PROFESSIONAL SERVICES AGREEMENT

Project: Outage Management (OMS) & Interactive Voice Response (IVR) Procurement

THIS AGREEMENT is made and entered into this 24th day of January , 2019 by and between the City of Roseville, a municipal corporation ("CITY"), and Power System Engineering, Inc. a Wisconsin corporation ("CONSULTANT"); and

W I T N E S S E T H:

WHEREAS, CITY desires professional services consisting of Outage Management (OMS) and Interactive Voice Response (IVR) system procurement; and

· WHEREAS, CONSULTANT has prepared a proposal dated January 4, 2019, which describes the scope of work to be performed by CONSULTANT, the budget for the work, and the schedule for performance of the work; and

WHEREAS, CONSULTANT is qualified and experienced to provide such professional services.

NOW, THEREFORE, the parties agree as follows:

1.   Services. CONSULTANT shall perform, at the direction of CITY, the scope of services as described in EXHIBIT "A," attached hereto and incorporated herein by this reference.

2.   Compensation. For its services provided hereunder, CONSULTANT shall be compensated on a time and expense basis in accordance with the budget estimate as described in

EXHIBIT "B," attached hereto and incorporated herein by this reference. Total compensation shall not exceed eighty-five thousand dollars ($85,000.00).

CONSULTANT shall submit one monthly invoice for its services. Such invoices shall be delineated by task, the person performing the services, and the hourly rate, which shall be stated in time increments of not greater than one tenth (1/10) hours. CITY shall pay invoices within thirty (30) days after receipt, if the services specified in the invoice have been satisfactorily completed.

3.   Indemnification. To the fullest extent allowed by law, CONSULTANT shall defend, indemnify, and save and hold harmless CITY, its officers, agents, employees and volunteers from any claims, suits or actions of every name, kind and description brought forth, or on account of, injuries to or death of any person (including but not limited to workers and the public), or damage to property, resulting from or arising out of CONSULTANT's willful misconduct or negligent act or omission while engaged in the performance of obligations or exercise of rights created by this Agreement, except those matters arising from CITY's sole negligence or willful misconduct. The parties intend that this provision shall be broadly construed.

CONSULTANT's responsibility for such defense and indemnity obligations shall survive the termination or completion of this Agreement for the full period of time allowed by law. The defense and indemnity obligations of this Agreement are undertaken in addition to, and shall not in any way be limited by, the insurance obligations contained in this Agreement.

4.   Insurance. CONSULTANT agrees to continuously maintain, in full force and effect, the following minimum policies of insurance during the term of this Agreement.

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COVERAGE	LIMITS OF LIABILITY
Workers' Compensation	Statutory
Commercial General Liability	$1,000,000 each occurrence $2,000,000 aggregate Personal Injury: $1,000,000 each occurrence $2,000,000 aggregate
Automobile Liability	$1,000,000 combined single limit
Professional Liability (errors and omissions)	$1,000,000 per claim $2,000,000 aggregate

a.   Form. CONSULTANT shall submit a certificate evidencing such coverage for the period covered by this Agreement in a form satisfactory to Risk Management and the City Attorney, prior to undertaking any work hereunder. Any insurance written on a claims made basis is subject to the approval of Risk Management and the City Attorney.

b.   Additional Insureds. CONSULTANT shall also provide a separate endorsement form or section of the policy showing CITY, its officers, agents, employees and volunteers as additional insureds for each type of coverage, except for Workers' Compensation and Professional Liability. Such insurance shall specifically cover the contractual liability of CONSULTANT. The additional insured coverage under the CONSULTANT's policy shall be primary and noncontributory, as evidenced by a separate endorsement or section of the policy, and shall not seek contribution from CITY's insurance or self-insurance. In addition, the additional insured coverage shall be at least as broad as the Insurance Services Office ("ISO") CG 20 01 Endorsement. Any available insurance proceeds in excess of the specified minimum insurance coverage requirements and limits shall be available to the additional insureds. Furthermore, the requirements for coverage and limits shall be: (1) the minimum coverage and

limits specified in this Agreement; or (2) the full coverage and maximum limits of any insurance proceeds available to the named insureds, whichever is greater.

