RESOURCE SOLUTIONS FOR RURAL COMMUNITIES

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FARMERS CONSERVATION ALLIANCE

REQUEST FOR QUALIFICATIONS: IN-CONDUIT HYDROPOWER SERVICES

RFQ Issued: March 25, 2025

Intent to Respond and Questions Due: April 25, 2025

Proposals Due: May 30, 2025

Respond to:

Farmers Conservation Alliance
102 State Street
Hood River, OR 97031

hydropowerRFQ@fcasolutions.org

Request for Qualifications: In-Conduit Hydropower Services

1. Overview

Farmers Conservation Alliance (FCA) is seeking to engage qualified engineering firms to provide professional services for conducting feasibility studies, design, and implementation planning for in-conduit hydropower systems within irrigation infrastructure. These services will support FCA's mission of modernizing irrigation systems while exploring renewable energy opportunities, including hydropower generation from existing water conveyance systems.

2. Project Background

FCA is working with various irrigation districts, ditch companies, and agricultural water providers (collectively, "irrigation communities") to identify opportunities for generating renewable energy from in-conduit hydropower systems. The goal is to assess the feasibility of hydropower generation using the existing water flows in irrigation canals and piping systems, with a focus on minimizing environmental impacts while maximizing energy output.

3. Scope of Services

The selected firm(s) will provide comprehensive engineering services, including but not limited to the following key tasks:

A. Site and Resource Assessment

- **Water Flow Data Analysis:** Analyze water flow data provided by FCA or the relevant irrigation community to estimate the hydropower capacity and potential annual energy generation.
- **Equipment Selection:** Identify and recommend appropriate turbines and hydropower generation equipment based on site-specific hydraulic conditions. Solicit quotes from equipment vendors for cost comparison.
- **Preliminary Facility Layout:** Develop a conceptual layout of the hydropower facilities, including penstocks, turbines, intake structures, powerhouse location, and transmission lines. This will also include a one-line electrical diagram.

B. Interconnection Assessment

- **Utility Grid Interconnection:** Evaluate the feasibility of connecting the hydropower system to the local utility grid and identify interconnection points.
- **Interconnection Cost Estimation:** Estimate costs for interconnecting to the utility grid, including costs for pre-application reports and addressing any potential technical or regulatory barriers.

C. Financial Evaluation

- **Project Cost Estimation:** Provide a detailed cost estimate for the project, covering equipment procurement, site preparation, construction, and interconnection fees.
- **Operational and Maintenance Costs:** Develop a projection of ongoing operational and maintenance (O&M) costs for the proposed hydropower system.
- **Revenue and Payback Analysis:** Conduct a financial analysis, including projected revenue based on local Power Purchase Agreements (PPA) or other

markets. The analysis should include a payback period and return on investment (ROI) calculation.

D. Permitting and Risk Assessment

- **Permitting Requirements:** Identify all necessary permits, including environmental, water rights, and construction-related permits. Provide a detailed timeline and outline the complexity of the permitting process.
- **Risk Assessment:** Evaluate potential risks associated with project development, including regulatory, environmental, financial, and operational risks. Propose mitigation strategies.

E. Deliverables

- **Final Feasibility Report:** A comprehensive report summarizing the hydropower potential, proposed equipment, preliminary design, interconnection feasibility, financial analysis, and permitting/risk assessments.
- **Financial Models:** Detailed spreadsheets showing cost breakdowns, revenue projections, and payback periods.

4. Service Areas

FCA seeks firms to perform Services for projects in one or more regions. Firms should identify which of the following region(s) they are applying to cover (i.e., service areas).

- Oregon
- Washington
- California
- Montana
- Idaho
- Colorado
- Nevada
- Utah
- Arizona

5. Submission Requirements

Interested firms must submit the following information:

- **Firm Background:** Provide a brief history of your firm, highlighting relevant experience in hydropower assessments and design, particularly within irrigation infrastructure.
- **Qualifications and Experience:** Include resumes of key personnel, emphasizing their expertise in hydropower engineering, financial modeling, and permitting processes. Provide proof of licensure for the identified service areas.
- **Past Projects:** Provide examples of at least three projects of similar scope, with details on project outcomes and client references.
- **Approach and Methodology:** Describe your approach to conducting feasibility studies, equipment selection, and financial analysis.
- **Cost Proposal:** Provide 2025 rate sheet (and rate escalation rubric) along with an estimated fee for completing the work outlined in the Scope of Services.
- **Location:** Identify the firm's office location(s) and discuss the ability to perform project services for the selected service areas over the next five years.
- **Organization Chart:** Complete organization chart listing all major disciplines associated with the Services and any applicable subconsultants.

Proposers must submit a non-binding Intent to Respond via email to hydropowerRFQ@fcasolutions.org by April 25, 2025, 5:00 PM PT.

- The Intent to Respond should include the firm's name, primary contact, and proposed service region(s).
- Firms that do not submit an Intent to Respond may still submit a proposal, but FCA highly encourages participation in this step to facilitate communication.
- Submission of an Intent to Respond does not obligate a respondent to submit a proposal.

Limit Statement of Qualifications to 30 pages total, excluding cover, section dividers, and deliverable examples.

6. Selection Criteria

Submissions will be evaluated based on the following criteria:

- Experience with in-conduit hydropower systems (25%) - Demonstrated expertise in similar projects.
- Technical qualifications and expertise of key personnel (20%) - Relevant expertise, certifications, and industry knowledge.
- Past project performance and references (20%) - Proven track record with successful projects and client references.
- Approach to completing the scope of work (20%) - Clearly defined methodology, project management plan, and risk mitigation strategy.
- Overall cost and value (15%) - Cost competitiveness and overall value.

7. Submission Instructions

RFQ Schedule

- **March 25, 2025** RFQ issued
- **April 25, 2025** **Intent to Respond due**
- **April 25, 2025** Questions & requests for additional information due
- **May 2, 2025** Clarifications & question responses posted to website: https://fcasolutions.org/rfq-in-conduit-hydropower-services/
- **May 30, 2025** **Proposals due**

All proposals must be submitted electronically in PDF format via email to hydropowerRFQ@fcasolutions.org by May 30, 2025, 5:00 PM PT.

- The email subject line must include: 'RFQ Submission – [Firm Name]'
- Attachments must not exceed 25MB (if larger, provide a link to a secure file-sharing service).
- Late submissions or non-PDF formats will not be accepted.

All questions must be submitted via email to hydropowerRFQ@fcasolutions.org by April 25, 2025, 5:00PM PT.

- A compiled Question & Answer (Q&A) document will be published on FCA's website https://fcasolutions.org/rfq-in-conduit-hydropower-services/ by May 2, 2025.
- All questions and answers will be made publicly available to ensure fairness.
- No direct responses will be provided via phone, fax, or mail.
- It is the proposer's responsibility to check the website regularly for updates.

PUBLISHED DATE: March 25, 2025