpatrick, Treasurer, Carpenter Nature Center, 12805 St. Croix Trail South, Hastings, Minnesota 55033. It is also available for inspection during normal business hours at RUS, Electric Staff Division, 1400 Independence Avenue, SW., Washington, DC, Room 1246-S, and at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

(b) *Transformer neutral connections.* Where it is necessary to separate the primary and secondary neutrals to provide the required electric service to a consumer, the RUS standard transformer secondary neutral connections may be modified in accordance with Rule 97D2 of the NESC.

(c) *Lowering of neutral conductor on overhead distribution lines.* (1) It is permissible to lower the neutral attachment on standard construction pole-top assemblies an additional distance not exceeding two feet (0.6 m) for the purpose of economically meeting the clearance requirements of the NESC.

(2) It is permissible to lower the transformer and associated neutral attachment up to two feet (0.6 m) to provide adequate clearance between the cutouts and single-phase, conventional distribution transformers.

(3) It is permissible to lower the neutral attachment on standard construction pole-top assemblies an additional distance of up to six feet (2 m) for the purpose of performing construction and future line maintenance on these assemblies from bucket trucks designed for such work.

[63 FR 35314, June 29, 1998, as amended at 69 FR 18803, Apr. 9, 2004]



**§ 1724.53 Preparation of plans and specifications.**

The provisions of this section apply to all borrower electric system facilities regardless of the source of financing.

(a) *General.* (1) The borrower (acting through the engineer, if applicable) shall prepare plans and specifications that adequately represent the construction to be performed.

(2) Plans and specifications for distribution, transmission, or generating facilities must be based on a construction work plan (as amended, if applicable), engineering study or construction program which has been approved by RUS if financing for the facilities will at any time be requested from RUS.

(b) *Composition of plans and specifications package.* (1) Whether built by force account or contract, each set of plans and specifications must include:

(i) *Distribution lines.* Specifications and drawings, staking sheets, key map and appropriate detail maps;

(ii) *Transmission lines.* Specifications and drawings, transmission line design data manual, vicinity maps of the project, a one-line diagram, and plan and profile sheets;

(iii) *Substations.* Specifications and drawings, including a one-line diagram, plot and foundation plan, grounding plan, and plans and elevations of structure and equipment, as well as all other necessary construction drawings, in sufficient detail to show phase spacing and ground clearances of live parts;

(iv) *Headquarters.* Specifications and drawings, including:

(A) A plot plan showing the location of the proposed building plus paving and site development;

(B) A one line drawing (floor plan and elevation view), to scale, of the proposed building with overall dimensions shown; and

(C) An outline specification including materials to be used (type of frame, exterior finish, foundation, insulation, etc.); and

(v) *Other facilities (e.g., generation and communications and control facilities).* Specifications and drawings, as necessary and in sufficient detail to accurately define the scope and quality of work required.

(2) For contract work, the appropriate standard RUS construction contract form shall be used as required by part 1726 of this chapter.

**§ 1724.54 Requirements for RUS approval of plans and specifications.**

The provisions of this section apply only to RUS financed electric system facilities.

(a) For any contract subject to RUS approval in accordance with part 1726 of this chapter, the borrower shall obtain RUS approval of the plans and specifications, as part of the proposed bid package, prior to requesting bids. RUS may require approval of other plans and specifications on a case by case basis.

(b) *Distribution lines.* RUS approval of the plans and specifications for distribution line construction is not required if standard RUS drawings, specifications, RUS accepted material, and standard RUS contract forms (as required by part 1726 of this chapter) are used. Drawings, plans and specifications for nonstandard distribution construction must be submitted to RUS and receive approval prior to requesting bids on contracts or commencement of force account construction.

(c) *Transmission lines.* (1) Plans and specifications for transmission construction projects which are not based on RUS approved line design data or do not use RUS standard structures must receive RUS approval prior to requesting bids on contracts or commencement of force account construction.

(2) Unless RUS approval is required by paragraph (a) of this section, plans and specifications for transmission construction which use previously approved design data and standard structures do not require RUS approval. Plans and specifications for related work, such as right-of-way clearing, equipment, and materials, do not require RUS approval unless required by paragraph (a) of this section.

