Power System Engineering, Inc.

Full-service consultants

GIS Evaluation & OMS Procurement

Proposal Prepared for:

Rochelle Municipal Utilities

DATE

January 24, 2018

Contact: Jim Weikert

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January 24, 2018

Jason Bird
Rochelle Municipal Utilities
333 Lincoln Highway
Rochelle, IL 61068

Subject: Proposal for GIS Evaluation & OMS Procurement

Dear Jason:

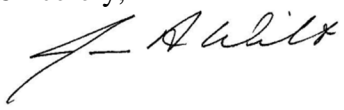
Thank you for the opportunity to provide a proposal for assisting RMU Energy (RMU) with procuring an Outage Management System (OMS).

PSE is seeing many utilities deploying OMS over the past several years. OMS has become the central system for operations to use in managing the distribution system given its connection to customer service, AMI, and field crews.

PSE has developed extensive familiarity with OMS systems in the market. We feel confident that we can help provide the guidance RMU needs to design and purchase a system that works well for the varied needs of your members.

I look forward to speaking with you about this proposal. Feel free to give me a call (608-206-3753) at your convenience and we can walk through the services we've laid out here.

Sincerely,



Jim Weikert
Director of Utility Automation

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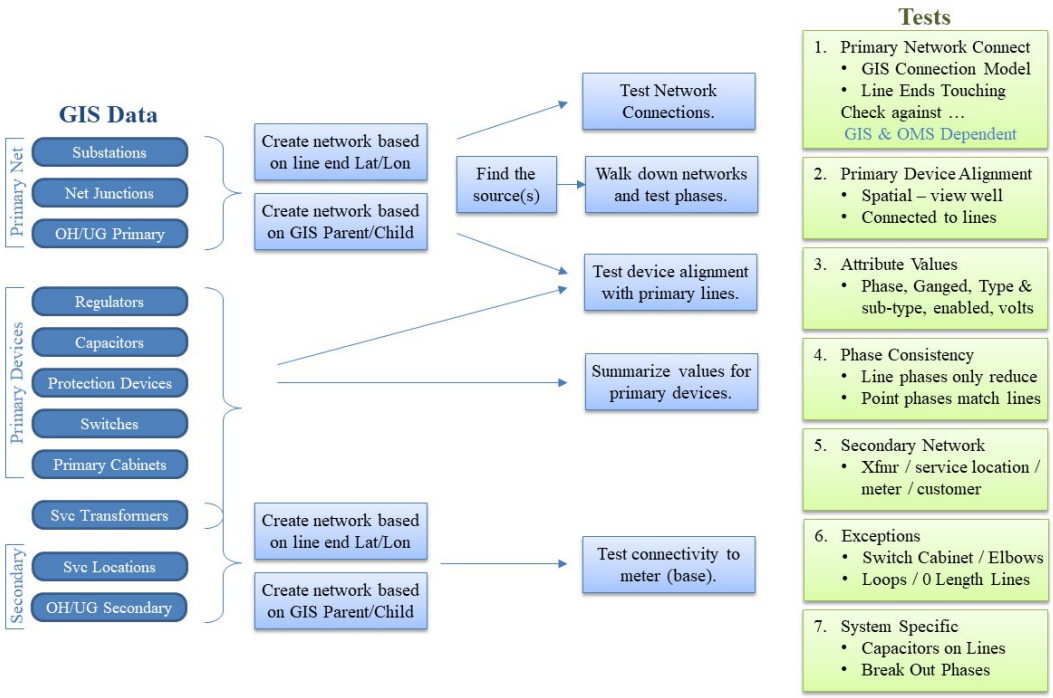
1 Approach

In describing our approach below, the first section describes the process we would follow for evaluating the GIS to measure its readiness for OMS and the second describes the process for procuring OMS.

1.1 GIS Evaluation

Typically GIS provides the connectivity model that drives OMS systems. From the GIS, the OMS knows how to group outages and predict faults.

