



### Sole Source Justification Form

Complete and submit this form to the Purchasing Division when requesting exception to the competitive procurement process.

Sole source procurement refers to those purchases where there is only one supplier that can provide the product/service to the City. Please be as thorough and detailed with explanations to assist in the evaluation process.

Date:	09/17/18	Division:	Energy Delivery
Department:		Title:	Manager, Electric Operations
Name:	Ricky de Aragon	Vendor ID:	
Requisition No:			
Vendor Name:	ARCOS		

Item Description/  
Scope of Work:

1. Why is the acquisition restricted to this good/service/supplier? (Explain why the acquisition cannot be competitively bid, and include consequences that would occur from not contracting with this supplier.)

See attached.

2. How was the price offered determined to be fair and reasonable? Explain what the basis was for comparison and include cost analyses as applicable. (Compare to vendor's previous or current offer to the City or to another agency/company, market research – or any other method of comparison that will substantiate fair and reasonable pricing in the absence of competition). Attach back-up documentation for reference.

See attached.

3. Describe any cost savings realized or costs avoided by acquiring the goods/services from this supplier. Include consequences that would occur from not contracting with this supplier.

See attached.

**Certification of Responsibility:**

I am aware of the City of Riverside requirements for competitive bidding and the established criteria for justification of single source purchasing. As an authorized Department representative, I have gathered the required technical information and have made a concentrated effort to review comparable/equal vendors or equipment. I hereby certify the validity of the information and feel confident this justification of single source meets the City's criteria and would withstand audit or vendor protest.

Signature

Date

Department Head

Date

Purchasing Manager (Up to \$50,000)  
Over \$50,000 - Must be submitted for City  
Council Approval with Purchasing Manager  
concurrence.

Date

## **Sole Source Justification Form**

### **ARCOS Resource Management Solution**

#### **1. Why is the acquisition restricted to this good/service/supplier?**

Acquisition should be restricted to this supplier because their solution (the ARCOS Solution with Call-out) enables RPU to mobilize crews by automatically launching call-outs and receive multiple responses (at once) for both planned and emergency events. This solution will provide the City of Riverside the option to choose if they wish to use stand by crews in anticipation for an emergency, or allow the system to assemble and call out crews on the fly. The ARCOS Solution with Call-Out would be configured to recognize the utility's crew scheduling and union business rules and automatically perform the call-outs once an authorized staff member (e.g., System Operator, Supervisor, Manager, etc.) initiates the call-out function.

In addition, this automated solution will to mitigate (or even eliminate) grievances that arise when errors or missteps occur when call-outs are performed by people. When individuals may have been skipped, missed or otherwise by-passed from being offered the opportunity to work overtime (because of human error), union members will file a grievance to address the error. Grievances take time to address, and they create additional costs that add to the burden for time. Utilizing the ARCOS Solution with Call-out mitigates (or even eliminates) grievances arising from errors or missteps from manual call-outs and automates the call-out process. The ARCOS Solution with Call-out also updates and refreshes the evergreen list (or order of staff to be called) using business rule compliancy mechanisms included in the software. This feature has been able to support utility industry call-out rules among hundreds of utilities throughout the United States without breaching union call-out rules.

#### ***Why should the acquisition not be competitively bid?***

ARCOS is the only company whose primary product offering focuses on helping utilities respond, restore and report more quickly, safely, and accurately using business logic to adhere to the union business rules associated with the local union's contract. The ARCOS Solution with Call-Out provides automation around damage assessment, field inspections, internal and third party crew management, location services, complex rules-based crew call-out and employee scheduling, and is designed specifically for utilities.

ARCOS is the only "off-the-shelf" event and resource management system that supports the call-out rules of over 300 separate union bargained agreements and thousands of local rules for utilities of all sizes, including 100% of the top 25 utilities in the United States. The solution supports Incident Command System (ICS) activation and mobilization and provides 100% situational awareness for crews allowing a utility to track working schedules and "schedule exceptions" (sick, rest, union business, out of service). The solution enables existing staff to do more with less resources by freeing up system operations staff to focus on critical restoration work instead of manually working through a list of names and manually dialing phone numbers. The ARCOS Solution with Call-out requires minimal ongoing technical support and operation as it is a Software as a Solution (SaaS) solution and fully supported and upgraded by ARCOS staff.

