

## § 1724.52

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 assist-

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ance. (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 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 Protection 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 Office of the Federal Register, 800 North Capitol Street, NW., Suite 700, Washington, DC.

(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 as-

semblies from bucket trucks designed for such work.

#### § 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).*