# ENGINEERING SERVICE CONTRACT FOR THE DESIGN AND CONSTRUCTION OF A GENERATING PLANT

AGREEMENT, made	,, between
(hereinafter called the "Owner") and	
of	hereinafter called the "Engineer")
	Rural Utilities Service (hereinafter called the "Administrator") of the "Government") has approved the making of a loan or loan
guarantee of not in excess of \$	by the Government to the Owner pursuant to the
	of, as amended, approximately \$ of the construction and operation of an electrical generating plant
which is estimated to cost \$	
and consists of	
	the Rural Utilities Service project designation ofch place as the Owner with the approval of the Administrator shall
NOW, THEREFORE, in considerat	ion of the mutual undertakings herein contained, the parties hereto

**ARTICLE I** 

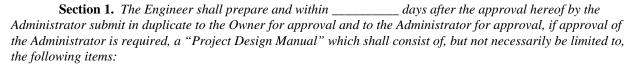
agree as follows:

General Obligation of Engineer

In accordance with the normal standards and practices used in the profession, the Engineer shall diligently and competently render all engineering services which shall be necessary or advisable for the expeditious, economical, and sound design and construction of the Project with due consideration to applicable ecological and environmental requirements. The enumeration of specific duties and obligations to be performed by the Engineer hereunder shall not be construed to limit the general undertakings of the Engineer.

#### **ARTICLE II**

# Design of Project



- (a) A detailed statement covering the procedures to be followed by the Engineer in the performance of this Agreement, including, without limitation, such matters as the routing and distribution of copies of correspondence and reports, the furnishing of lists of plans and specifications, procedures relating to the awarding of construction and equipment contracts, identification of persons to be called by telephone with respect to various subject matters, contract closeouts, and meetings.
- (b) A design outline which includes all design criteria for the Project, including, without limitation, plant site, equipment, building requirements, environmental equipment and other environmental factors, civil, electrical, and mechanical requirements. The outline shall comply with the requirements of RUS Environmental Policies and Procedures.
- (c) Evaluation studies which support the economic basis for the design and selection of equipment, including, without limitation, turbine throttle and exhaust conditions, boiler feed pump, air quality equipment, and condenser.
- (d) Testing procedures which outline the responsibilities to be assumed by the Owner, Engineer, and contractor and include, without limitation, acceptance testing, concrete tests, laboratory testing, radiographic inspection, electrical checkout, and testing.
- **Section 2.** In addition, the Engineer shall prepare and within \_\_\_\_\_\_ days after the approval hereof by the Administrator submit in duplicate to the Owner for approval and to the Administrator for approval, if approval of the Administrator is required, preliminary plans (hereinafter called the "Preliminary Plans") which shall consist of:
  - (a) A single-line diagram of proposed main and auxiliary electrical connections, including all major equipment, switching and substations.
  - (b) A single-line flow diagram of proposed steam, water, gas, oil, and air connections, including all major equipment.
  - (c) A schedule, in a form acceptable to the Owner and Administrator, showing by months the estimated time required for each major subdivision of the Project for design, fabrication, and installation, and the estimated date the project will be available for commercial service. Such schedule shall specify, in percentages, the portion of the total design performance of the Engineer under this Agreement which each item of design represents.
  - (d) The Engineer's estimate of the total cost of the completed Project, by components, together with the forecast of the amounts of money needed by the Owner each month until completion of the Project.
- Section 3. Promptly upon receipt of approval by the Owner and by the Administrator, if the approval of the Administrator is required, of the Project Design Manual and Preliminary Plans, the Engineer shall proceed with preparation of and shall submit, in duplicate, to the Owner and to the Administrator, if approval of the Administrator is required, complete and detailed plans and specifications, drawings, maps, and other engineering documents required for the construction of the Project (all of the foregoing being hereinafter sometimes collectively called the "Plans and Specifications"). In the preparation of the Plans and Specifications, the Engineer shall consult with the Owner to the end that the Project shall serve the purposes intended by the Owner. The Engineer shall diligently make such necessary changes in the Plans and Specifications as may be required by the Owner and the Administrator. The Plans and Specifications shall include the following:
  - (a) Detailed drawings showing the complete design and layout of the Project.
  - (b) The form of construction contract (hereinafter called the "Construction Contract") to be entered into between the Contractor and Owner for the construction of the Project, including forms of notice and instructions to bidders, material and construction specifications, contractor's proposal, bidder's qualifications,

contractor's bond, and construction drawings. If the Owner or the Administrator shall direct that the Project shall be constructed under more than one contract, the Engineer shall submit forms of all necessary Construction Contracts and shall also prepare and submit in connection with each such contract all that is hereinabove required of the Engineer in connection with the Construction Contract. All maps, drawings, plans, specifications, estimates, and other documents required to be prepared or submitted by the Engineer under this section or other sections of the Agreement shall conform to applicable environmental requirements related to the project, including those commitments contained in the RUS Final Environmental Statement, standard specifications, and other forms prescribed by the Administrator, unless deviation therefrom shall be permitted by the Administrator in writing.