      c.   Cancellation/Modification. CONSULTANT shall provide ten (10) days written notice to CITY prior to cancellation or modification of any insurance required by this Agreement.

      d.   Umbrella/Excess Insurance. The limits of insurance required in this Agreement may be satisfied by a combination of primary and excess insurance. Any excess insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and noncontributory basis for the benefit of CITY (if agreed to in a written contract) before CITY's own insurance shall be called upon to protect it as a named insured.

      e.   Subcontractors. CONSULTANT agrees to include in its contracts with all subcontractors the same requirements and provisions of this Agreement, including the indemnity and insurance requirements, to the extent they apply to the scope of the subcontractor's work. Furthermore, CONSULTANT shall require its subcontractors to agree to be bound to CONSULTANT and CITY in the same manner and to the same extent as CONSULTANT is bound to CITY under this Agreement. Additionally, CONSULTANT shall obligate its subcontractors to comply with these same provisions with respect to any tertiary subcontractor, regardless of tier. A copy of CITY's indemnity and insurance provisions will be furnished to the subcontractor or tertiary subcontractor upon request.

      f.   Self-Insured Retentions. All self-insured retentions ("SIR") must be disclosed to Risk Management for approval and shall not reduce the limits of liability. Policies containing any SIR provision shall provide or be endorsed to provide that the SIR may be satisfied by either the named insured or CITY. CITY reserves the right to obtain a full

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certified copy of any insurance policy and endorsements. The failure to exercise this right shall not constitute a waiver of such right.

g.   Waiver of Subrogation. CONSULTANT hereby agrees to waive subrogation which any insurer of CONSULTANT may acquire from CONSULTANT by virtue of the payment of any loss under a Workers Compensation, Commercial General Liability or Automobile Liability policy. All Workers Compensation, Commercial General Liability and Automobile Liability policies shall be endorsed with a waiver of subrogation in favor of CITY, its officers, agents, employees and volunteers for all worked performed by CONSULTANT, its employees, agents and subcontractors.

h.   Liability/Remedies. Insurance coverage in the minimum amounts set forth herein shall not be construed to relieve CONSULTANT of liability in excess of such coverage, nor shall it preclude CITY from taking such other actions as are available to it under any other provisions of this Agreement or law.

5.   Records. CONSULTANT and its subcontractors shall maintain all files and records relating to the services performed hereunder during the term of this Agreement and for a period of not less than one (1) year after the date of termination or expiration. Provided, however, that in the event of litigation or settlement of claims arising from the performance of this Agreement, CONSULTANT and its subcontractors shall maintain all files and records until such litigation, appeals or claims are resolved. Duly authorized representatives of CITY shall have right of access during normal business hours and after reasonable notice to CONSULTANT's and subcontractors' files and records relating to the services performed hereunder, and may review and copy the files and records at appropriate stages during performance of the services and during the one (1) year period following termination or

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expiration of this Agreement. CONSULTANT shall include this provisions in its contracts with all subcontractors.

6. Time is of the Essence. Time is of the essence of this Agreement.

7. Compliance with Laws. CONSULTANT shall comply with all federal, state and local laws, ordinances and policies as may be applicable to the performance of services under this Agreement.

8. Ability to Perform. CONSULTANT agrees and represents that it has the time, ability and professional expertise to perform the services required under this Agreement.

9. Governing Agreement. In the event of any conflict between this Agreement and its EXHIBITS, the provisions of this Agreement shall govern. In the event of any conflict between any of the EXHIBITS, the provisions of the first in order of attachment shall govern.

10. Assignment. CONSULTANT is employed to perform unique personal services. CONSULTANT shall not assign this Agreement without the prior written consent of CITY. CONSULTANT shall not employ or otherwise incur any obligation to pay other specialists or experts for services in connection with this Agreement, without prior written consent of CITY.

11. Independent Contractor. CONSULTANT shall act as an independent contractor, and covenants and agrees that it will conduct itself consistent with such status, that it will neither hold itself out as, nor claim to be, an officer or employee of CITY by reason of this Agreement.

