Performance Work Statement (PWS)

INDEPENDENT TECHNICAL AND ENGINEERING ADVISORY SERVICES FOR TRANSMISSION INFRASTRUCTURE PROGRAM (TIP)

***\*Note that this sample has been revised from the source document on the Government Point of Entry as necessary to align formatting and applicable FAR procedures.\****

1. BACKGROUND:

The Western Area Power Administration (WAPA) is a Federal agency under the U.S. Department of Energy (DOE) that markets and transmits wholesale hydroelectric power generated at Federal dams across the western United States. This power is sold to customers in accordance with Federal law. WAPA’s transmission system was developed to deliver the Federal hydro-power to those customers. WAPA owns and operates an integrated 17,000 circuit-mile, high voltage transmission system and markets power across 15 western states, a 1.3 million square- mile service area. WAPA’s service area encompasses the following states: Arizona, California, Colorado, Nebraska, Nevada, New Mexico, North Dakota, South Dakota, Utah, and Wyoming; as well as parts of Iowa, Kansas, Montana, Minnesota, and Texas.

1. PURPOSE:

The purpose of this acquisition is to obtain independent technical and engineering advisory services to support WAPA’s Transmission Infrastructure Program (TIP). The authority for WAPA to enter into project finance loans for third-parties includes, but is not limited to:§ 302 and § 641 of the DOE Organization Act (42 U.S.C. §§ 7152, 7251) as amended;§ 402 of the American Recovery and Reinvestment Act of2009 (42 U.S.C. § 16421a), which amended the Hoover Power Plant Act of 1984 (Public Law 98-381) by adding§ 301 ("WAPA Area Power Administration Borrowing Authority"); the DOE Energy and Water Appropriations Act of 1993 (42 U.S.C. § 7278); and the Contributed Funds Act (43 U.S.C. § 395).

This performance work statement is for independent engineer services that will work directly for the Transmission Infrastructure Program for project finance transactions supporting independent power projects. This work scope **does not include** any provision for services to the WAPA for technical, architectural, engineering and related services in support of WAPA utility functions and operations. Vendors must possess past experience and technical competence in providing independent technical and engineering advisory services for debt finance transactions in the areas listed below under scope.

1. SCOPE:

TIP seeks advisory services from Engineering Consultants with senior level experience to serve as Independent Engineers in support of debt financing activities. Independent Engineers will advise TIP on various engineering aspects of independent project finance loan projects that shall be owned and operated by third-parties including, but not limited to, projects in the following energy or energy-related sectors:

* + Electrical transmission and related infrastructure, particularly focusing on one (1) or more of the following technologies:
1. High-voltage Direct-Current and Alternating-Current electrical transmission technologies
2. Electrical Sub-stations including related infrastructure technologies
3. Energy Storage and related infrastructure technologies
4. Generation tie-line and hybrid generation-storage technologies linked to transmission systems
5. Utility-scale efficient electrical generation, transmission, and distribution technologies

**The Independent Engineer will assist TIP with respect to these work areas:**

Work Area 1 - Review of Loan Application

* + Review and analyze all aspects of the work anticipated to be performed by the Project Sponsors, project company management and their contractors for technical and financial merit, as compared to industry best practices. Provide evaluation of viability of proposed projects.
	+ Review and validate the technology maturity level proposed in a project, particularly with respect to whether the project can meet projected yields, equipment and materials procurement plans and manufacturing replication strategies. Provide an assessment of key engineering and operation risks for the technology proposed in the project.
	+ Provide an assessment of whether the project’s engineering approach and construction methodologies are sufficient to complete the project as envisioned.
	+ Provide assessment of whether the major project participants have sufficient technical and managerial wherewithal required to complete the project.
	+ Perform risk analysis including risk identification, risk quantification, risk mitigation, and probability- impact analysis. Develop costs vs. level of confidence curves, review and validate proposed project scheduling using Primavera or equivalent techniques and perform analysis of proposed critical path schedules.
	+ Provide ongoing support to TIP during the application review process in meetings with and/or related to Project Sponsors, including responding to specific requests for analytical support and review of any sponsor submissions.