**Section 4.** The Engineer shall also proceed to procure and submit to the Owner and to the Administrator, if approval of the Administrator is required, forms of other contracts and documents for the equipment and materials proposed to be purchased by the Owner for use in connection with the construction of the Project or any services necessary or desirable in connection therewith.

Section 5. The Engineer, immediately upon receipt of notice from the Owner and from the Administrator, if approval of the Administrator is required, of their approval for bidding purposes of the form of Construction Contract or any contracts for materials, equipment, and services, as the case may be, shall, unless otherwise instructed by the Owner with the prior approval of the Administrator, take all appropriate and necessary action to procure full, free, and competitive bidding for the award of such contracts. In fulfilling this responsibility, the Engineer shall prepare and submit to the Owner for approval a recommended bidders' list. Upon approval of such list by the Owner, the Engineer, in collaboration with the Owner, shall fix a date for the opening of bids for such contracts. The Engineer shall be available to each prospective bidder for consultation with respect to the details of the Plans and Specifications and all other matters pertaining to the preparation of the Proposals for the construction of the Project or the supply of materials, equipment or services therefor.

Section 6. The Engineer shall attend all openings of bids for the construction of the Project, or any part thereof, or for the furnishing of materials, equipment, and services therefor. In case fewer than three (3) bids are received for the construction of the Project or component parts of the Project, the Owner shall be notified immediately and such bids shall remain unopened unless permission is obtained from the Owner for the opening of such bids. If bids are opened, the Engineer shall carefully check and prepare tabulations of all bids received and shall render to the Owner all such assistance as shall be required in connection with consideration of the bids so that contracts may be prudently and properly awarded. The Engineer shall submit in writing to the Owner its first, second, and third choice of bidders, materials, and equipment to be used in each case, with its recommendation and reasons for the selection. When the Owner has indicated its choice of bidders, materials, and equipment, the Engineer shall forward a tabulation of the bids, copies of the recommendation, and the Owner's selection to the Administrator, if approval of the Administrator is required. If requested by the Administrator, the Engineer shall forward one complete copy of all original bids received. Upon approval by the Administrator, if approval of the Administrator is required, of the selection of a bidder, materials, and equipment, the Engineer shall prepare three counterparts of the contract to be executed by the Owner and the Contractor and shall forward such executed counterparts to the Administrator for approval, if approval of the Administrator is required.

**Section 7.** The Engineer shall furnish to the Owner all engineering information, services, data, and drawings required for procuring all necessary or desirable permits, licenses, franchises, titles, rights, and authorizations and shall cooperate with the Owner's attorney in the procuring thereof.

#### **ARTICLE III**

# Construction Management

Section 1. The Engineer shall supervise the construction of the Project and shall make a diligent effort to ensure the expeditious and economical construction thereof in accordance with the Plans and Specifications and the terms of the Construction Contract and equipment or material contracts and the loan contract (hereinafter called the "Loan Contract") entered into between the Owner and the Government or any other lenders specifying the terms upon which the Project shall be constructed and financed. The Engineer shall carefully inspect all materials and equipment prior to their incorporation in the Project and shall promptly reject those not in compliance with the Specifications. The Engineer shall also supervise and inspect the incorporation of the

materials in the Project and the workmanship with which such materials are incorporated. The Engineer, as representative of the Owner, shall have sole responsibility for requiring the Contractor to perform the Construction Contract in accordance with its terms and the Plans and Specifications, and, in performing the duties incident to such responsibility, the Engineer shall issue to the Contractor such directives and impose such restrictions as may be required to obtain reasonable and proper compliance by the Contractor with the terms of the Construction Contract and the Plans and Specifications in the construction of the Project; provided that the Engineer shall not be required to exercise any actual control over employees of the Contractor. The term "supervise" when used herein shall not confer upon the Engineer responsibility for the Contractor's construction means, methods, or techniques. The obligations of the Engineer hereunder run to and are for the benefit of only the Owner and the Administrator.