(d) *Substations.* (1)(i) Plans and specifications for all new substations must receive RUS approval prior to requesting bids on contracts or commencement of force account construction, unless:

(A) The substation design has been previously approved by RUS; and

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(B) No significant NESC revisions have occurred.

(ii) The borrower shall notify RUS in writing that a previously approved design will be used, including identification of the previously approved design.

(2) Unless RUS approval is required by paragraph (a) of this section, plans and specifications for substation modifications and for substations using previously approved designs do not require RUS approval.

(e) *Generation facilities.* (1) This paragraph (e) covers all portions of a generating plant including plant buildings, the generator step-up transformer, and the transmission switchyard at a generating plant. Warehouses and equipment service buildings not associated with generation plants are covered under paragraph (f) of this section.

(2) The borrower shall obtain RUS approval, prior to issuing invitations to bid, of the terms and conditions for all generating plant equipment or construction contracts which will cost \$5,000,000 or more. Unless RUS approval is required by paragraph (a) of this section, plans and specifications for generating plant equipment and construction do not require RUS approval.

(f) *Headquarters buildings.* (1) This paragraph (f) covers office buildings, warehouses, and equipment service buildings. Generating plant buildings are covered under paragraph (e) of this section.

(2) Unless RUS approval is required by paragraph (a) of this section, plans and specifications for headquarters buildings do not require RUS approval. The borrower shall submit two copies of RUS Form 740g, Application for Headquarters Facilities. This form is available from Program Development and Regulatory Analysis, Rural Utilities Service, United States Department of Agriculture, Stop 1522, 1400 Independence Ave., SW., Washington, DC 20250–1522. The application must show floor area and estimated cost breakdown between office building space and space for equipment warehousing and service facilities, and include a one line drawing (floor plan and elevation view), to scale, of the proposed building with overall dimensions shown. The information concerning the planned building may be included in the bor-

rower's construction work plan in lieu of submitting it with the application. (See 7 CFR part 1710, subpart F.) Prior to issuing the plans and specifications for bid, the borrower shall also submit to RUS a statement, signed by the architect or engineer, that the building design meets the Uniform Federal Accessibility Standards (See § 1724.51(e)(1)(i)).

(g) *Communications and control facilities.* (1) This paragraph (g) covers microwave and powerline carrier communications systems, load control, and supervisory control and data acquisition (SCADA) systems.

(2) The borrower shall obtain RUS approval, prior to issuing invitations to bid, of the terms and conditions for communications and control facilities contracts which will cost \$1,500,000 or more. Unless RUS approval is required by paragraph (a) of this section, plans and specifications for communications and control facilities do not require RUS approval.

(h) Terms and conditions include the RUS standard form of contract, general and special conditions, and any other non-technical provisions of the contract. Terms and conditions which have received RUS approval in connection with a previous contract for a particular borrower are considered approved by RUS for that borrower.

[63 FR 35314, June 29, 1998, as amended at 65 FR 63196, Oct. 23, 2000; 77 FR 3071, Jan. 23, 2012]

**§ 1724.55 Dam safety.**

(a) The provisions of this section apply only to RUS financed electric system facilities.

(1)(i) Any borrower that owns or operates a RUS financed dam must utilize the "Federal Guidelines for Dam Safety," (Guidelines), as applicable. A dam, as more fully defined in the Guidelines, is generally any artificial barrier which either:

(A) Is 25 feet (8 m) or more in height;

or

(B) Has an impounding capacity at maximum water storage elevation of 55 acre-feet (68,000 m<sup>3</sup>) or more.

(ii) The "Federal Guidelines for Dam Safety," FEMA 93, June, 1979, published

by the Federal Emergency Management Agency (FEMA), is hereby incorporated by reference. This incorporation by reference is approved by the Director of the Office of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies of the "Federal Guidelines for Dam Safety" may be obtained from the Federal Emergency Management Agency, Mitigation Directorate, PO Box 2012, Jessup, MD 20794. It is also available for inspection during normal business hours at RUS, Electric Staff Division, 1400 Independence Avenue, SW., Washington, DC, Room 1246-S, and at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

