

**Western Area Power Administration (WAPA)  
Transmission Infrastructure Program (TIP)**

**Recommended Format for the Submission of the Business Plan Proposal**

**Section A: Application Information**

1. Project Name
2. Evidence of Authority
3. Rights Validation Statement
4. Availability of Funding
5. Project Participants
6. Applicant Point of Contact Information

**Section B: Project Development Plan**

1. Executive Summary
2. Technology Description
3. Project Eligibility
4. Organization
5. Prior Experience
6. Proposed Project Location
7. Project Development Schedule
8. Proposed Role for WAPA Development Assistance
9. List and Status of Licenses/Permits/Approvals
10. Project Development Costs

**Section C: Technical Plan**

1. Major Project Development Plans
2. Potential Reliability Impacts
3. Potential Environmental Impacts
4. Support to Renewable Energy Sources

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5. Analysis of Alternatives
6. Potential Fatal Flaws/Preliminary Risk Assessment

### **Section D: Business Plan**

1. Market Analysis
2. Proposed Commercial Deal Structure
3. Plan to Secure Revenue Contracts/Offtake Agreements
4. Total Project Costs
5. Debt and Equity Financing Plan
6. Economic Benefits
7. Governance and Oversight

### **Section E: Financial Plan**

1. Background and Legal Structure
2. Legal Authority
3. Summary of financial planning cost assumptions
4. Statement on targeted financial returns and key metrics
5. Pro forma financial model

### **Attachments**

Suggested attachments may include project map, project origination and development activities checklists, baseline schedule for development phase and major milestones for entire project life cycle, financial model, development phase budget worksheet, stakeholder endorsements, and/or organizations charts.

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## Recommended Format for the Submission of the Business Plan Proposal

### SECTION A: APPLICATION INFORMATION

1. Project Name: Assign a project name to establish an identity within the TIP program and applicant organization and facilitate communications with stakeholders during the life of the project.
2. Evidence of Authority: Submit evidence that the signatory of the application has full authority to bind the Project Sponsor(s) to the commitments and representations made in the application. This authority and responsibility include an ability to attest to the accuracy of the information provided in the application.

An applicant can choose a legal representative to act on their behalf to make an access or amendment application for them. A letter of authority specifically setting out the nature, terms and duration of the appointed person's authority; signed by the applicant and a proper witness will be required.

3. Rights Validation Statement: Provide a written statement that identifies the legal owner(s) of any physical and economic assets, technology or intangibles that will be contributed to the project during the development and construction/execution phases of the project.
4. Availability of Funding: If funds for the development phase are to be provided by investors other than the applicant(s), provide a written affirmation from a senior officer of such an investor expressing a commitment to provide, or interest in providing, the financing necessary to develop the project.

Clearly identifies and quantifies the available funding projected for all project requirements, all entities providing resources to the project, and the level of expectation that they perform within stated project budget parameters.

5. Project Participants: Identify all project participants of the project organization enterprise to include proponents, participants, consultants, functional managers, known team members, and other key process stakeholders. List all parties involved with the project, their function and contact information, including the name of a specific contact person. In this manner, the primary resources for defining project objectives, goals, planning and development activities, costs and account management, and schedule parameters are identified. The needs and concerns of all project participants, even those indirectly involved, should and can be considered. Their early buy-in, stated expectations and continued involvement in the project are essential.

6. Applicant Point of Contact Information: Provide contact information that identifies authoritative individuals over project and team management actions. These contacts will represent the primary resources for management methodology, financing, technical support, functional assets, consultants, industry associations and alliances, and other supplemental project management elements.