- Section 2. If, after the Construction Contract has been approved by the Administrator, if approval of the Administrator is required, it shall be determined that any change or changes in the Plans and Specifications are advisable, the Engineer shall prepare and submit to the Owner and the Contractor all necessary details in connection with such change or changes. The execution of such changes by the Engineer shall be within the intent of the Engineer's general undertakings as outlined elsewhere in this contract. Upon approval of the change or changes by the Owner and the Contractor, the proposed change or changes shall be submitted by the Engineer to the Administrator, if approval of the Administrator is required, in the form of a contract amendment.
- Section 3. The Engineer shall prepare all estimates, certificates, reports, and other documents required to be executed by the Engineer pursuant to the terms of the Construction Contract, equipment or material contracts, or the Loan Contract. When any bid specification is forwarded to RUS for review, an updated cost estimate for the proposed contract shall also be included. After all major equipment contracts have been awarded and all permits have been received, and after approximately forty percent (40%) of the project design has been completed and construction has commenced, the Engineer shall update, on a quarterly basis, unless more frequently requested by the Owner, the information required under Article II, Section 2 (d) hereof.
- **Section 4.** The Engineer shall, upon completion of construction of component parts of the Project, make a complete inspection and conduct, utilizing the Owner's operating personnel and/or the manufacturer's representatives, such component and system tests as shall be necessary to assure conformance with the Plans and Specifications, the standards required by the Construction Contract, equipment and materials contracts, and the guarantees given in connection therewith.
- **Section 5.** The Engineer shall schedule and coordinate the start-up activities for placing the plant in service. This shall include preparation of system operating schedules, written system start-up procedures, and operating manuals describing the various plant systems and operating procedures.
- Section 6. The Engineer shall prepare written procedures for final acceptance tests of major equipment, such procedures being subject to the Owner's concurrence. Furthermore, the Engineer shall conduct, utilizing the Owner's operating personnel, final acceptance tests of major equipment. Such tests shall be made in the presence of duly qualified representatives of the Owner and the Administrator, if the Administrator elects to attend, and the time and procedure of such tests shall be agreed upon by the Engineer, the Owner, and the Administrator. After completion of each final acceptance test, the Engineer shall prepare copies of the test results and recommendations as to acceptability of equipment and submit them to the Owner for review.
- **Section 7.** A competent resident engineer with full authority to act for the Engineer shall be maintained by the Engineer at the site of the Project during the entire period of any construction activity. The Engineer shall maintain at the site of the Project and under the direct supervision of the resident engineer a sufficient number of qualified engineering field inspectors to fully discharge the responsibilities of the Engineer pursuant to Article III, Section 1 hereof.

## ARTICLE IV

### Final Documents

The Engineer shall, upon the completion of the inspection and tests in respect of the Project provided in Sections 4 and 6 of Article III, obtain or prepare and deliver to the Owner the following:

- (a) A nameplate inventory and summary in triplicate of all equipment and facilities incorporated in the Project together with a breakdown of contract costs arranged by Standard List of Retirement Units, RUS Bulletin 181-2.
- (b) Two complete sets of final inventory (record) drawings showing the location and layout of the Project in accordance with revisions to design drawings and field records of construction. All information required by this Agreement to be included in the maps and drawings shall be included in the record drawings. One complete set of the record drawings shall be in reproducible form satisfactory to the Owner. The Engineer shall also provide the Owner with any other original manufacturer's equipment drawings not otherwise available to the Owner.
- (c) An itemized statement in triplicate of the amounts payable by the Owner under all contracts for the construction of the Project and the furnishing of materials, equipment, and services thereof.
- (d) A certificate in triplicate to the effect that the Project has been fully constructed substantially in accordance with the Plans and Specifications if and as amended.
  - (e) A detailed report in duplicate of all tests, in a form satisfactory to the Owner.
- (f) All maps, tracings, and drawings prepared or used by the Engineer in connection with the performance of the duties of the Engineer under this Agreement.
  - (g) Operating and maintenance manuals received from manufacturers.

When the Owner has determined that the Project is available for commercial service, the Engineer shall report to the Owner and the Administrator, for depreciation purposes, the estimated total contract cost of the Project, plus the Owner's other related overhead cost, as obtained from the Owner, showing as a separate item the cost of land (a non-depreciable item).

# **ARTICLE V**

## Compensation

**Section 1.** The Owner shall pay the Engineer for the services performed hereunder as indicated in the attached Schedule A.

Section 2	. The total compensat	ion to be paid in conne	ection with this Agreeme	nt shall not exceed
\$	(			Dollars.)