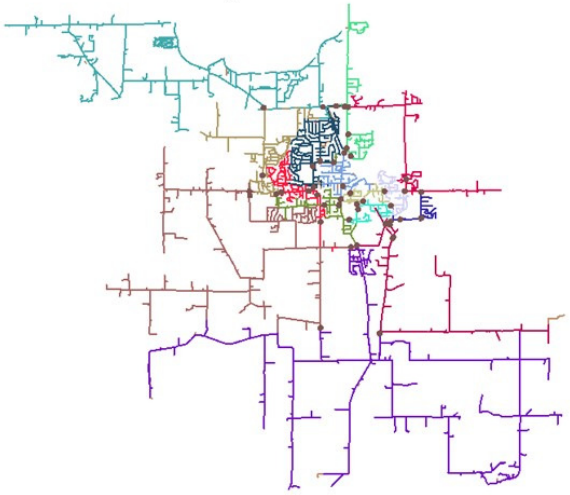
PSE has developed a process to review the data content and connectivity of the GIS data. The diagram below illustrates PSE's analysis process.



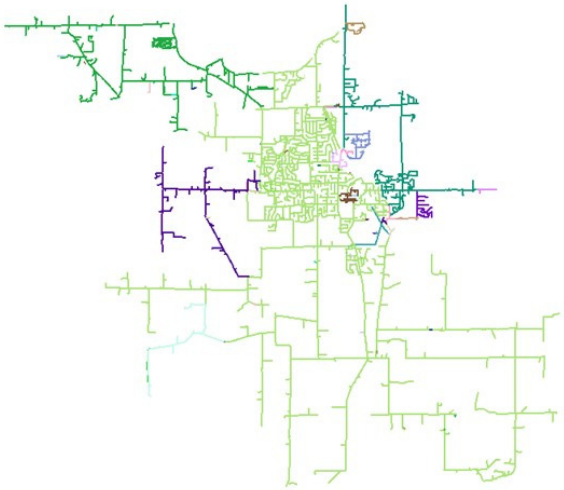
The diagram below provides an example output from this analysis. Our analysis will cover,

- Connectivity of lines and point devices
- Completeness of attributes needed for OMS
- Indications of where the issues occur so that they can be found and fixed by a GIS technician.

Network by Circuit Field



Network by Connectivity to Substation



Substation	Feeder	Network	Elements	Likely Correct	Possible Errors	Correct %	Error %	Comments
North	6	52	5740	3105	2635	54%	46%	
East	5	26	2163	1638	525	76%	24%	
South	5	65	7176	5826	1350	81%	19%	
Orphans		24	210	0	210	0%	100%	
Total	**16**	**167**	**15289**	**10569**	**4720**	**69%**	**31%**	

1.2 Requirements Development

1.2.1 Technical Requirements

PSE will work with RMU to develop requirements unique to your OMS. The form PSE uses requires the vendor to indicate compliance or non-compliance with each of the requirements listed.

The table below shows a brief sample of the kind of requirements that are often included in an RFP.

Table 1: Representative RFP Technical Requirements

#	Requirement
General Outage Reporting	
1	**IVR Outage Report:** The system must allow an outage to be reported by a member through an IVR system.
2	**IVR Existing Outage Report**: The system must be capable of indicating to the caller whether they are part of an existing predicted outage when the IVR is taking the call.
Member Service Interface	
5	**Outage Entry Tool**: The system must provide a call entry tool to allow member service representatives (CSRs) to enter outage calls.