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## SECTION B: PROJECT DESCRIPTION

1. **Summary:** Provide a descriptive summary of the nature and scope of the proposed project including the purpose, justification and qualifying criteria, design features, capacity and estimated total capital cost. This summary will address specific project goals and objectives; especially as they relate to satisfying minimum evaluation criteria and the responsibilities and expectations of the project team, resource providers and stakeholders. Provide a description of the site location, facility and construction plans. Include a detailed work breakdown structure (WBS) up to construction, and major milestones for construction and operational readiness. Describe any potential legal or regulatory risks to the project. Specific project solutions should not be stated in the summary.
2. **Technology Description:** Provide a description of the power system components of generation, load and transmission system (or technology to be employed) as they relate to the project and its commercial feasibility. Provide details on major subsystems including sub-stations or major sub-components. Include a discussion on pole design and emergency return path if applicable. Provide a summary of technical pre-feasibility work completed to date (if any) and any analysis of alternatives. If applicable, discuss why any technology to be used on the project is not now in general use and how the applicant intends to employ such technology. Any reciprocal impacts of the project should be evaluated against transfer capability, reliability criterion, and new demands on the transmission grid.
3. **Project Eligibility:** Provide a detailed explanation, supporting an executive decision to initiate investigations, as to whether the proposed project fulfills all applicable TIP requirements, especially with respect to:
  - Review from Project Proposal how project meets statutory criteria
  - Delivers or facilitates the delivery to market of power from renewable resources
  - Has a least one terminus within WAPA's service territory
  - Demonstrates reasonable expectation of repayment
  - Will not adversely impact system reliability or operations
  - Is in the public interest
4. **Organization:** Provide a current organizational chart showing the applicant's structure, relationship to any subsidiaries or affiliates, and relationship to the project work processes and deliverables. Any proposed partnerships, ownership projections and stakeholder interests should be recognized in a manner that establishes authority relationships and accountability that may have a positive or negative influence on the project. Identify national origin of equity and project development sponsors if other than US. WAPA may request additional documentation as part of the project evaluation process.
5. **Prior Experience:** Describe the prior relevant experience of each key project participant described in Section A-4 as it relates to carrying out projects like the one being proposed. State experience in a manner that conveys individual and associated organizational maturity with respect to facilitating specific project financing, development, management and execution performance for the type of project proposed. Identify individual, organization and corporate knowledge; historical information; lessons-learned; or

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other information about the results of previous project decisions and performance, and information from the risk management perception.

6. **Proposed Project Location:** Identify the proposed location and rationale for the site location. Describe the route and terminal selection(s) based on known environmental mitigation and avoidance information, land use and ownership information, terrain, geology, construction and maintenance access needs, and economic efficiency and optimization of design. Preliminary evaluation criteria can include access requirements, topography, geology, constructability, impacts to land use, etc.

7. **Project Development Schedule:** Provide a timeline of the estimated start and completion dates of each major phase or key milestone on the critical path of the project from introduction through start of commercial operations, and a conceptual schedule to achieve such. For each event, provide the projected completion date and a brief description of the significance of the milestone or event listed, and current progress on timelines as appropriate.

8. **Proposed Role for WAPA Development Assistance:** Identify specific development assistance that the applicant anticipates WAPA performing. Provide a detailed description (using major WBS categories) of technical, project management and other tasks WAPA would perform, and preliminary estimates for hours and costs associated with such tasks.

9. **List and Status of Licenses/Permits/Approvals:** Provide a listing and status of agreements, licenses, permits and approvals essential to the development of both business and technical project aspects that eventually advances its level of maturity to substantiate implementing an Advanced Funding Agreement, allowing for the project to evolve to the development phase of the project life-cycle. This listing should include the current status and estimated approval dates for each. Some of the relevant documentation that supports these development processes includes:

- A Western Electricity Coordinating Council (WECC) Phase I Path Rating Study for determining project ratings in accordance with North American Electric Reliability Corporation (NERC) planning standards and WECC criteria.
- A WECC Phase II Transmission Project Status Report that documents all the studies and findings in an accepted Rating Report and the project granted an “Accepted Rating.”
- An Environmental Assessment that produces a Record of Decision and Mitigation Measures.
- Lands and Right of Way (ROW Acquisition and Management Plan that defines ownership/ROW needs, access requirements, complaint resolution, damage/restoration processes, and any anticipated condemnation needs.
- Commercial Off-take Agreements that assure the lender the project proponent will have a purchaser for its power capacity.
- Interconnection Requests/Agreements such that the requirements of the utilities as well as the project can be determined early in the process.
- Permits and inspections required by Federal, state, and local authorities having jurisdiction over the project.