Work Area 2 - Pre-Construction

* + Review and analyze siting and permitting issues, including identification of licenses and permits that the project will need to construct and operate the project. Provide critical path analysis and status reports on siting and permitting issues.
	+ Perform technical review of plant engineering and design, in accordance with prudent industry standards. Review reliability and efficiency issues, and adequacy of supply and offtake arrangements.
	+ Review construction contracts, including the engineering, procurement and construction (“EPC”) contract, other contracts including principal subcontracts, and the milestone schedule.
	+ Analyze construction and start-up plans, adequacy of planned procurement construction activities, and adequacy of project completion tests from the perspective of a financing party. For example, lender and/or guarantor.
	+ Review service agreements, including for performance guarantees, warranty and force majeure issues; determination of insurance requirements; and analysis of factors influencing commercial and final acceptance.
	+ Review plant operation and maintenance plans; review and analyze all project documents, including offtake agreements, fuel supply agreements, feedstock supply agreements; review and analyze variable and fixed operating cost estimates; and, review and analyze capital expenditures and maintenance programs.
	+ Review interconnection requirements and arrangements.
	+ Review decommissioning and disposal/recycling plans.

Work Area 3 - Construction

* + Provide monthly project implementation and construction status reports.
	+ Provide review and analysis of change order requests.
	+ Identify and report schedule and cost deviations.
	+ Provide monitoring and certification of disbursements, including review of EPC contractor milestones and drawdown requests.
	+ Evaluate sufficiency of punch lists. Review and report status of punch list items until completion.

Work Area 4 – Test and Completion

* Provide certification regarding mechanical completion, provisional acceptance and final acceptance. Certify that TIP’s project completion tests have been met. Certify that project has been fully accepted and has entered commercial operation.

Work Area 5 - Operation

* + Review operation and maintenance plans and procedures.
	+ Undertake annual reviews of projects for a period commencing after the closing on the loan guarantee agreement and ending on a date to be specified in the Matching Order for the project. Visit plant and report on operations once yearly. Review production, availability, efficiency, environmental compliance, licensing and permitting issues, and details of any major problems.
	+ Review and analyze any proposed project modifications.

In addition to providing the services as identified, the Independent Engineer may also be called upon to support TIP’s loan execution and monitoring function in special situations in all work areas. In this regard, the Contractor will assist TIP in the drafting of independent reviews and assessments of technical aspects of projects. The Contractor may also be called upon to perform due diligence on projects for pre-feasibility and feasibility assessments. Under TIP’s direction, the Contractor will also assist in the preparation of presentations and documents for US Government oversight, auditor and accounting requirements.

The contractual type for this PWS is to be determined but likely to include multiple awards and establishment of a TIP Standing List. Notice of award is not an authorization to such Invitee to begin any work on behalf of TIP. The Invitation for TIP participation is solely for the purpose of developing a Standing List of Engineering Consultants. This Invitation does not commit TIP to acquire or contract for any services or to pay any costs incurred in the submission of any Statements of Expertise and Resources or in making necessary studies or designs for the preparation thereof. TIP and each Engineering Consultant will sign an Instrument of Agreement as an instrument of understanding that contains terms and conditions applying to future Matching Orders issued by TIP on a project-by-project basis to retain the services of an Engineering Consultant as an Independent Engineer. Issuance of an Instrument of Agreement does not obligate TIP to issue a Matching Order to an Engineering Consultant.

TIP also expects, with respect to each and all of the foregoing, delivery in paper and/or electronic media, as TIP shall deem appropriate, of any technical or engineering reviews or opinions, memoranda, documents (including basic/template or transaction-specific agreements), and relevant administrative records.

TIP is limited by the Anti-deficiency Act from undertaking to pay any amounts that are not specifically obligated. Accordingly, TIP may not provide open-ended indemnities or agreements to reimburse third-party costs to any person. An Independent Engineer shall always exclude TIP as an indemnifying party.

1. DELIVERABLES

All deliverables will be determined IAW individual Blanket Purchase Agreement (BPA) calls.

1. TRAVEL

Travel must be authorized by the Government in writing, at a minimum of two (2) weeks in advance. Reimbursement for travel will be in accordance with Federal Travel Regulations ([www.gsa.gov/ftr](http://www.gsa.gov/ftr)) and the contractor shall submit supporting documentation in IPP, for example, receipts for actual travel expenses incurred.