11	**Member Call History:** The CSR Call Entry Tool must provide a list of previously reported outages (calls, IVR, AMI) for the member whose outage is currently being entered by the CSR. The history must be visible to the CSR while they are entering the call without having to go to a different screen. It must list date and time for each outage report or call for this member.
12	**Member Outage Event History:** The CSR Call Entry Tool must provide a list of previous outage events for the member whose outage is currently being entered by the CSR. The history must be visible to the CSR while they are entering the call without having to go to a different screen. It must list date, cause and restoration time for each outage event for this member.
Call Back / Notification	
19	**Notification Entry**: The system must allow a CSR to indicate whether or not a member desires notification of changes in the outage status. The CSR must be able to independently record an alternate number for notification. The CSR must be able to independently record whether notification is required for changes to ERT (Estimated Repair Time). The CSR must be able to independently record whether notification is required upon restoration.
23	**ERT Notification Limiting**: Allows utility to control frequency of ERT update notifications to avoid too frequent of updates if ERT changes are made too rapidly.
26	**Text Notification with Subscription:** The system must support the use of text messages to perform notifications for an outage, change in ERT and restoration if the member has signed up for text notifications with the utility.
Member Portal	
31	**Member Outage Map:** The system must provide a web-based outage map that geographically displays the service territory and highlights sections of known outages.
32	**Outage Summary**: The member portal must be able to display the number of outages in areas throughout the territory.
Operations / Dispatch Event Management	
39	**Event Management Tool:** The system must provide a tool for operations and dispatch personnel to manage outage events.
40	**Outage Entry Tool:** The system must provide an outage entry tool to allow operations personnel to enter outage calls using the same tool as they use for managing events.
46	**Custom Classifications:** The system must allow the utility to modify the lists of the following: 1) Outage causes (tree, animal, etc.) 2) Hazard types (line down, pole hit, etc.) 3) Event types (planned, unplanned, momentary, etc.)
Prediction	
52	**Predicted and Confirmed Outages**: The system must have the capability to reflect outage events created by the outage prediction process and have a status of “predicted” or “confirmed.” Predicted outages are those which cannot be verified by real-time system information confirmed by SCADA device operations.
54	**Prediction Modes**: The system must allow the operator to control whether prediction follows rules based on normal circumstances or abnormal circumstances such as a large storm.

59	**Jumpers:** The system must have the ability to add and remove temporary jumpers. The outage prediction must reflect changes based on these jumpers.
Dispatch Center Geographic Network View (Integration)	
71	**Network View:** The system must provide a geographic display of the distribution system that shows the following: - Single phase and 3-phase lines, - Protection devices, regulators, transformers and service transformers - Member service locations (and associated meters) - Land base information including streets
72	**Outage and event Visualization**: The network view must have unique indications for the following: - Outages depending on reporting method (call, IVR, AMI, field crew), - Protection device which opened for an event.
Crew Management	
90	**Crew Assignment:** The system must have the ability to manually assign one or more crews to an outage. It must allow crews to be assigned to multiple outages and allow the assignments to be prioritized.
91	**Unassign Crews:** The system must have the ability to "unassign" a crew or crews from an outage.
92	**ERT Assignment**: The system must allow the users to assign and modify ERT for an event.
Remote (Line Crew) User Interface	
101	**Event Service Tool:** The system must provide a tool to allow line crews to view and update information about outage events from a laptop or tablet computer in the field.
102	**Web Based**: The event service tool for line crews must be web-based and not require the installation of a client software tool. Please indicate what platforms the tool can run on (Windows, iOS, etc.).
103	**Disconnected Crew Network Display:** The tool must allow crew members to visualize a geographic network view of the system. It must display the network view even if a communications does not exist to the OMS server.
Executive Storm Management Dashboard	
113	**Dashboard:** The system must provide a summary view of outage related information to allow executives to manage major storm events.
114	**Web Based**: The dashboard must be web-based and not run from a client software tool installed on the users computer.
115	**Map:** The dashboard must provide a geographic network view indicating the service territory, areas with outages, crew locations, and status of energized / de-energized circuits.
Integrations & Administration	
122	**IVR Interface**: The system must have the ability to provide an outage prediction process that utilizes, as inputs, the current state of the distribution network and event information in the form of an interface from an IVR system that associates a database look-up of the phone number to a physical address and meter location. Please provide information on the interfaces supported.

123	**CIS Interface:** The system must have the ability to provide an interface to the CIS such that; as updates are made to the CIS with new member premise locations being added or existing premise locations being disconnected, it is reflected in the OMS within minutes. Please provide information on the interfaces supported.
Reporting	
132	**Standard Reports**: The system must have the ability to generate standard IEEE Reliability Index Reports for user supplied time frames. Reports must include the following:
133	System Average Interruption Frequency Index (SAIFI)
134	System Average Interruption Duration Index (SAIDI)

1.2.2 Responsibility Matrix

One of the most critical items in evaluating bids from vendors and in signing contracts that lead to successful system installation and deployment, is agreeing on the responsibilities of the supplier and the purchaser. PSE will work to ensure that important responsibilities are clearly defined.

