

JUSTIFICATION FOR OTHER THAN FULL AND OPEN COMPETITION

Solicitation No.: INR13PS30235

Project Name: Support for Colorado River Mid-Term Operations model (MTOM) System

In accordance with FAR 6.302, the proposed contractual action is pursuant to the statutory authority of 41 U.S.C. 253(c)(1) and the authority of FAR 13.5 Test Program for Commercial Items.

1. Agency and Contracting Activity.

Bureau of Reclamation, Lower Colorado Region and Upper Colorado Region

2. Nature/Description of Action.

The Lower Colorado and Upper Colorado Regions of the Bureau of Reclamation have teamed to construct a significant new component to their decision support system for the Colorado River Basin (Basin). For the mid-term timeframe of 24-60 months, the new Mid-Term probabilistic Operations Model (MTOM) system provides Reclamation managers and stakeholders probabilistic projections for the potential state of the Basin. The model is implemented in RiverWare™, and the system includes spreadsheet-based applications for pre- and post-processing of model data, as well as a set of PDF and PPT-based reports for distribution to managers and stakeholders. This system will be used by Reclamation and stakeholders to better support operational decision making and forecasting for the two-to-five year time scale. This modeling system serves a critical need for Reclamation in carrying out the Secretary of Interior's role of Water Master of the Basin. As such, the implementation of the MTOM system is a GRPA goal and incurs regular scrutiny. It is under these circumstances that Reclamation requires technical user support and maintenance of the MTOM system, as well as the capability to make improvements to the system as needed. A contract for assistance with development of the MTOM system was awarded to Precision Water Resources Engineering (PWRE). This small company has expertise in Riverware model and spreadsheet application development in general, but also has expertise in the MTOM system specifically. Because Reclamation requires a contractor who knows the MTOM system sufficiently to immediately provide services without requiring training or re-learning the system, PWRE is the only responsible source for this requirement. To these ends, Reclamation requests approval to award on a sole source basis a requirement that is only available from one responsible source.

3. Description of Supplies/Services.

Reclamation has a need to set up an Indefinite Delivery - Indefinite Quantity (IDIQ) type contract with Precision Water Resources Engineering (PWRE) for regular maintenance and support services, as well as product upgrades and enhancements, for the MTOM

modeling system. Awarding a follow-on as an IDIQ type contract to PRWE will allow for continuous support on all of Reclamation's MTOM needs while at the same time reducing both re-procurement and administrative contract costs. The contract's period of performance is five (5) years.

4. Statutory Authority Permitting Other than Full and Open Competition.

	Authority	FAR Coverage	Application
<input checked="" type="checkbox"/>	41 U.S.C. 253(c)(1)	FAR 6.302-1	Only one responsible source and no other supplies or services will satisfy agency requirements
<input type="checkbox"/>	41 U.S.C. 253(c)(2)	FAR 6.302-2	Unusual and compelling urgency
<input type="checkbox"/>	41 U.S.C. 253(c)(3)	FAR 6.302-3	Industrial mobilization; engineering, developmental or research capability; or expert services
<input type="checkbox"/>	41 U.S.C. 253(c)(4)	FAR 6.302-4	International Agreement
<input type="checkbox"/>	41 U.S.C. 253(c)(5)	FAR 6.302-5	Authorized or required by statute
<input type="checkbox"/>	41 U.S.C. 253(c)(6)	FAR 6.302-6	National Security
<input type="checkbox"/>	41 U.S.C. 253(c)(7)	FAR 6.302-7	Public Interest

5. Demonstration of Contractor's Unique Qualifications.

The MTOM system is a custom built hydrologic modeling system. The hydrologic model was developed using a commercial river and reservoir management software tool called RiverWare™. The supporting applications for providing inputs and processing outputs are custom built applications based on MS Excel spreadsheets. Because the requirement is for user support, maintenance of the system, and continuous development, it is imperative that the contractor be intimately familiar with the model and supporting applications.

PWRE helped develop the RiverWare model, and developed all the code for the spreadsheet applications. As such, they are the only potential offeror with the requisite knowledge of the model's inner workings and applications' code. No other potential offeror has an equivalent product or the capabilities to develop a backward-compatible replacement software product without the duplication of substantial cost to Reclamation that is not expected to be recovered through competition and within an acceptable timeframe. In addition, no other firm has the expertise, skills, knowledge, and access to the code required to ensure performance of Reclamation's software enhancement and technical support requirements.

To procure these services commercially would require Reclamation to train the potentially new contractor in Colorado River Basin reservoir operations as well as the entire modeling system. This would not only be time consuming but would result in a great deal of duplicated effort and additional costs to the Government.

