Request for Information (RFI): 20676
Energy Market Solution

Responses Due Date: 06/22/16
Time Due: 12:00 PM CT

Submit Responses to: Gai Hunter
Grand River Dam Authority
Central Purchasing Unit
Email: ghunter@grda.com

Buyer: Gai Hunter
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Date of Request for Information Release: 06/02/16
Deadline for Questions Submission: 06/15/16 at 3:30PM CT

NOTE: If Respondent has any questions pertaining to the enclosed RFI, direct them to the Buyer as listed above. Only answers provided by the GRDA Central Purchasing Unit will be considered official and valid by GRDA.
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1. INTRODUCTION

The purpose of this Request for Information (RFI) is to gather information to assist GRDA in formulating its requirements, and identify qualified vendors who are able to meet our requirements.

This is solely a request for information and not a Request for Proposal (RFP). This RFI is issued solely for information and planning purposes and does not constitute a solicitation. Responses to this notice are not offers and cannot be accepted by the GRDA to form a binding contract; however, respondents to this RFI may be placed on the list of potential respondents and receive an announcement if a procurement process may arise from this RFI.

Based on the information provided by the respondents to this RFI, a determination may be made regarding any actual contracting through a procurement process which, at GRDA’s option, could include but not be limited to: a formal bid process, a sole brand bid process, a sole source process, procurement via Federal GSA contract(s), cooperative agreement(s), or a piggyback of a contract established as a result of the public bid of another public agency.

Participation in this RFI is voluntary. Respondents are solely responsible for all expenses associated with responding to this RFI. Responses to this RFI will not be returned. Respondents will not be notified of the result of the review.

2. BACKGROUND

In order to respond more effectively to the SPP Integrated Marketplace, to provide optimal data analysis for marketplace decision making, and to reduce the burden of manual data collection from various sources, GRDA is interested in evaluating the effectiveness of the current mix of software tools it uses for energy marketplace management, such as: bidding strategy (day ahead and real time), deal management, and settlement processes by pursuing a turnkey, enterprise-level solution that provides portfolio optimization and analytics, as well as other energy management benefits.

GRDA intends to evaluate and possibly implement a Commercial Off-the-Shelf System in 2016 or 2017 in partnership with a capable implementation vendor. The specific schedule, deliverables and roles and responsibilities between GRDA and the software implementation vendor are yet to be determined. Vendors are encouraged to provide a “best practice” solution for the implementation of their software.

3. ELIGIBILITY

Only vendors that can provide proof that they possess the following qualifications are eligible to respond to this RFI.

- Vendor must present proficient* and recent** experience with providing their enterprise-level software solution and implementation services to a member and participant of the Southwest Power Pool (SPP) Integrated Marketplace (IM).

* Proficient = More than 2 SPP IM customers.
**Recent = Less than 2 years ago. (SPP Integrated Marketplace started in March 2014).
4. SOLUTION REQUIREMENTS

At a high level, GRDA has the following goals for an enterprise-level energy market solution:

4.1 FRONT OFFICE FUNCTIONS:

1. Ability to provide extensive data exchanges with the Southwest Power Pool (SPP) regional transmission organization (RTO) for unit schedules and dispatch instructions.
2. Automate bid-to-bill workflow processes with visibility into key market data, ability to set key performance indicators with notifications/alerts upon specific events, and ability to review historical trends with key information markers for auditable review. Provide deal analytics to calculate unit commitment schedules for various market conditions.
   a. **Locational Marginal Pricing (LMP) Summary** comparisons with display and graphs, and customizable views for various details.
   b. **Deal Management and Automation**, able to enter both energy and natural gas trading deals.
3. Ability to quickly and accurately analyze asset operation to optimize our energy offers, regulation offers, and load forecasts.
   a. **Dynamic position screen** to display both physical and price positions.
   b. **Generation Dispatch/Scheduling Summary** with display and graphs, and customizable views for various details (i.e. Energy, Regulation up/down, Spin, Supplemental, etc.).
   c. **Start/Stop Instruction display** with display or tabular views and audible or visual triggers for various details and events (i.e. instruction/received date, ability to filter between resources or instruction types, acknowledged and unacknowledged start/stops, etc.)
   d. **Resource Offer/Demand Bid Entry displays** capability to submit (All Market parameters) Day-Ahead and Real-Time offers/bids from the same display.
   e. **5-Minute Data Summary display** with graphs or tabular views able to have customizable views for various details (i.e. Date, Meter data, Resource Name, Resource Type, etc.).
   f. **Resource Performance** with graphs or tabular views able to have customizable views for various details (i.e. hour ending format, dispatch instruction, actual MW, LMP price, etc.).