Below is small excerpt from a responsibility matrix which is similar in format to what will be provided for RMU.

Table 2: Sample Responsibility Matrix

#	Description	Vendor Responsibility	Utility Responsibility
1	**System Development**		
1.1	Provide list of devices and fields required in GIS for development of OMS.	x	
1.2	Update GIS model as needed including updates to field devices needed for OMS model.		x
2	**Integrations**		
2.1	GIS: Integrate with the utility's GIS system.	x	
2.2	IVR: Integrate with the utility's IVR system.	x	
3	**Installation & System Acceptance Testing**		
3.1	Deliver server and workstation hardware to the utility.	x	
3.2	Install server and workstation hardware.		x
3.3	Provide System Acceptance Test plan which meets RFP requirements	x	
4	**Training**		
4.1	Provide administrator training for the OMS administrators.	x	
4.2	Provide on-site operator training.	x	

1.2.3 Pricing Normalization

In order to normalize pricing from many vendors, PSE's RFPs require bidders to insert their prices according to a standard format.

Below is a sample excerpt from a standard pricing sheet included in the RFP.

Table 3: Representative Normalized Pricing Template

#	Item Description	Supplier Description	Qty.	Unit	Total
A. Master					
1. Software Costs					
	Software License				
	…				
				Total Software Costs	
2. Hardware Costs					
	Primary Control Center Hardware				
	Backup Control Center Hardware				
	Network Hardware				
	…				
				Total Hardware Costs	
3. Engineering Services					
	System Engineering				
	Import of Customer GIS data				
	Factory Acceptance Test				
	…				
				Total Engineering Services Costs	
4. Onsite Services					
	Hardware Installation				
	Integration with AMI, CIS, …				
	System Acceptance Testing				
	…				
				Total Onsite Costs	
				Total Base System Costs	

#	Item Description	Supplier Description	Qty.	Unit	Total
Post Installation Service Contracts					
	Annual Support and Software Upgrade				
	Vendor Patch Maintenance				
	Vendor Engineering Services				
	…				
				Total Post Installation Service Costs	

1.2.4 Integration Requirements

Integrations comprise the biggest component of an OMS installation. Understanding the capabilities and expectations for the utility are critical to having a successful installation. The table below is an example of the integration requirements PSE includes in our RFP.

Table 4: Representative Integration Requirements

#	Requirement
IVR Interface	
	IVR Interface: The system must provide an interface with the utility's Interactive Voice Response (IVR) system which provides the functionality described in this section.
	IVR Restoration Notification List: The interface must have the ability to send a list of phone numbers to the IVR with a message indicating that power has been restored for those customers. The list must be limited to customers involved in the outage for which power has been restored and who indicated that they want to receive a voice message indicating restoration.
	…
SMS Interface	
	SMS Interface: The system must provide an interface with cellular carriers in keeping with the utility's SMS messaging agreements which provides the functionality described in this section.
	SMS Restoration Notification: The interface must have the ability to send a message indicating that power has been restored to a list of phone numbers. The list must be limited to customers involved in the outage for which power has been restored and who indicated that they want to receive an SMS message indicating restoration.
	…
CIS Interface	
	Periodic CIS Update: The interface must support periodic (i.e. daily or weekly) updates of customer information from CIS.
	Individual Disconnect for Non-Payment Query: Indicate whether the interface provides the ability to query the CIS to determine whether an individual account has been disconnected for non-payment.
	Periodic Disconnect for Non-Payment Query: Indicate whether the interface provides the ability to query the CIS at an administrator define periodic rate (i.e. 15 minutes) to determine whether any accounts have been disconnected for non-payment without requiring a refresh of the full CIS data.
	…
Remote Call Center Interface	
	Call Center Inbound Outage Call: The interface must have the ability to accept a reported outage from an Call Center. The interface must support receiving the following from the call center, - Account Number: Account Number as defined in CIS - Service Location: Location of the outage for that account - Notifications: Whether the caller wants to receive restoration or ERT updates for this outage.
	Call Center Existing Outage Indication: The interface must have the ability to respond to a query from the call center indicating whether a service location is part of an existing outage. (This functionality enables the call center to indicate that the caller is part of an existing outage.)
	…
AMI Interface	