12. Representations and Warranties. CONSULTANT warrants that it has not employed or retained any company or person, other than a bona fide employee working for CONSULTANT, to solicit or secure this Agreement, and that it has not paid or agreed to pay any company or person, other than a bona fide employee, any fee, commission, percentage, brokerage fee, gift or any other consideration, contingent upon or resulting from the award or

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making of this Agreement. For breach or violation of this warranty, CITY shall have the right to terminate as void this Agreement, without liability, or, in its discretion, to deduct from the Agreement price or consideration, or otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gift or contingent fee.

13.   Successors in Interest. This Agreement shall be binding upon the heirs, successors, executors, administrators and assigns of the respective parties hereto.

14.   Copyright, Ownership and Use of Materials. All tangible material ("Material") created or delivered pursuant to this Agreement is considered a work made for hire under the Copyright Act. To the extent such Material does not qualify as a work made for hire, CONSULTANT hereby assigns to CITY all right, title, and interest, including but not limited to all copyrights, in all Material created by CONSULTANT in its performance under this Agreement. Material constitutes the scope of work outlined in Exhibit A and attached hereto, and all written and other tangible expressions, including but not limited to, drawings (including computer aided drawings), papers, documents, reports, surveys, renderings, exhibits, sketches, maps, models, prints, paintings or photographs, in any and all media or formats in which such materials have been created or are maintained. All Material furnished by CONSULTANT is, and shall remain, the property of CITY.

CONSULTANT shall execute any documents necessary to effectuate such assignment. In the event that CONSULTANT uses, employs, designates, or retains any person or entity who is not an employee of CONSULTANT, to perform any work required of it pursuant to this Agreement, CONSULTANT shall require said person or entity to execute an agreement containing the preceding paragraph.

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15. Termination of Agreement. The City may terminate this Agreement without cause by giving CONSULTANT ten (10) days advance written notice from the City Manager. CONSULTANT may terminate this Agreement without cause by giving CITY thirty (30) days advance written notice. In the event of termination through no fault of CONSULTANT, CITY shall compensate CONSULTANT for services performed as of the date of termination, upon the release to CITY of all Material hereunder, in any and all media or formats in which such materials have been created or are maintained. CITY retains the right to receive and use any Material, notwithstanding any termination or any dispute regarding the amount to be paid.

16. Attorney's Fees; Venue; Governing Law. If either party commences any legal action against the other party arising out of this Agreement or the performance hereof, the prevailing party in such action shall be entitled to recover its reasonable litigation expenses, including but not limited to, court costs, expert witness fees, discovery expenses, and attorney's fees. Any action arising out of this Agreement shall be brought in Placer County, California, regardless of where else venue may lie. This Agreement shall be governed by and construed in accordance with the laws of the State of California.

17. Modification. This Agreement and each provision contained herein may be waived, amended, supplemented or eliminated only by mutual written agreement of the parties.

18. Severability. If any of the provisions contained in this Agreement are for any reason held invalid or unenforceable, such holding shall not affect the remaining provisions or the validity and enforceability of the Agreement as a whole.

19. Notices. Any notices to parties required by this Agreement shall be delivered personally or mailed, U.S. first class postage prepaid, addressed as follows:

CITY OF ROSEVILLE	CONSULTANT
Michelle Bertolino	Ken Cooper
Electric Utility Director	Utility Automation Consultant
2090 Hilltop Circle	1532 W. Broadway, Suite 103
Roseville, CA 95747	Madison, WI 53713

Either party may amend its address for notice by giving notice to the other party in writing.

20. Integrated Agreement. This is an integrated agreement and contains all of the

terms, considerations, understanding and promises of the parties. It shall be read as a whole.

IN WITNESS WHEREOF, the City of Roseville, a municipal corporation, has authorized

the execution of this Agreement in duplicate by its City Manager and attested to by its City Clerk

under the authority of Resolution No. _____, adopted by the Council of the City of Roseville on

the ___ day of _____, 20__, and CONSULTANT has caused this Agreement to be

executed.

CITY OF ROSEVILLE, a
municipal corporation

POWER SYSTEM ENGINEERING, INC.,
a Wisconsin corporation

BY:_____
    DOMINICK CASEY
    City Manager

ATTEST:

BY:_____
its:_____ Vice Presidet Utility Automation

and

BY:_____
its:_____ Board Secrety

BY:_____
    SONIA OROZCO
    City Clerk

APPROVED AS TO FORM:

BY: _____

      ROBERT R. SCHMITT
      City Attorney

APPROVED AS TO SUBSTANCE:

BY: _____

      MICHELLE BERTOLINO
      Electric Utility Director

EXHIBIT "A"

PSE Power System
Engineering, Inc.