4.2 MIDDLE OFFICE FUNCTIONS:

2. Identify, validate, and quantify Profit & Loss leakage.
3. Import/Export capability to APIs, Excel, and other extensible formats.
4. Ability to open multiple displays of same display.
5. Production cost analytics: ability to input fuel cost variables in order to analyze a unit’s efficiency.
6. Ability to model combined cycle and analyze different configurations.
7. Ability to model forward valuations for GRDA’s assets using forward power and gas prices as well as other fundamental data.
8. Ability to analyze scenarios by changing inputs to evaluate effectiveness on the portfolio.
9. Ability to calculate the hedge effectiveness of Transmission Congestion Rights (TCR) positions in a volumetric approach.
10. Compare congestion component of LMP to the Transmission Congestion Rights (TCR)/Auction Revenue Rights (TCR/ARR) revenue.
11. Revenue/Expense capture capability: Calculate an hourly position based on actuals and any other financial agreements, for hourly energy position (short=purchase/long=sale), for MWH and dollar amounts, accepts negative values that integrates with a financial system, and the ability to create a deal based on resulting position.

4.3 BACK OFFICE FUNCTIONS:

1. Calculate, review, and verify market and transmission settlement statement charges, and assist with determining disputes and shadow discrepancies.
2. Ability to provide pre-settlements, shadow, and support re-settlements calculated on the last known statement.
3. Profit and Loss calculation on all settlement locations, including resources, load, and no location, based on actual MWHs from submitted meter data with all market charges.
4. Able to display SPP market charges based on types (i.e. Energy, Regulation up/down, Spin, Supplemental, etc.), and/or settlement location, and/or operating day(s), or invoice day(s), or month(s), or any range of dates.
5. Able to allocate market settlements by percentages that are co-owned.
6. Calculate settlements based on contract parameters (i.e. customer agreements).
7. Deal capture, including invoicing and interface with general ledger and monitor credit.
8. Bilateral (physical/financial) deals.
11. Fuel Inventory.
12. FERC EQR.
13. Tagging.

4.4 ENERGY ACCOUNTING FUNCTIONS:

1. Manage, Track, calculate and verify meter data for generators, interconnections, loads (able to interface with existing meter data management system).
2. Checkout with counterparties.
3. Audit record of data changes.
4. Data validation.
5. Use of meters and schedules in various calculations, including losses.
6. Analytics, displays, and reporting capabilities that can use data from multiple data sources (SCADA or data warehouse).
7. Meter Agent data submission.
8. Hourly load and resource data to SPP market settlements.
9. Hourly MVARH data to SPP transmission settlements.

4.5 REPORTING

Enterprise-level solution must provide standard reports and allow for ad-hoc reporting with customizable views and displays with multiple export format options.

5. VENDOR REQUIREMENTS

At a high level, GRDA has the following goals for an implementation vendor and software support of chosen solution:

5.1 PROFESSIONAL SERVICES/PROJECT MANAGEMENT:

1. Current state assessment with Gap Analysis and improvement roadmap to assist GRDA in achieving efficiencies in the energy market and energy-related financial accounting processes.
2. Onsite or online system administration and module specific training to user community.

5.2 TECHNICAL SUPPORT SERVICES:

1. Customer Account Team knowledgeable of the SPP market participation requirements and changes impacting GRDA’s business model;
2. Adhering to established service level agreements;
3. Utilization of an automated issue tracking system through resolution.
4. Able to provide market model health checks to ensure GRDA is maximizing software’s capabilities and achieving efficiencies within the SPP energy market.

6. RESPONSES

Responses should include:

1. Company background.
2. An overview of proposed software and professional services, emphasizing on experience with SPP members and participants of the Integrated Marketplace.
3. Methodology to implement market solution, such as deliverables and projected timeline to completion.
4. Company contact information.
5. Pricing structures and estimated cost of the project.

7. PRESENTATIONS/DEMONSTRATIONS

In addition to a written response, GRDA invites respondents to present their creative solutions via web demonstration (only web demo is allowed for this RFI) and will be given up to 2 hours to present their presentation.
Presentation date will be determined by parties. Respondents wishing to demonstrate their product should include in their response a preferred and alternate date / time (morning or afternoon session).

While GRDA is interested in learning of expanded functionality offered by a respondent’s product, every effort should be made to remain focused on addressing the specific requirements in this RFI.

In addition to a web demonstration of system capabilities, vendor should provide a free short-term trial to potential users, cost prospectus, and technical information on system requirements, and requisite interfacing.

8. **ACCESSIBILITY OF ELECTRONIC INFORMATION TECHNOLOGY**

All electronic and information technology (EIT) mentioned in this RFI should meet the Oklahoma Information Technology Accessibility Standards ("Standards") and is viewable at the following URL: [http://www.ok.gov/cio/documents/isd_itas.pdf](http://www.ok.gov/cio/documents/isd_itas.pdf).