#	Requirement
	AMI Outage Indication: The interface must have the ability to receive unsolicited messages indicating individual meters have lost power.
	AMI Meter Ping: The interface must have the ability to ping an AMI meter to receive indication whether or not it has power. Indicate whether it supports sending multiple ping messages to the AMI system and asynchronously receiving responses indicating power status from individual meters.
	…
GIS Interface	
	Incremental Updates: The interface must be able to limit the network model updates which it imports to feeders which have been updated. Indicate whether the interface can recognize features with an updated date within a certain range.
	Temporary OMS Settings: The interface must maintain temporary device settings when performing a GIS update. It must maintain as-switched states independent of normal switched state. It must maintain cuts and jumpers.
	…

1.3 RFP Generation & Issuance

Once the system design is complete, PSE will create the OMS RFP document using our RFP template sections as described above. PSE will then submit the final document to vendors. PSE will manage this vendor interaction for RMU.

1.3.1 Terms and Conditions

PSE will supplement RMU's standard terms and conditions with additions that we have historically found beneficial. RMU will be required to have these reviewed by its attorney.

We find that including terms and conditions in the RFP positions the purchaser more strongly rather than the utility having to make exceptions to the vendor's conditions.

PSE's additions will include a proposed milestone payment schedule based on identifiable completion of project phases. The table below is an example of a milestone payment schedule used for an OMS contract.

Mile-stone #	Milestone Description (key reference section)	Milestone Payment	Cumulative Payment
I	Contract Execution	X %	X %
II	Complete System hardware engineering. Order server and network equipment.	X %	X %
III	Complete FAT, cleanup, and ship system to RMU.	X %	X %
IV	Completion of installation of OMS hardware on site.	X %	X %
V	Complete integration with remote systems.	X %	X %
VI	Complete System Acceptance Testing	X %	X %

1.3.2 Training

PSE will ensure that the RFP clearly states what training is required by the vendor. Typically, vendors divide the training into onsite training and training classes held at their facility. The onsite training is typically focused on operators and is done during the installation phase.

Vendor facility training classes are typically appropriate for administrators of the system including engineers and IT personnel who will update and maintain the system.

1.4 RFP Evaluation, Vendor Selection, and Contracting

During this process, PSE will receive RFP responses and lead the evaluation of responses with RMU.

1.4.1 Evaluation

There is no single correct answer regarding which vendor to choose. Rather, PSE has found that the final decision comes from a combination of various factors.

PSE will assist RMU by ranking each vendors performance in critical categories and summarizing the reasoning behind those rankings. From this, RMU will be able to see which vendors should be short listed for further consideration.

A sample of PSE's evaluation summary table is shown below.

	Category	dataVoice	GE	KUBRA	Milsoft	mPower	OSI	Sensus	Survalent
Bronze	Customer Web Outage Map	Full Outage Map with App Optional	No details provided	Multi-tenant Web map based on a common outage ID and locations		Full Outage Map -	Yes	Not a customer facing map	Yes
	Personnel Notification	Yes	No details provided	Notifi system for SMS, voice, e-mail and other notifications			Yes	Customers & personnel can receive alerts for alarms.	Yes
	CSR Call Handling	Harris NorthStar Partner, strong tool with map, outage status, call history, DNP status	No details provided		**Hosted IVR Solution**	Minimal call taking screen.	Yes		Yes
	Existing Experience (with level)	Many Years	New to small solutions	3-4 Years - Very Large Utilities	Many Years	6 years of Integrator / OMS	3-4 years OMS	--	3-4 years OMS
	Price Range	$$			$	$	Assumes 25 utilities		$$$$
Silver	GIS / Outage Prediction	Strong prediction rules.	GE OMS (Alstom / PowerOn) have very strong tools.		Strong prediction rules.	Not operable map. Can't change a switch from open to closed - backfeeding.	Strong prediction rules.		Strong prediction rules.
	Dispatch Tools	Strong dispatch tools.	GE OMS (Alstom / PowerOn) have very strong tools.		Strong dispatch tools.	Single function screen for managing crews.	Strong dispatch tools.		Strong dispatch tools.
	Existing Experience (with level)	Yes	Strong with large utilities						
	Price Range	$$$$			$$$	$$$	Assumes 25 utilities		$$$$
Gold	Mobile Crew Tools	Strong crew tablet Apps	Indicated - but no details provided		Strong Crew tablet Apps	**Crew tool is a Windows program.**			Crew tools is a windows program
	IVR & Text Notifications	Also offer IVR	Indicated - but no details provided		Also offer IVR		No standard notification interface		Supported
	Existing Experience (with level)	Yes	Strong with large utilities						
	Price Range	$$$$			$$$$		Assumes 25 utilities		$$$$
	Overall Comments	Based on a Customer Outage (IVR/OMS) foundation.	Large SCADA vendor reaching down into OMS	Large customer experience solution provider offering alternative	Based on EA / OMS foundation.	Based on a GIS visualization tool. Does not support switch changes, ...	Traditional SCADA vendor expanding into OMS	Based on Sensus AMI Regional Network Interface (RNI) / Sensus Analytics	Traditional SCADA vendor expanding into OMS