The entire ARCOS Resource Management Platform can be accessed and managed through mobile devices by all employee groups (system operators, supervisors, and employees). The solution provides a standardized process in which operations can communicate to the Grid Control Center from the field in real-time. The solution improves customer satisfaction by compressing the time spent assembling crew so that trouble repairs begin sooner resulting in faster restoration (which reduces the duration of the outage). Reducing the duration of an outage also have a positive impact on reliability metrics. The solution provides a secure environment for employee information, data transmission and call-out related intelligence (as employees have unique passwords to access the system). The ARCOS Solution with Call-

out provides real-time integration that may be easily interfaced with RPU's proposed OMS and Mobile Workforce Management and other applications.

**What are the consequences that would occur from not contracting with this supplier?**

Staff has been working to identify methods whereby overtime can be limited, and this solution further supports that effort to reduce overtime. RPU currently incurs financial and reliability impacts by utilizing a manual call-out process. By not implementing the ARCOS solution, we will continue to pay approximately \$113,000 of "paid wait" per year. However, if the ARCOS Solution with Call-out is implemented, the time it takes to call-out staff will be compressed. By compressing the time it takes to call-out staff, the time it takes to assemble crew members to respond to an outage is compressed. This reduction in the amount of time it takes to call-out staff reduces the amount of money crews are paid to wait for the balance of the crew to arrive before they can begin work on the event.

The reliability and service restoration impact will continue as well. On average, it takes one hour to complete a four person crew call-out using the manual system we use today which requires a system operator to manually call crew members one after the other working down a list until four crew members affirmatively respond or call back. The hour it takes the system operator to make these calls prevents that operator from beginning work on restoring the outage. We quantify that this one hour of time that it takes the operator to perform the manual call-out costs the organization approximately \$15,000 in lost revenue (and six minutes in the System Average Interruption Duration Index which measures the average outage duration for each customer served and is also a Key Performance Indicator identified in RPU's Strategic Plan).

By adopting the ARCOS Solution with Call-out, we also stand to avoid staff costs by benefitting from the more efficient call-out process. Our current manual call-out process for crew assignments and resource acquisitions is managed by two superintendents and the manager of the section. Their time to establish crew assignments can be quantified as two hours per week. We estimate that there are 1.5 occurrences each week based on outage histories. Just the avoided cost for the two superintendents equates to approximately \$11,000 per year.

**2. How was the price determined to be fair and reasonable? Explain what the basis was for comparison and include the cost analyses as applicable.**

The ARCOS Solution with Call-out record keeping and compliance to union call-out rules are 100% consistent and unmatched by any other vendor. Systems that have entered the market over the years and failed such as Evoxis in 2004, Dialogics in 2007, and TeleStaff in 2011. These systems failed due to their inability to support complex call-out rules, call-out list sorting, and complex crew call-outs across multiple locations. Consolidated Edison hired Edison Electric Institute to conduct a call-out survey to 22 electric IOU's for their sole source procurement. They found that 18 had ARCOS, three had home-grown call-out list management systems, and one did callouts manually. Kansas City Power & Light also hired Edison Electric Institute to conduct a survey of companies to determine which call-out systems were in use across the utility industry and again found that the majority of companies surveyed used ARCOS and all were highly satisfied. No other system, off-the-shelf or home grown, has been able to support utility industry call-out rules without overfilling call-outs or breaching the union call-out rules.