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- Feasibility Study with “Fatal Flaw” Analysis that ensures all the major elements normally associated with high-voltage power transmission system development and completion are identified and evaluated. Such an analysis of the proposal is essential to determine if there were any significant issues that could potentially rule out the project.
- Status Report of Permitting and Regulatory Approvals that identify potential problems, problem resolution, and timeframes associated with permitting processes.

10. Project Development Costs: Provide estimated total cost and an estimated breakdown by cost category (resources and deliverables) for Project Development. The total estimated cost of a project includes services such as consultant and legal fees, administrative and application fees, labor and all other non-labor costs to complete development so that it satisfies all requirements for debt and equity financing for construction. Estimated costs should include reserves (also called contingency allowances) as costs associated with schedule activity costs.

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## SECTION C: PROJECT ELIGIBILITY

1. Major Project Development Plans: Provide a description, status and associated costs of key project plans essential to develop a strategic process outline of all project activities from start to finish. A variety of activities and their associated description, cost and status are considered essential to develop the documentation to support the submittal of the Request for WAPA Borrowing Authority. These can be accomplished by the development of:

- a. Preliminary project development and planning criteria, to support the terms and conditions of a formal project development agreement that includes:
  - A Business Case proposed to represent and document the reasoning for starting a new project.
  - Identify and contact proponents and stakeholders as a key resource for defining project objectives, mission need, planning and development activities, costs and account management and schedule parameters.
  - Summarize project milestones in a series of activities/events on the critical path that will determine the earliest completion time of the project. Include a baseline schedule for the development phase milestones and activities.
  - Develop a preliminary project schedule that allows resource allocation during specific activity durations. Schedule risk analysis should take into account the uncertainty associated with individual project activity durations.
  - Identify and quantify resources in matrix form relative to project needs, impact on WAPA's functional organizations (if any), and projected funding requirements. All entities providing resources to the project should provide relative cost estimates based on project maturity level, with the expectation that they perform within stated project budget parameters. At each level of development, a cost risk analysis should produce a defensible assessment of the level of cost to budget, such that the cost estimate has an acceptable probability of not being exceeded.
  - A management methodology for integrating scope, schedule, and resources, and for objectively measuring project performance and progress is suggested.
  - A third level WBS as a means of identifying the deliverable scope of the project and define resource organization requirements.
  - For each WBS component, a WBS Dictionary that documents a brief definition of the scope or statement of work, defined deliverable(s), a list of associated activities, and a list of milestones.
  - A benefit analysis that weighs the benefits of the project relative to TIP evaluation criteria, socio-economic benefits, technical feasibility, market analysis, and financial modeling.
- b. A Design/Construction/Execution plan, including right-of-way acquisition (if applicable). This plan provides the relevant information and benchmark terms and conditions that the sponsor will employ to design, construct and commission the proposed project.

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c. An Operations and Maintenance (O&M) Plan essential to provide planning, execution and implementation activities that impart consistency across and within Federal and utility jurisdictions. These efforts begin early in the planning process and will continue to evolve throughout the project life- cycles. The plan is intended to ensure:

- Avoidance and minimization efforts are employed during corridor and route selection in consideration of both construction and long-term O&M activities.
- Operating and maintaining utilities comply with the NERC and WECC reliability and service requirements.
- O&M process criteria and activities comply with applicable Federal, utility and state laws and policies.
- Implementation and operating criteria and processes are defined and established prior to functionality testing and commercial operations.
- The plan establishes routine, emergency and emergency response activities for operation and maintenance of the transmission line and its ancillary facilities.
- Operating utilities are provided access to transmission lines and ancillary facilities and implement necessary O&M activities in a timely, cost effective, efficient and safe manner.

d. In addition to utility commission and operating council requirements, the applicant may also be required to secure Federal, state and local resource agency permits for the project. Permit requirements for individual projects may vary depending on project location, conditions and interconnecting criteria. A legend of essential permits with respective critical path location should be provided with the preliminary business plan.