**Section 3.** The Engineer shall submit to the Owner each month a certified statement in duplicate of the amounts due for services hereunder, which statement shall be in accordance with the applicable reports of engineering progress required by Article VI, Section 1 hereof, and shall be in such detail and contain such supporting data as the Owner may request. The Owner shall review and approve each statement within thirty (30) days or inform the Engineer of the reasons the statement cannot be approved. Upon approval of each such statement by the Owner, ninety (90) percent of the amount thereof shall be due and payable. The balance of the compensation payable under Section 1 hereof shall be due and payable within thirty (30) days after completion of the Project. The Project shall be deemed complete for the purposes of the Agreement when all required final documents, including a certificate of completion, have been submitted by the Engineer and approved by the Owner and by the Administrator, if approval of the Administrator is required.

- **Section 4.** In the event that this Agreement at any time be terminated pursuant to Article VI, Section 2 hereof, the compensation which shall be payable by the Owner to the Engineer for services rendered prior to such termination shall be computed as follows:
  - (a) Compensation for services in respect of the Design of the Project shall be determined in accordance with Section 1 of this Article V, using the final report of engineering progress referred to in Article VI, Section 1 hereof to determine the percentage of completion of the services in respect of design of the Project as of the effective date of termination.
  - (b) Compensation for services in respect of supervision and inspection of construction of the Project and all other services shall be computed at the rate of \$ \_\_\_\_\_\_ per staff hour of supervision and inspection of construction performed by the Engineer prior to the effective date of termination, but in no event shall such compensation exceed an amount computed in accordance with the provisions of Section 1 of this Article V. The Engineer shall submit to the Owner, in duplicate, a statement of the staff hours of supervision and inspection of construction in such detail and with such supporting data as may be requested by the Owner.
- **Section 5.** Compensation payable to the Engineer under any of the Articles of this Agreement shall be in addition to taxes or levies (excluding Federal, State, and Local Income Taxes) which may be assessed against the Engineer by any State or political subdivision directly on services performed or payments for services performed by the Engineer pursuant to this Agreement. Such taxes or levies which the Engineer may be required to collect or pay, shall, in turn, be added by the Engineer to invoices submitted to the Owner pursuant to this Agreement.
- Section 6. At or prior to the time when any payments shall be made to the Engineer pursuant to this Agreement, the Engineer if requested by the Owner shall furnish to the Owner, as a condition precedent to such payment, a certificate to the effect that all salaries or wages earned by the employees of the Engineer in connection with the Project have been fully paid by the Engineer up to and including a date not more than fifteen (15) days prior to the date when such payment shall be made. At or before the time when the final payment provided to be made hereunder shall be made to the Engineer by the Owner, the Engineer shall also furnish to the Owner, as a condition precedent to such payment, a certificate in form satisfactory to the Administrator that all the employees of the Engineer have been paid for services rendered by them in connection with the Project and that all other obligations which might become a lien on the Project have been paid.
- Section 7. Interest at the rate of \_\_\_\_\_\_\_ percent ( \_\_\_\_\_\_\_ %) per annum [percentage is not to exceed any applicable State usury laws] shall be paid by the Owner to the Engineer on all unpaid balances due the Engineer, commencing thirty (30) days after the due date, provided that the delay in payment beyond the due date shall not have been caused by any condition within the control of the Engineer. Such compensation shall be paid ten (10) days after the amount of the interest has been determined by the Engineer and the Owner.

#### **ARTICLE VI**

#### Miscellaneous

Section 1. The Engineer shall prepare and execute in such form and detail as the Owner and the Administrator shall direct all estimates, certificates, reports, and other documents required to be executed by the Engineer pursuant to the Construction Contract or the Loan Contract, including, without limitation, a monthly report of engineering progress on the form of schedule referred to in Article II, Section 2 (c) hereof, showing the percentage of completion of each of the subdivisions thereof and the overall percentage of completion of engineering services in respect of the design and construction of the Project as of the date of each such report; Monthly Cost Estimates and Forecasts of Cash Requirements in the form referred to in Article II, Section 2 (d) hereof, which shall contain explanations of changes, if any, from prior Monthly Cost Estimates and Forecasts of Cash Requirements. From time to time the Engineer shall prepare and submit to the Owner for approval and to the Administrator for approval, if approval of the Administrator is required, all necessary changes in the schedule referred to in Article II, Section 2 (c) hereof; provided, however, that no changes shall be made in the percentages assigned to each item of design in the original schedule approved by the Owner and by the Administrator, if approval of the Administrator is required, pursuant to Article II, Section 2 (c) hereof.