1.4.2 Short-Listed Vendor Meetings

To save cost, PSE recommends excluding short-listed vendor demonstrations. We believe that we can work with RMU to evaluate the vendor offerings using the proposals alone. This allows RMU to avoid the cost of several days of vendor meetings.

1.4.3 Vendor Selection and Contracting

Following the evaluations, PSE will support RMU in final selection and contract negotiations.

Note that PSE will not be primarily responsible for contract signature. PSE will make technical recommendations on vendor contract terms; however, ultimate contract negotiation is between RMU and the vendor.

2 Further Considerations

Beyond the scope that has been proposed here, there are other services that may be beneficial to RMU in the future. These services are discussed here.

2.1 GIS Improvement

PSE's proposal evaluates RMU's GIS state today and identifies areas that need to be improved. We have not included services to resolve the issues or repeat the evaluation as improvements are made. We are happy to discuss this more if it makes sense after the initial evaluation.

2.2 Short-Listed Vendor Meetings

As identified in the proposal, PSE has not included short-listed vendor meetings. This is typically an important part of an RFP and vendor selection process. However, to reduce costs, we have proposed not including this services.

Typically the value of this is to allow personnel across the utility to see the options and build consensus. This is especially true since OMS touches so many parts of the utility including operations and customer service. If RMU believes that its important, we are happy to add this back in.

2.3 System Implementation

Following contracting with the selected vendor, PSE could also support RMU in the implementation phase. Below are tasks that PSE can provide during implementation.

PSE has not proposed any fees for services to support implementation. Without specifics yet of the capabilities of the vendor it is difficult to provide an allocation of how those services would be used.

Should RMU desire, they may wish to contract further for PSE's assistance for some of the items below

2.3.1 Integration Support

PSE can assist RMU in designing the integrations to various systems such as CIS, IVR and SCADA. This can involve,

- Configuration of MultiSpeak services needed to support desired functionality.
- Design of custom adapters for web services, flat files and database interfacing.
- Development of MultiSpeak adapter interface to non-MultiSpeak services.

In addition, we can support RMU in working with your CIS or other vendors on any integrations that are necessary on their side.

2.3.2 System Acceptance Testing

PSE can work with RMU and the vendor during System Acceptance Test (SAT). We can assist in troubleshooting as necessary and represent RMU in verifying that the vendor provides the functionality required in the contract.

At this point in the installation, most of the major troubleshooting and integration issues have been resolved. PSE can monitor the SAT performed by the vendor. This would include verification of major system operations.

3 Project Cost

The table below provides estimated cost for each of the components described above. This estimate is based on PSE's current understanding of RMU's needs and the anticipated level of effort required.

Category	Cost
GIS Evaluation	$7,500
Draft Requirements, RFP Generation & Issuance	$10,000
Evaluation & Contracting	$5,000
Future Considerations	Not Included
Totals	**$22,500**

Travel expenses (food, car rental, etc.) are not anticipated and therefore not included in the above costs. Any actual travel costs will be passed through to RMU with no additional markup.