(2) The borrower shall evaluate the hazard potential of its dams in accordance with Appendix E of the U.S. Army Corps of Engineers Engineering and Design Dam Safety Assurance Program, ER 1110-2-1155, July 31, 1995. A summary of the hazard potential criteria is included for information as Appendix A to this subpart. The U.S. Army Corps of Engineers Engineering and Design Dam Safety Assurance Program, ER 1110-2-1155, July 31, 1995, published by the United States Army Corps of Engineers, is hereby incorporated by reference. This incorporation by reference is approved by the Director of the Office of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies of the U. S. Army Corps of Engineers Engineering and Design Dam Safety Assurance Program may be obtained from the U. S. Army Corps of Engineers, Publications Depot, 2803 52nd Ave., Hyattsville, MD 20781. It is also available for inspection during normal business hours at RUS, Electric Staff Division, 1400 Independence Avenue, SW., Washington, DC, Room 1246-S, and at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

(3) For high hazard potential dams, the borrower must obtain an independent review of the design and critical features of construction. The reviewer must have demonstrated experience in the design and construction of dams of a similar size and nature. The reviewer must be a qualified engineer not involved in the original design of the dam or a Federal or State agency responsible for dam safety. The reviewer must be approved by RUS.

(4) The independent review of design must include, but not necessarily be limited to, plans, specifications, design calculations, subsurface investigation reports, hydrology reports, and redesigns which result from encountering unanticipated or unusual conditions during construction.

(5) The independent review of construction shall include:

(i) *Foundation preparation and treatment.* When the foundation has been excavated and exposed, and before critical structures such as earth embankments or concrete structures are placed thereon, the borrower shall require the reviewer to conduct an independent examination of the foundation to ensure that suitable foundation material has been reached and that the measures proposed for treatment of the foundation are adequate. This examination must extend to the preparation and treatment of the foundation for the abutments.

(ii) *Fill placement.* During initial placement of compacted fill materials, the borrower shall require the reviewer to conduct an independent examination to ensure that the materials being used in the various zones are suitable and that the placement and compaction procedures being used by the contractor will result in a properly constructed embankment.

(6) If the reviewer disagrees with any aspect of the design or construction which could affect the safety of the dam, then the borrower must meet with the design engineer and the reviewer to resolve the disagreements.

(7) *Emergency action plan.* For high hazard potential dams, the borrower must develop an emergency action plan incorporating preplanned emergency measures to be taken prior to and following a potential dam failure. The

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plan should be coordinated with local government and other authorities involved with the public safety and be approved by the borrower’s board of directors.

(b)(1) For more information and guidance, the following publications regarding dam safety are available from FEMA:

- (i) “Emergency Action Planning Guidelines for Dams,” FEMA 64.
- (ii) “Federal Guidelines for Earthquake Analysis and Design of Dams,” FEMA 65.

(iii) “Federal Guidelines for Selecting and Accommodating Inflow Design Floods for Dams,” FEMA 94.

(iv) “Dam Safety: An Owner’s Guidance Manual,” FEMA 145, August, 1987.

(2) These publications may be obtained from the Federal Emergency Management Agency, Mitigation Directorate, PO Box 2012, Jessup, MD 20794.

[63 FR 35314, June 29, 1998, as amended at 69 FR 18803, Apr. 9, 2004]

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**APPENDIX A TO SUBPART E OF PART 1724—HAZARD POTENTIAL CLASSIFICATION FOR CIVIL WORKS PROJECTS**

The source for this appendix is U.S. Army Corps of Engineers Engineering and Design Dam Safety Assurance Program, ER 1110–2–1155, Appendix E. Appendix E is available from the address listed in §1724.55(a)(2).

Category <sup>1</sup>	Low	Significant	High
Direct Loss of Life <sup>2</sup> .....	None expected (due to rural location with no permanent structures for human habitation).	Uncertain (rural location with few residences and only transient or industrial development).	Certain (one or more extensive residential, commercial or industrial development).
Lifeline Losses <sup>3</sup> .....	No disruption of services—repairs are cosmetic or rapidly repairable damage.	Disruption of essential facilities and access.	Disruption of critical facilities and access.
Property Losses <sup>4</sup> .....	Private agricultural lands, equipment and isolated buildings.	Major public and private facilities.	Extensive public and private facilities.
Environmental Losses <sup>5</sup> .....	Minimal incremental damage.	Major mitigation required	Extensive mitigation cost or impossible to mitigate.