Full-service consultants

OMS & IVR Procurement

Proposal Prepared for:

CITY OF
ROSEVILLE
CALIFORNIA

January 4, 2019

Contact: Ken Cooper

cooperk@powersystem.org

Direct: 859-201-1008

Mobile: 859-621-0744

Fax: 608-222-9378

400 Bellerive #150
Nicholasville, KY 40356

www.powersystem.org

January 4, 2019

Sage Armstrong [*via email:* SArmstrong@roseville.ca.us]
Roseville Electric Utility
311 Vernon Street
Roseville, CA 95678

Subject: *Proposal for OMS and IVR Procurement*

Dear Sage:

Thank you for the opportunity to provide a proposal for assisting Roseville Electric Utility (Roseville) with procuring an Outage Management and IVR system (OMS/IVR).

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

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

I look forward to speaking with you about this proposal. Feel free to give me a call (859-201-1008) or reach out to me via email at cooperk@powersystem.org. I look forward to speaking with you and walking through the services we've laid out here.

Sincerely,

Ken Cooper
Utility Automation Consultant

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FIGURES AND TABLES

1 OMS/IVR Procurement

PSE's approach is described below. We begin with a brief evaluation of the readiness of Roseville's GIS, followed by the OMS/IVR procurement steps.

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, as illustrated in the figure below.

Although Roseville has a very good GIS, PSE would like to better understand the details in order to measure GIS readiness for OMS. This evaluation will help to lessen the charges by the vendor during conversion and testing. Vendors will charge for model corrections.

Figure 1: PSE's GIS Evaluation Process
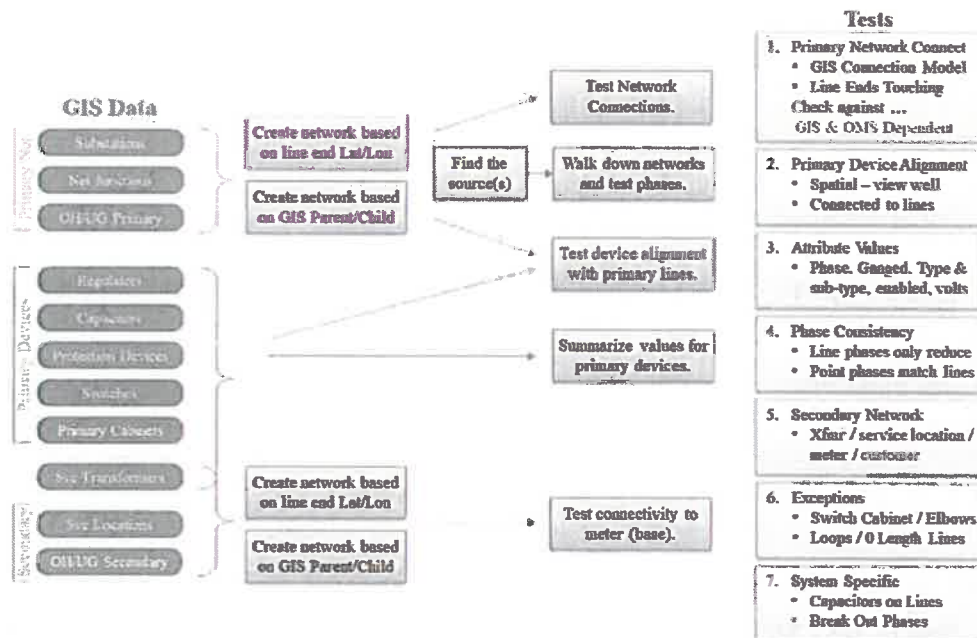
The diagram below provides an example output from this analysis. Our analysis will cover:

- 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.