6. Description of efforts made to maximize competition.

As described in paragraph 8 below, market research was conducted. Based on the results the two potential firms contacted which have been previously used by Reclamation for similar work, were not fully familiar with the required modeling system, nor seemed interested in this work. No competition is anticipated for this follow-on procurement. The original contract was procured as a sole source; however, as required by FAR Subpart 5.2 Synopses, the intent to sole source was synopsized. No responses were received challenging the intent to award on a sole source basis.

7. Determination of Fair and Reasonable Cost.

In accordance with FAR 15.404, a cost and price analysis will be performed on PWRE's proposal. Reclamation has some procurement history with PWRE, which will contribute to such analyses. In addition, other firms which provided similar services via the GSA Advantage market often include hourly rates for software support in their GSA schedules, which can be used for comparison purposes.

8. Description of Market Research Conducted.

Market research was conducted for similar services in March 2013. Shana Tighi (Lower Colorado Region, BCOO) contacted multiple Reclamation employees in the Lower Colorado Region (Aaron Marshall and Hong Nguyen-DeCorse, YAO) and the Upper Colorado Region (James Prairie). These employees were asked about contractors used for RiverWare development work within their respective programs. From these contacts, two additional potential offerors were investigated – Hydros Consulting and AMEC E&I.

Hydros Consulting has the skill set required to develop RiverWare models. It was not confirmed if they also have the skill set required to develop Excel spreadsheet applications using Visual Basic for Applications (VBA) code. One particular staff member, through the contracting work performed for YAO, has developed some expertise in YAO operations; however no one from the company is familiar with the MTOM modeling system.

Reclamation staff could not confirm if AMEC E&I has the skill set required to develop RiverWare models or Excel spreadsheet applications using VBA code. Therefore the AMEC office in Boulder Colorado was called. The receptionist reported that the company does have staff with the above mentioned skills. No one from the company is familiar with the MTOM modeling system, and it is unknown if the personnel with RiverWare and VBA coding skills have any experience in the Colorado River Basin and reservoir operations.

If Reclamation has a future need for developing a new RiverWare model or modeling system complete with supporting applications, either of the above-mentioned companies could be viewed as potential offerors, along with PWRE. Nonetheless, or an existing

system with a need for immediate support, PWRE is the only company with the requisite knowledge. A summary of market research with additional detail is attached.

9. Any Other Supporting Facts.

As stated in Section 5 above, to procure these services commercially would require Reclamation to train the potentially new contractor in Colorado River Basin reservoir operations as well as the entire modeling system. This would result in a great deal of duplicated effort and additional costs to the Government. PWRE was queried as to how much time was spent just learning Colorado River operations in order to provide the required services for developing the MTOM system. Reclamation staff at Upper Colorado Region and Lower Colorado Region were also queried for an estimate of how much time each staff member spent training PWRE on the details of reservoir operations. The following tables indicate an estimate of the cost to the Government that would be duplicative if another contractor was awarded the requirement. Note, contractor time and costs only include hours and costs incurred during the course of the MTOM Development contract.

CONTRACTOR:

Estimated Time and Cost spent learning Colorado River Operations and all aspects of MTOM

Position	Cost	Hours	Total Cost
Principal Engineer	\$150	159	\$23,850
Hydrologist/Modeler	\$100	73	\$ 7,300
Hydrologist/Modeler	\$100	50	\$ 5,000
Total Contractor Labor Hours & Cost		282	\$36,150

Additional Expenses	Item	Estimated Cost
Principal Engineer Travel	1 trip to Durango Office	\$1,200
Principal Engineer Travel	1 trip to SLC office	\$1,200
Principal Engineer Travel	1 trip to BCOO office	\$1,200
Hydrologist/Modeler Travel	1 trip to Durango office	\$1,200
Total Contractor Travel Cost		\$4,800
Total Costs at Risk for Duplication:		\$ 40,950

RECLAMATION:

Estimated time spent training contractor on Colorado River reservoir operations

Position	GS-Level	Location	Estimated Hours
Hydraulic Engineer	12-4	SLC	16
Hydraulic Engineer	12-4	SLC	8
Hydraulic Engineer	12-10	SLC	8
Hydraulic Engineer	12-7	SLC	40
Hydraulic Engineer	12-1	Durango	18
Hydraulic Engineer		Durango	18
Hydrologist	12-3	BCOO	18
Water Resources Specialist	12-3	BCOO	18

Total Government Labor Hours at Risk for Duplication**144****10. Listing of Interested Sources.**

No sources expressed an interest in the original synopsis during the original procurement in 2011; nor for this procurement, in writing or otherwise.

11. Actions Taken to Remove Barriers to Competition.

Market Research will be conducted around twelve months prior to the contract ending in order to allow enough time to solicit potential contractors and to allow time for contractors to submit capability statements and or questions regarding the requirement. In addition, we will consult with the local SBA procurement center for assistance.