PSE will remain flexible to adjust the scope of services as required by RMU Should the evolution of this project necessitate work outside this scope or for additional cost, no work would be performed without RMU's authorization.

Agreement for Professional Services

Consultant Power System Engineering, Inc.

Address 1532 W. Broadway

Madison, WI 53713

Date _____

Client Rochelle Municipal Utilities

Address _____

_____

Project No. _____

Project Name and Location GIS Evaluation & OMS Procurement

The following attachments, which describe the services, costs, and related items, are made part of this Agreement: Attached Scope of Work

Special Conditions None

The Terms and Conditions attached, when initialed by both parties, are incorporated and made a part of this Agreement

Offered by:

1/19/18

Signature and Date

Jim Weikert, Director of Utility Automation

Print name and title

Power System Engineering, Inc.

Name of Consulting Firm

Accepted by:

_____

Signature and Date

_____

Print name and title

RMU

Name of Client

Terms and Conditions

Performance of Services: On project basis, Consultant shall perform the services outlined in the Scope of Services Addendum (all projects estimated to require over $7,500 in services) or agreed otherwise with Client. The following items are understood:

- Client may accept or reject any recommendations of Consultant.
- Client Management is ultimately responsible for all decisions relating to any project engagement.
- Client will have a management level individual that is responsible for:
  - Overseeing any consulting services provided under this Agreement.
  - Establishing and monitoring the performance of the consulting services to ensure that those services meet Client objectives;
  - Making any decisions, approvals, and directions that involve management functions related to the consulting services and accept full responsibility for those decisions, approvals, and directions;
  - Evaluating the adequacy of the services performed and any findings that result.

Standard of Care: Consultant's services shall be provided consistent with and limited to the standard of care applicable to such services, which is that Consultant shall provide its services consistent with the professional skill and care ordinarily provided by consultants practicing in the same or similar locality under the same or similar circumstances.

Access to Site: Unless otherwise stated, Consultant will have access to the site for activities necessary for the performance of the services. Consultant will take reasonable precautions to minimize damage due to these activities, but has not included in the fee the cost of restoration of any resulting in damage and will not be responsible for such costs.

Billing/Payment: Client agrees to pay Consultant for all services performed and all costs incurred. Invoices for Consultant's services shall be submitted, at Consultant's option, either upon completion of such services or on a monthly basis. Invoices shall be due and payable upon receipt. If any invoice is not paid within 15 days, Consultant may, without waiving any claim or right against Client, and without liability whatsoever to Client, suspend or terminate the performance of services. The retainer shall be credited on the final invoice. Accounts unpaid 30 days after the invoice date may be subject to a monthly service charge of 1.5% (or the maximum legal rate) on the unpaid balance. In the event any portion of an account remains unpaid 60 days after the billing, Consultant may institute collection action and Client shall pay all costs of collection, including reasonable attorney's fees.

Indemnification: Client shall, to the fullest extent permitted by law, indemnify and hold harmless Consultant, his or her officers, directors, employees, agents and subconsultants from and against all damage, liability and cost, including reasonable attorney's fees and defense costs, arising out of or in any way connected with the performance of the services under this Agreement, excepting only those damages, liabilities or cost attributable to the sole negligence or willful misconduct of Consultant.

Information for the Sole Use and Benefit of Client: All services, opinions, or conclusions of Consultant, whether written or oral, and any plans, specifications or other documents and services provided by Consultant are for the sole use and benefit of Client for the subject project or site and are not to be provided to any other person or entity or used for any other purposes without the prior written consent of Consultant. Nothing contained in this Agreement shall create a contractual relationship with or a cause of action in favor of any third party against either Consultant or Client. Accordingly, any assignment of this agreement or the rights and obligations hereunder shall require the written consent of both parties.

Certifications, Guarantees and Warranties: Consultant's services as well as any work product or deliverables are not a warranty or guarantee, and Consultant shall have no such obligation. Consultant shall not be required to execute any document that would result in Consultant certifying, guaranteeing or warranting the existence of any conditions. Furthermore, consultant shall not be liable for any computer security or cyber security breach, even if consultant has been engaged by client to perform cyber security services, since client recognizes that it is impossible to obtain complete protection against computer or cyber security breaches caused by hackers or other causes.