Figure 2: GIS Evaluation (Sample Excerpt)

Network by Circuit Field   **Network by Connectivity to Substation**

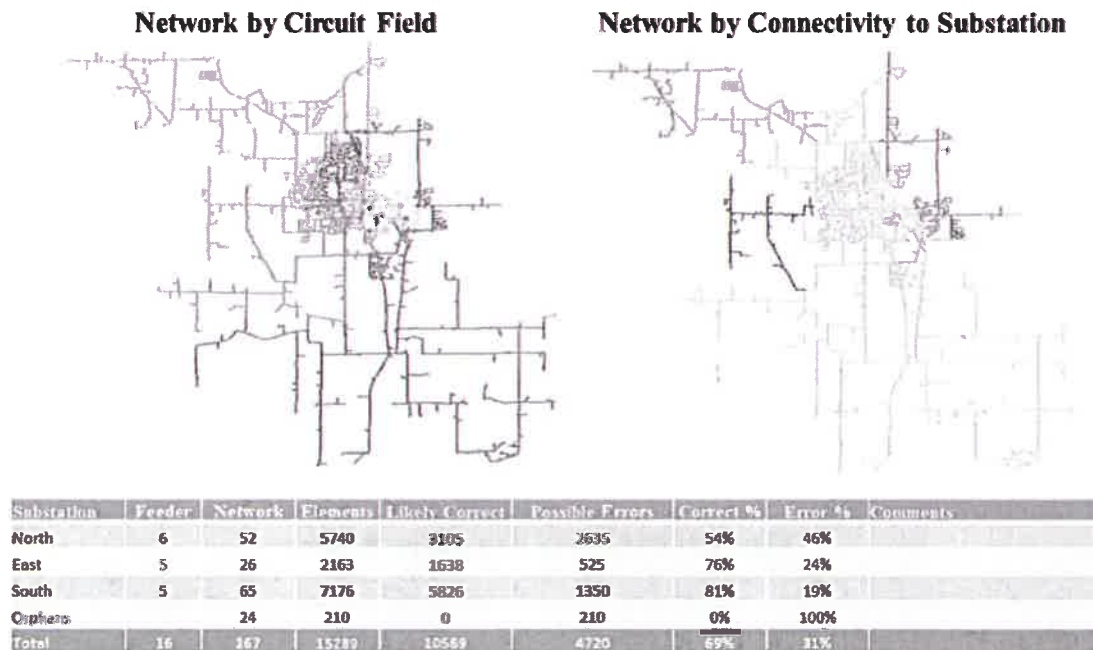| Substation	Feeder	Network	Elements	Likely Correct	Possible Errors	Correct %	Error %	Comments
North	6	52	5740	3105	2635	54%	46%	
East	5	26	2163	1638	525	76%	24%	
South	5	65	7176	5826	1350	81%	19%	
Orphans		24	210	0	210	0%	100%	
Total	16	167	15289	10569	4720	69%	31%	

1.2 OMS/IVR Requirements Development

1.2.1 Technical Requirements

As a first step in preparing the Request for Proposal (RFP), PSE will work with Roseville to develop requirements unique to your OMS/IVR needs.

During past visits onsite with Roseville and conference calls, PSE gathered information for the technology work plan (TWP). This information should cover most if not all of the data needed for this project. As we develop the requirements, and as we work through this project as a whole, PSE will make efforts to maximize the information we have already gathered from this project to ensure efficiencies.

The table below shows a brief sample of the kind of requirements that are often included in an RFP. Vendors are required to indicate compliance or non-compliance with each of the requirements. We will also gain understanding of whether the functionality is included in the base cost or can be provided as an option with additional cost. This helps minimize surprises later on.

Table 1: Technical Requirements (Sample Excerpt)

#	Requirement
General Outage Reporting	
1	**IVR Outage Report:** The system must allow an outage to be reported by a customer 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.

Customer Service Interface

3	**Outage Entry Tool**: The system must provide a call entry tool to allow customer service representatives (CSRs) to enter outage calls.
4	**Customer Call History**: The CSR Call Entry Tool must provide a list of previously reported outages (calls, IVR, AMI) for the customers 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 customer.
5	**Customer Outage Event History**: The CSR Call Entry Tool must provide a list of previous outage events for the customer 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 customer.

Call Back / Notification

6	**Notification Entry**: The system must allow a CSR to indicate whether or not a customer desire 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.
7	**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.
8	**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 customer has signed up for text notifications with the utility.