NOTES:  
<sup>1</sup> Categories are based upon project performance and do not apply to individual structures within a project.  
<sup>2</sup> Loss of life potential based upon inundation mapping of area downstream of the project. Analysis of loss of life potential should take into account the extent of development and associated population at risk, time of flood wave travel and warning time.  
<sup>3</sup> Indirect threats to life caused by the interruption of lifeline services due to project failure, or operation, i.e., direct loss of (or access to) critical medical facilities or loss of water or power supply, communications, power supply, etc.  
<sup>4</sup> Direct economic impact of value of property damages to project facilities and down stream property and indirect economic impact due to loss of project services, i.e., impact on navigation industry of the loss of a dam and navigation pool, or impact upon a community of the loss of water or power supply.  
<sup>5</sup> Environmental impact downstream caused by the incremental flood wave produced by the project failure, beyond which would normally be expected for the magnitude flood event under a without project conditions.

**Subpart F—RUS Contract Forms**

**§1724.70 Standard forms of contracts for borrowers.**

(a) *General.* The standard loan agreement between RUS and its borrowers provides that, in accordance with applicable RUS regulations in this chapter, the borrower shall use standard forms of contract promulgated by RUS for construction, procurement, engineering services, and architectural services financed by a loan made or guaranteed by RUS. (See section 5.16 of

appendix A to subpart C of part 1718 of this chapter.) This subpart prescribes RUS procedures in promulgating electric program standard contract forms and identifies those forms that borrowers are required to use.

(b) *Contract forms.* RUS promulgates standard contract forms, identified in the List of Required Contract Forms, §1724.74(c), that borrowers are required to use in accordance with the provisions of this part. In addition, RUS promulgates standard contract forms

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identified in the List of Guidance Contract Forms contained in §1724.74(c) that the borrowers may but are not required to use in the planning, design, and construction of their electric systems. Borrowers are not required to use these guidance contract forms in the absence of an agreement to do so.

[63 FR 58284, Oct. 30, 1998]

### § 1724.71 Borrower contractual obligations.

(a) *Loan agreement.* As a condition of a loan or loan guarantee under the RE Act, borrowers are normally required to enter into RUS loan agreements pursuant to which the borrower agrees to use RUS standard forms of contracts for construction, procurement, engineering services and architectural services financed in whole or in part by the RUS loan. Normally, this obligation is contained in section 5.16 of the loan contract. To comply with the provisions of the loan agreements as implemented by this part, borrowers must use those forms of contract (hereinafter sometimes called "listed contract forms") identified in the List of Required Standard Contract Forms contained in §1724.74(c).

(b) *Compliance.* If a borrower is required by this part or by its loan agreement with RUS to use a listed standard form of contract, the borrower shall use the listed contract form in the format available from RUS, either paper or electronic format. Exact electronic reproduction is acceptable. The approved RUS standard forms of contract shall not be retyped, changed, modified, or altered in any manner not specifically authorized in this part or approved by RUS in writing on a case-by-case basis. Any modifications approved by RUS on a case-by-case basis must be clearly shown so as to indicate the modification difference from the standard form of contract.

(c) *Amendment.* Where a borrower has entered into a contract in the form required by this part, no change may be made in the terms of the contract, by amendment, waiver or otherwise, without the prior written approval of RUS.

(d) *Waiver.* RUS may waive for good cause, on a case by case basis, the requirements imposed on a borrower pursuant to this part. Borrowers seeking a

waiver by RUS must provide RUS with a written request explaining the need for the waiver.

(e) *Violations.* A failure on the part of the borrower to use listed contracts as prescribed in this part is a violation of the terms of its loan agreement with RUS and RUS may exercise any and all remedies available under the terms of the agreement or otherwise.

[63 FR 58285, Oct. 30, 1998, as amended at 69 FR 7108, Feb. 13, 2004]

### § 1724.72 Notice and publication of listed contract forms.

(a) *Notice.* Upon initially entering into a loan agreement with RUS, borrowers will be provided with all listed contract forms. Thereafter, new or revised listed contract forms promulgated by RUS, including RUS approved exceptions and alternatives, will be sent by regular or electronic mail to the address of the borrower as identified in its loan agreement with RUS.