**Section 2.** The Owner may at any time terminate this Agreement by giving notice to the Engineer in writing to that effect, delivered or mailed to the Engineer's last known address not less than twelve (12) calendar

days prior to the effective date of termination specified in the notice. From and after the effective date specified in such notice, this Agreement shall be terminated, except that the Engineer shall be entitled to receive compensation for services hereunder as provided in Section 3 of Article V hereof, and the Engineer shall be obligated forthwith to deliver to the Owner all maps, tracings, and drawings of the Project and all other letters, documents, and other material including all records pertaining thereto. If this Agreement shall be terminated, the Engineer shall prepare and submit to the Owner and the Administrator a final report of engineering progress as of the date of termination.

- **Section 3.** *Insurance. The Engineer shall take out and maintain throughout the period of this Agreement insurance of the following types and minimum amounts:* 
  - (a) Workers' compensation and employers' liability insurance, as required by law, covering all of the Engineer's employees who perform any of the obligations of the Engineer under the Agreement. If any employer or employee is not subject to the workers' compensation laws of the governing State, then insurance shall be obtained voluntarily to extend to the employer and employee coverage to the same extent as though the employer or employee were subject to the workers' compensation laws.
  - (b) Public liability insurance covering all operations under the Agreement shall have limits for bodily injury or death of not less than \$1 million each occurrence, limits for property damage of not less than \$1 million each occurrence, and \$1 million aggregate for accidents during the policy period. A single limit of \$1 million of bodily injury and property damage is acceptable. This required insurance may be in a policy or policies of insurance, primary and excess including the umbrella or catastrophe form.
  - (c) Automobile liability insurance on all motor vehicles used in connection with the Agreement, whether owned, nonowned, or hired, shall have limits for bodily injury or death of not less than \$1 million per person and \$1 million per occurrence, and property damage limits of \$1 million for each occurrence. This required insurance may be in a policy or policies of insurance, primary and excess including the umbrella or catastrophe form.
  - (d) Errors and Omissions (Professional Liability) Insurance in an amount at least as large as the maximum compensation specified in Article V, Section 2, but not less than \$500,000.

The Owner shall have the right at any time to require public liability insurance and property damage liability insurance greater than those required in subsections "b" and "c" of this Section. In any such event, the additional premium or premiums payable solely as the result of such additional insurance shall be added to the total compensation to be paid under this Agreement.

The Owner shall be named as Additional Insured on all policies of insurance required in subsections "b" and "c" of this Section.

The policies of insurance shall be in such form and issued by such insurer as shall be satisfactory to the Owner. The Engineer shall furnish the Owner a certificate evidencing compliance with the foregoing requirements which shall provide not less than thirty (30) days prior written notice to the Owner of any cancellation or material change in the insurance.

The Engineer shall also follow the requirements of 7 CFR part 1788, RUS Fidelity and Insurance Requirements for Electric and Telephone Borrowers.

- Section 4. The obligations and duties to be performed by the Engineer under this Agreement shall be performed by persons qualified to perform such duties efficiently. The Engineer, if the Owner shall so direct in writing, shall replace any resident engineer or other persons employed by the Engineer in connection with the Project. For the information of the Owner and the Administrator, the Engineer shall file with the Owner and the Administrator a statement, signed by the Engineer, of the qualifications, including specific experience of each engineer and inspector assigned to the Project and the duties assigned to each.
- **Section 5.** Approvals, directions, and notices provided to be given hereunder by the Administrator to the Engineer or the Owner shall be deemed to be properly given if given by the Administrator or by any person authorized by the Administrator to give such approvals, directions, or notices.

**Section 6.** The Engineer shall follow all applicable RUS rules and regulations.

**Section 7.** This Agreement may be simultaneously executed and delivered in three or more counterparts, each of which so executed and delivered shall be deemed to be an original, and all constitute but one and the same instrument.

**Section 8.** The obligations of the Engineer under this Agreement shall not be assigned without the approval in writing of the Owner and of the Administrator.

**Section 9.** This Agreement shall be effective only from and after the time when it shall be approved by the Administrator in writing. Neither this Agreement nor any provision thereof shall be modified, amended, rescinded, waived, or terminated without the approval of the Administrator.

		[Name of Engineer] who will be in responsible charge of th				
ct possesses lie	cense number	issued by the	issued by the State of			
e	day of	,	•			
IN WITN	<b>ESS WHEREOF</b> , the	parties hereto have ca	used this	Agreement to be duly executed.		
				Owner		
			Ву	President		
ATTEST:						
		Secretary				
				Engineer		
				President Partner [Strike out inapplicable designation.		
ATTEST:						
		Secretary				

# Schedule A

# Compensation