Customer Portal

9	**Customer Outage Map**: The system must provide a web-based outage map that geographically displays the service territory and highlights sections of known outages.
10	**Outage Summary**: The customer portal must be able to display the number of outages in areas throughout the territory.

Operations / Dispatch Event Management

11	**Event Management Tool**: The system must provide a tool for operations and dispatch personnel to manage outage events. (Assign crews, updating ETR, etc.)
12	**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.
13	**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		
14	**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.	
15	**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.	
16	**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)		
17	**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 - Customer service locations (and associated meters) - Land base information including streets	
18	**Outage and Event Visualization:** The network view must have unique indications for the following: - Outages depending on reporting method (CSR, IVR, AMI, field crew), - Protection device which opened for an event. - Crew assigned/Unassigned and GPS crew locations.	
Crew Management		
19	**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.	
20	**Unassign Crews:** The system must have the ability to "unassign" a crew or crews from an outage.	
21	**ERT Assignment:** The system must allow the users to assign and modify ERT for an event.	
Remote (Line Crew) User Interface		
22	**Event Service Tool:** The system must provide a tool to allow line crews to view and update information about outage events from a tablet or laptop computer in the field.	
23	**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, Android etc.).	
24	**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		
25	**Dashboard:** The system must provide a summary view of outage related information to allow executives to manage major storm events.	

#	Requirement
26	**Web Based:** The dashboard must be web-based and not run from a client software tool installed on the user's computer or remote device.
27	**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	
28	**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.
29	**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 customer 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	
30	**Standard Reports:** The system must have the ability to generate standard IEEE Reliability Index Reports for user supplied time frames and protection device. Reports must include the following:
31	System Average Interruption Frequency Index (SAIFI)
32	Customer Average Interruption Duration Index (CAIDI)
33	System Average Interruption Duration Index (SAIDI)

1.2.2 Integration Requirements

Integrations comprise the biggest component of an OMS/IVR installation. Understanding the capabilities and expectations for the utility are critical to having a successful installation.

We will work with Roseville to develop and confirm the integration requirements. A sample excerpt is shown below. Like the technical requirements, the integration requirements will also be tailored to Roseville's unique situation and needs.

Table 2: Integration Requirements (Sample Excerpt)

#	Requirement
IVR Interface	
1	**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.
2	**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.
3	...

	SMS Interface
4	**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.
5	**SMS Updates and Restoration Notification:** The interface must have the ability to send a message indicating that an update or power has been restored to a list of phone numbers. The list must be limited to customers involved in the outage for and who indicated that they want to receive an SMS message indicating restoration.
6	...
	CIS Interface
7	**Periodic CIS Update:** The interface must support periodic (i.e. daily or weekly) updates of customer information from CIS.
8	**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.
9	**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.
10	...
	Remote Call Center Interface
11	**Call Center Inbound Outage Call:** The interface must have the ability to accept a reported outage from a 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.
12	**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.)
13	...
	AMI Interface
14	**AMI Outage Indication:** The interface must have the ability to receive unsolicited messages indicating individual meters have lost power.
15	**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.
16	...
	GIS Interface
17	**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.

18	**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.		
19	...		
AVL Interface			
20	**AVL Interface**: The system must provide an interface with AVL vendors for tracking and viewing of vehicle locations.		
21	**AVL reports**: The interface must have the ability retrieve data from AVL system or store locally vehicle for tracking position and performance.		

1.3 RFP Development and Issuance

1.3.1 RFP Development

Once the requirements have been developed, PSE will create the OMS/IVR RFP document, which will include the technical and integration requirements discussed above, as well as the following key sections:

- Responsibility Matrix

- Normalized Pricing Sheet

- Terms and Conditions

- Training Requirements

1.3.1.1 Responsibility Matrix

Another critical component of successful system installation and deployment is agreeing upon the responsibilities of the supplier and the purchaser. PSE will clearly define important responsibilities upfront as part of the Request for Proposal. This helps ensure accurate pricing from vendors and a smooth contracting process with the selected supplier.