2. Potential Reliability Impacts: Provide a summary of the reliability impacts to the electric grid associated with the project by evaluating the project proposal to address any gaps between the feasibility studies, the system studies results, the utility coordination efforts, the business case parameters, any project off-take agreement criteria, and draft project development agreement(s) terms and conditions. Components of the analysis should include potential markets for power, access to transmission or distribution systems, capacity, etc.

Feasibility evaluation, budgetary cost development, and tariff projections for an integrated power transmission project should be used to validate the business case objectives. Once this is achieved, terms and conditions may be established which will advance the project to the development phase.

3. Potential Environmental Impacts: Provide an outline of potential project environmental impacts and how these impacts will be mitigated for any preferred and alternate routes. These impacts can be revealed with high-level environmental review of potential transmission line corridors and the preferred routing, substation sites and other land and ROW requirements. Initial assessment is one of sequentially gathering of information and evaluation of the impact that will result from implementation of a project.

It is important to work in an organized manner that includes preliminary project criteria and decisions, preliminary assessment of impact, and design revision and phased environmental analysis. A process of

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reviewing draft and final environmental impact statements for conflicting requirements and participating in developing mitigation measures for conditions that would encumber construction and long-term operations and maintenance of the project is essential.

4. **Support to Renewable Energy Sources:** Provide a description of how the project supports the delivery to market of power generated from renewable energy sources, constructed or reasonably expected to be constructed. The explanation should define all project partners' participation in region-wide planning groups and any associated inter-connection relationships, existing or needed to success fully develop the project.

5. **Analysis of Alternatives:** Provide analysis of all reasonable alternatives identified by stakeholders and participants in the early development processes. The analysis process should identify those alternatives that best meet overall TIP objectives. This is especially important and required for projects that are impacted by regulation, public process, high risk factors, economic constraints, and those having significant organization resource impacts. The feasibility of alternatives should be investigated on the basis of cost, technical and logistic factors. Also, the consequences on the project sponsor and the public of not implementing the project should be addressed.

6. **Risk Assessment:** Identify and analyze known risk factors associated with project organization environment, characteristics, management practices, regulating authorities and dependency on external participants. Risk can be managed in many ways, such as acceptance, mitigation, transfer, and avoidance. A cost and schedule risk analysis is usually developed from the WBS as the document that details, from the top down, the various work packages (WP) of which the project consists. Each work product may then be subdivided into a statement of quantities and estimates of the labor, material, equipment and time required to complete them. A method and planned approach for proactively managing risk should be discussed and adopted by the project team. This effort initiates the planning and development of strategies to successfully manage project risks. For those functional elements (i.e., environment, finance, lands, construction, commissioning, commercial operation, etc.) that represent high levels of risk, a stand-alone risk management plan should be prescribed during the project development life-cycle phase. This effort should be a subset of the respective function management plan, as identified when establishing project management methodology, activities and reporting responsibilities.