Consequential Damages: Notwithstanding any other provision of this Agreement, and to the fullest extent permitted by law, neither Client nor Consultant, their respective officers, directors, partners, employees, contractors or subconsultants shall be liable to the other or shall make any claim for any incidental, indirect or consequential damages arising out of or connected in any way to the projects worked on under this Agreement or to this Agreement. This mutual waiver of consequential damages shall include, but is not limited to, loss of use, loss of business, loss of income, loss of reputation or any other consequential damages that either party may have incurred from any cause of action including negligence, strict liability, breach of contract and breach of strict or implied warranty. Both Client and Consultant shall require similar waivers of consequential damages protecting all the entities or persons named herein in all contracts and subcontracts with others involved in any project.

Risk Allocation: In recognition of the relative risk, rewards and benefits of any project to both Client and Consultant, the risks have been allocated such that Client agrees that, to the fullest extent permitted by law, Consultant's total liability to Client for any and all injuries, damages, claims, losses, expenses, or claim expenses arising out of this Agreement from any cause or causes, shall not exceed $250,000 for a project. Such causes include, but are not limited to, Consultant's negligence, errors, omissions, strict liability, breach of contract or breach of warranty.

Ownership of Documents: All documents produced by Consultant under this Agreement are instruments of Consultant's professional service and shall remain the property of Consultant and may not be used by Client for any other purpose without the prior written consent of Consultant.

Confidentiality: The Consultant agrees to keep confidential and not to disclose to any person or entity, other than the Consultant's employees, subconsultants and the general contractor and subcontractors, if appropriate, any data or information not previously known to and generated by the Consultant or furnished to the Consultant and marked CONFIDENTIAL by the Client. These provisions shall not apply to information in whatever form that is in the public domain, nor shall it restrict the Consultant from giving notices required by law or complying with an order to provide information or data when such order is issued by a court, administrative agency or other legitimate authority, or if disclosure is reasonably necessary for the Consultant to defend itself from any legal action or claim.

Dispute Resolution: Any claims or disputes between Client and Consultant arising out of the services provided by Consultant or out of this Agreement shall be submitted to non-binding mediation as a condition precedent to any other claim. Client and Consultant agree to include a similar mediation agreement with all contractors, subconsultants, subcontractors, suppliers and fabricators, providing for mediation as the primary method for dispute resolution among all parties.

Termination of Services: This Agreement may be terminated at any time by either party. In the event of termination, Client shall pay Consultant for all services rendered to the date of termination, and all reimbursable expenses incurred prior to termination and reasonable termination expenses incurred as the result of termination.

Change Order: A Change Order is authorized in a written order to Consultant by an Authorized Client's after the execution of the Agreement, authorizing a change in the Work, the time of performance, or an adjustment in the Consultant's prices. Any Consultant's pricing changes must be approved by Client. Change Orders will be documented via emails. Verbal Change Orders will be documented in written form prior to the initiation of the work connected with the change order.

Site Requirements: Consultant requests clearance to gain access to appropriate Client facilities for the purpose of this project, a secure Internet connection, and access to a printer and/or copier when onsite at Client office(s), standard work days/hours with breaks for meals as appropriate, a safe and easily accessible meeting area for onsite meetings, and any safety guidelines/rulebook or other requirements prior to the start of any onsite work.

Excusable Delay: Fires, floods, strikes, lockouts, epidemics, accidents, shortages or other causes beyond the reasonable control of Consultant which prevents Consultant from delivering or Client from receiving any of the goods and services covered by this Agreement shall suspend deliveries until the cause is removed, provided Consultant informs Client of the cause of the excusable delay and the estimated time of delay, in writing, and subject to Client's right of termination as stated herein. If Client does not elect to terminate, the goods or services will be promptly delivered when the cause is removed.

Compliance with Laws: Consultant shall comply with all federal, state, and local laws (including environmental laws), ordinances, and regulations relating in any way to Contractor's performance under this Agreement.

It is agreed the above terms and conditions are incorporated into and made a part of the Agreement.

Initialed ***JAW*** Consultant_____ Client