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

Table 3: Responsibility Matrix (Sample Excerpt)

#	Description	Responsibility	
		Vendor	**Utility**
1	**System Development**		
1.1	Provide list of data 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
1.3	Provide interface to GIS for development of the OMS connectivity and electrical model		x

#	Description	Responsibility	
		Vendor	Utility
1.4	Build OMS connectivity model.	x	
1.5	…	x	
2	**Integrations**		
2.1	GIS: Integrate with the utility's GIS system.	x	
2.2	CIS: Integrate with the utility's CIS system.	x	
2.3	…		
3	**Installation & System Acceptance Testing**		
3.1	Install server and workstation hardware.		x
3.2	Provide System Acceptance Test plan which meets RFP requirements	x	
3.3	…		
4	**Training**		
4.1	Provide administrator training for the OMS administrators.	x	
4.2	Provide onsite operator training.	x	

1.3.1.2 Normalized Pricing Sheet

In order to normalize pricing from many vendors, PSE's RFP requires 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 4: Normalized Pricing Template (Sample Excerpt)

#	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				
	…				
			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			

1.3.1.3 Terms and Conditions

PSE will supplement Roseville's standard terms and conditions with additions that we have historically found beneficial. Roseville 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.

Milestone	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 Roseville.	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 %

1.3.1.4 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.

1.3.2 RFP Issuance and Management of Bidding Period

Once the RFP is finalized, PSE will issue the document to vendors pre-approved by Roseville. We will handle communications with vendors during the bidding period and act as the primary point of contact for questions. PSE will respond to written questions in the form of formal addenda, which will be reviewed and approved by Roseville prior to distribution to all vendors on the bidders' list.

1.4 Evaluation, Vendor Selection, and Contracting

PSE will receive proposals and lead the evaluation with Roseville.

1.4.1 Evaluation

PSE will assist Roseville by ranking each vendor's performance in critical categories and summarizing the reasoning behind those rankings. We will facilitate a discussion of this evaluation via webinar.

From this, Roseville will be able to see which vendors should be shortlisted for further consideration.

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

Table 5: Evaluation Summary (Sample Excerpt)

	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 system ID and locations		Full Outage Map	Yes	Not a customer facing map	Yes
	Proactive Notification	Yes	No details provided	Notify 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			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	$$			$	$			$$$$
Silver	Good Outage Prediction	Strong prediction rules	GE OMS (Alstom / PowerOn) have very strong tools		Strong prediction rules	Not on-create map. Can't change on either from apart to closed locations mapping	Strong prediction rules.		Strong prediction rules
	Dispatch Tools	Strong dispatch tools.	GE OMS (Alstom / PowerOn) have very strong tools		Strong dispatch tools.	Single function screen for managing crews	Strong dispatch tools.		Strong dispatch tools
	Existing Experience (with level)	Yes	Strong with large utilities						
	Price Range	$$$$			$$$	$$$			$$$$
Gold	Mobile Crew Tools	Strong crew tablet Apps	Indicated - but no details provided		Strong Crew tablet Apps	Crew tool is a Windows program.			Crew tools is a windows program
	IVR & Text Notifications	Also offer IVR	Indicated - but no details provided		Also offer IVR				Supported
	Existing Experience (with level)	Yes	Strong with large utilities						
	Price Range	$$$			$$$				$$$$
	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 Shortlisted Vendor Demonstrations (Onsite)

PSE recommends that Roseville host shortlisted vendor demonstrations prior to making a final vendor decision. Each shortlisted vendor will demonstrate an overview of the proposed system during an onsite presentation to Roseville personnel. PSE will be available to facilitate the meeting

and ask questions based on our evaluation and understanding of the competitiveness of each proposed solution.

Vendor demonstrations will be based on an agenda created by PSE that focuses on Roseville's unique situation and needs. We plan to allow approximately four (4) hours for each vendor presentation, which includes time for internal follow up discussions. PSE will plan for two vendors per day for vendor meetings.

A sample excerpt from an onsite vendor demonstration is shown below.