(b) *Availability.* Listed contract forms are published by RUS. Interested parties may obtain the forms from: Rural Utilities Service, Program Development and Regulatory Analysis, U.S. Department of Agriculture, Stop 1522, 1400 Independence Avenue, SW., Stop 1522, Washington, DC 20250-1522, telephone number (202) 720-8674. The list of contract forms can be found in §1724.74(c), List of Required Contract Forms.

[63 FR 58285, Oct. 30, 1998]

### § 1724.73 Promulgation of new or revised contract forms.

RUS may, from time to time, undertake to promulgate new contract forms or revise or eliminate existing contract forms. In so doing, RUS shall publish notice of rulemaking in the FEDERAL REGISTER announcing, as appropriate, a revision in, or a proposal to amend §1724.74, List of Electric Program Standard Contract Forms. The amendment may change the existing identification of a listed contract form; for example, changing the issuance date of a listed contract form or by identifying a new required contract form. The notice of rulemaking will describe the new standard contract form or the substantive change in the listed contract

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form, as the case may be, and the issues involved. The standard contract form or relevant portions thereof may be appended to the supplementary information section of the notice of rulemaking. As appropriate, the notice of rulemaking shall provide an opportunity for interested persons to provide comments. A copy of each such FEDERAL REGISTER document shall be sent by regular or electronic mail to all borrowers.

[63 FR 58285, Oct. 30, 1998]

### § 1724.74 List of electric program standard contract forms.

(a) *General.* The following is a list of RUS electric program standard contract forms for architectural and engineering services. Paragraph (c) of this section contains the list of required contract forms, *i.e.*, those forms of contracts that borrowers are required to use by the terms of their RUS loan agreements as implemented by the provisions of this part. Paragraph (d) of this section contains the list of guidance contract forms, *i.e.*, those forms of contracts provided as guidance to borrowers in the planning, design, and construction of their systems. All of these forms are available from RUS. See § 1724.72(b) for availability of these forms.

(b) *Issuance date.* Where required by this part to use a standard form of contract in connection with RUS financing, the borrower shall use that form identified by issuance date in the List of Required Contract Forms in paragraph (c) of this section, as most recently published as of the date the borrower executes the contract.

(c) *List of required contract forms.* (1) RUS Form 211, Rev. 4-04, Engineering Service Contract for the Design and Construction of a Generating Plant. This form is used for engineering services for generating plant construction.

(2) RUS Form 220, Rev. 6-98, Architectural Services Contract. This form is used for architectural services for building construction.

(3) RUS Form 236, Rev. 6-98, Engineering Service Contract—Electric System Design and Construction. This form is used for engineering services for distribution, transmission, sub-

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station, and communications and control facilities.

(d) *List of guidance contract forms.* (1) RUS Form 179, Rev. 9-66, Architects and Engineers Qualifications. This form is used to document architects and engineers qualifications.

(2) RUS Form 215, Rev. 5-67, Engineering Service Contract—System Planning. This form is used for engineering services for system planning.

(3) RUS Form 234, Rev. 3-57, Final Statement of Engineering Fee. This form is used for the closeout of engineering services contracts.

(4) RUS Form 241, Rev. 3-56, Amendment of Engineering Service Contract. This form is used for amending engineering service contracts.

(5) RUS Form 244, Rev. 12-55, Engineering Service Contract—Special Services. This form is used for miscellaneous engineering services.

(6) RUS Form 258, Rev. 4-58, Amendment of Engineering Service Contract—Additional Project. This form is used for amending engineering service contracts to add an additional project.

(7) RUS Form 284, Rev. 4-72, Final Statement of Cost for Architectural Service. This form is used for the closeout of architectural services contracts.

(8) RUS Form 297, Rev. 12-55, Engineering Service Contract—Retainer for Consultation Service. This form is used for engineering services for consultation service on a retainer basis.

(9) RUS Form 459, Rev. 9-58, Engineering Service Contract—Power Study. This form is used for engineering services for power studies.

[63 FR 58285, Oct. 30, 1998, as amended at 65 FR 63196, Oct. 23, 2000; 69 FR 52595, Aug. 27, 2004]

### §§ 1724.75–1724.99 [Reserved]

## PART 1726—ELECTRIC SYSTEM CONSTRUCTION POLICIES AND PROCEDURES

### Subpart A—General

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