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### **SECTION D: BUSINESS PROPOSAL**

1. Market Analysis including an analysis of the current and projected market for the project or facility output and describing current and potential competitors for the project's output.
2. Proposed Commercial deal structure. Describe the commercial deal structure including ownership of physical assets; capacity sharing proposals; and proposed revenue agreements in order to satisfy future capital repayment including principal and interest and project sponsor equity returns. Provide a graphic depiction of the counterparties and contractual agreements as related to the Project Sponsor.
3. Plan to secure Revenue/Offtake Agreements: Provide a description of the planned revenue from the Project. In the power transmission industry, the principal off-take agreements is the Transmission Service Rights (TSR) agreement which documents terms and conditions for price of capacity and tenor of contract. In the context of TIP projects, the Business Proposal will need to identify the TSR agreements for the capacity and the potential generation asset or other entity that may be counterparty to these contracts. The Project Sponsor should provide a preliminary discussion in terms of credit worthiness for the anchor tenant generation providers as well as details on their target offtakes for Power Purchase Agreements. For non-transmission projects, Project Sponsors should have to describe revenue contracts and counterparties proposed. Typically, the off-take agreement extends for a period of time beyond the expected final maturity of the project loan. The final part of this section should describe the Project Sponsor Plan of Action and milestones that link to the master schedule for securing revenue/offtake contracts.
4. Total Project Costs: Provide a complete description of costs by phase of the project life cycle. This should include development costs, pre-construction costs, construction costs and operations and maintenance costs. Provide narrative to articulate the pro forma representations noted in the financial model provided.
5. Debt and Equity Financing Plan: Provide a narrative describing the sources of funding for each phase of the project. Begin the narrative with a description of current funding sources and types of financing (debt/equity) for the Project Development entity. Describe the plan for fundraising for debt and equity including WAPA Borrowing Authority linking discussion to major milestones and project phases. Identify planned target dates for equity commitment, debt financing application, financial close and major contract awards. Provide a summary table for sources and uses of financing for reference from the financial model.
6. Economic Benefits: Identify any potential economic benefits from the project that WAPA, regional entities, governmental agencies or the project applicant may realize if the project is achieving commercial operation. This effort involves a systematic process for calculating and comparing benefits and costs of a project and providing a basis for comparing similar projects. It should involve comparing the total expected cost of each option against the total expected benefits, to see whether the benefits outweigh the costs, and by how much. The Project Sponsor may include any job benefits analysis representations in this section.

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7. Management of Development: Introduce oversight processes and controls that assure planning, development, progress, and measured performance in a manner that affords accountability and transparency of project decisions and actions. Provide a plan for a joint management structure for tracking project progress and arriving at material decisions with WAPA and TIP senior management. Identify those major commercial and project factors for which the Project Sponsor will seek WAPA commitments. These processes should begin in the early project development phases and continue in diligence throughout the life cycle of the project. Project management performance evaluation for all project phases should be an element of the oversight effort in addressing project goals, objectives, risk mitigation, financial management, and other stated assessment factors.

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### **SECTION E: FINANCIAL PLAN**

1. **Background and Legal Structure:** Describe the applicant's history, ownership, and legal structure (e.g., state governmental agency, local governmental agency, corporation, or partnership) and the relationship between the applicant and the Borrower. Include a copy of the statutory authority under which the entity was created, if applicable.
2. **Legal Authority:** Describe the legal authority of the applicant to carry out the proposed project activities (e.g., issuing debt, charging fees). Provide supporting documentation.
3. **Summary Key Planning costs assumption:** Provide a detailed summary of baseline cost assumptions for major project uses of cash. This should include a recap of development costs, pre—construction costs including lands acquisition, construction costs through commercial operations. This section should provide a preliminary analysis of operations and maintenance assumptions in terms of identifying contractor role, annual operations costs, long-term maintenance costs, and insurance costs.
4. **Statement of targeted financial returns and metrics:** Provide a written narrative to accompany the pro forma financial model noting the Project Sponsors targets for Capitalization Structure (Debt to Equity ratio); Returns on Equity, Project Internal Rate of Return as well as key metrics for Debt Service Coverage Ratios and projected revenue/offtake rates (for transmission lines this is \$/kWMonth).
5. **Pro forma financial model:** See pro forma model which may be downloaded from the TIP website.