Table 6: Vendor Demonstration Agenda (Sample Excerpt)

#	Topic	Time
1	**Company Overview and Introductions** • Deployment Team and Experience • Similar Utility Projects	15 minutes
2	**Scenario #1: Small Outage** Show the operation of your software for a small outage of ~10 customers. Please cover the following: • <u>Outage</u>: AMI sends outage notification from meters (50% of meters report the outage). OMS predicts faulted device based on this. o Initial 2-3 meters reporting are on a single transformer. o 2-3 minutes later more meters indicate the outage is beyond a single transformer, changing the prediction. • <u>Customer Facing Web Map</u>: … • <u>Crews</u>: Please demonstrate how: o Crews are notified of outages. o … • <u>Closure</u>: …	30 minutes
3	**Scenario #2: Large Outage** Show the operation of your software for two outages of ~500 customers each on different subs. Please cover the following: • <u>Outage</u>: AMI sends outage notification from meters (50% of meters report the outage). OMS predicts faulted device based on this. o Initial 200-300 meters reporting are on two fused single-phase taps. o 2-3 minutes later more meters indicate the outage is from a hydraulic recloser, changing the prediction. • <u>Customer Notification</u> … • <u>Customer Calls</u> … • <u>Operations</u> … • <u>Restoration</u> …	30 minutes

#	Topic	Time
4	**Additional OMS Capabilities** Demonstrate additional OMS functionality that could be enabled. • <u>Text In Outages</u>: How customers could text in an outage. • <u>Crew App</u>: Demonstrate additional functionality of the crew tool: ○ …	15 minutes
5	**Future Capabilities** Demonstrate additional functionality beyond OMS that could be enabled with your system in the future. • <u>IVR</u>: Demonstrate IVR functionality that your company can offer. ○ Automated call taking ○ Outbound messaging • <u>Advanced Operations</u>: Demonstrate functionality that you can offer: ○ …	30 minutes
6	**System Architecture** • …	30 minutes
7	**Integrations** • …	1 hour

1.4.3 Vendor Selection and Contracting

Following the onsite vendor demonstrations, PSE will support Roseville 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 Roseville and the vendor.

2 System Implementation

Following contracting with the selected vendor, PSE could also support Roseville 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 Roseville desire, they may wish to contract further for PSE's assistance for some of the items below.

2.1 Integration Support

PSE can assist Roseville in designing the integrations to various systems such as CIS, AMI, IVR, SCADA, and local tele-communications system. 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.

- Coordination with telephone system vendor.

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

2.2 System Acceptance Testing

PSE can work with Roseville and the vendor during System Acceptance Test (SAT). We can assist in troubleshooting as necessary and represent Roseville 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.

EXHIBIT "B"

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 Roseville's needs and the anticipated level of effort required.

Costs for OMS/IVR Procurement:

Category	Base Labor Cost	Additional T&M	Trips	Travel Cost
GIS Evaluation	$4,000	None	0	$0
OMS/IVR Requirements Development, RFP Development and Issuance	$21,000	None	1 Trip (2 people)	$3,500
Evaluation, Vendor Selection, and Contracting	$17,000	See below	1 Trip (1 person, 3 days)	$1,750
Total for RFP	**$42,000**			**$5,250**

Costs for Optional System Implementation:

Category	Base Labor Cost	Additional T&M	Trips	Travel Cost
System Implementation (Optional)	$23,000	See below	2 Trips	$3,500

Travel Costs are an estimate only. Only actual costs would be passed through to the client. Should any additional travel beyond the proposed trip(s) listed become necessary, no arrangements will be made until approved by PSE and Roseville.

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

Several time and materials options have been included:

- Contracting: PSE has included 20 hours for contracting support in the above project costs. We believe this is reasonable. However, if negotiations with a vendor extend significantly and exceed this amount, PSE can continue to provide support on a time and materials basis.

- System Implementation: PSE has included the following for system implementation.

  o Project Kickoff & System Acceptance Trips: We have included two 2-day trips, one at the kickoff of the implementation and one at acceptance testing. We believe this is reasonable for onsite activities.

  o Engineering Support: We have included 60 hours of engineering time to guide the integrations. If development of adapters or in-depth engineering for integration are needed, PSE can provide additional support on a time and materials basis.

  If the implementation requires significant development work, PSE can continue to assist on a time and materials basis.

PSE's hourly rates are shown in the table below.

Staff Name	Title	Hourly Rate
Jim Weikert	Vice President of Utility Automation and Communications	$195
Ken Cooper	Utility Automation Consultant	$175
Logan Suhr	Senior GIS Analyst	$125
Cynthia Studner	Project Coordinator	$125