ARCOS uses a pricing model that provides pricing that are determined by the size of the utility as determined by meter count. This approach is both fair and reasonable as the larger the utility, the more field crews are needed (and subject to call-outs). ARCOS uses a tiered structure for meter counts which includes a one-time, non-recurring cost for system configuration and training of staff. Its software licensing price provides unlimited user licenses at a cost that recurs annually. ARCOS solution requires a minimum commitment of 36 months. The final component of the ARCOS solution is the usage charge that is required (similar to a cell phone plan) where the two-way communication (from the system to the technicians) require the sending of the notification via phone call, text, email and mobile app, and the receipt of acknowledgement back from the technician to the system (\$0.25 per minute). ARCOS Solution with Call-out pricing is therefore determined by three components and this criteria is equitably applied across all utilities that use their system:

1. Implementation & training costs (a one-time, non-recurring cost): \$72,490
2. Annual licensing cost determined by the count of the meters at a utility (\$49,000 to \$56,000 estimated for approximately 176,000 water and electric meters. This pricing includes unlimited users and Crew Manager module.
3. \$0.25 per minute usage fees covers:
  - Customer support
  - Call recording – storage of that data
  - Call reporting
  - Forensics – DTMF capture, tone trace, timing sequence
  - Capture and recording of busy signals & dropped calls
  - Log Tracing
  - Line status
  - Auto Retry of dropped calls
  - Not only handling outbound calls, but also simultaneous inbound, emails, texting, mobile responses, and maintaining business rules.

3. Describe any cost savings realized or costs avoided by acquiring the goods/services from this supplier. Include consequences that would occur from not contracting with this supplier.

Summary ARCOS Annual Savings	
Total Hard Cost Savings	\$61,777
Total Soft Cost Savings	\$52,183
<b>Total Potential Annual Savings</b>	<b>\$113,960</b>

Average Customer Meter Revenue per Hour	\$ 0.1367	
Lost Meter Revenue Due to Manual Callouts	\$ 12,685.760	(Customers * SAIDI Hours * Meter Revenue Per Hour)
20% Improved Restoration Time Using ARCOS	20%	9.6 recovered meter minutes
<b>Total Potential Customer Meter Revenue Recovered per Year</b>	<b>\$2,537.15</b>	

9. Eliminate Callout Related Grievances/Bypass Errors - Hard Cost Savings	
ROI Justification: ARCOS can automate callout list sorting and rotations, ensure calls are made appropriately, and monitor rest rules to reduce	
Number of Callout Related Grievances per Year	2
Average Cost to the Company per Grievance	\$1,000
Average Cost to the Union per Grievance	
Annual Cost of Callout Related Grievances	\$ 2,000
Percentage of Grievances Avoided due to ARCOS	100%
<b>ARCOS Annual Grievance Potential Cost Savings</b>	<b>\$2,000.00</b>

b. Reduction in "Paid Wait" - Hard Cost Savings			
RPU justification: Using ARCOS automated callout platform, callout durations may be compressed, potentially reducing the time crew members are paid to wait on the rest of the crew to arrive before they can begin work.			
Average # of Employees Requested for a Callout		4	
Average Time Required to Fill Callout (hours)		1	
Average Callout Employee Hourly Rate		\$106.00	
Average Paid Wait Cost for First Employee to Accept		\$106.00	
Average Paid Wait Cost for Second Employee to Accept		\$70.67	
Average Paid Wait Cost for Third Employee to Accept		\$35.33	
Average Paid Wait Cost for Fourth Employee to Accept		\$0.00	
Total Paid Wait Cost per Callout		\$212.00	
Average Annual Number of Callouts		300	
Annual Cost to Wait for Final Employee to Accept Callout		\$63,600.00	
Percentage of Wait Time Avoided by Faster ARCOS Callout		90%	
Total Potential Hours Gained Annually by Reducing "Paid Wait"		540.00	FTE = 0.3
ARCOS Annual Overtime Costs Potentially Saved		\$57,240	

In Electric Operations, it takes an operator more than one hour just to go through the evergreen list and contact staff one after the other for a single emergency event. This occurs in part because operators are busy trying to both call-out eligible workers while also trying to manage communications for the event itself. RPU desires to optimize the system operator's time, improve crew scheduling, minimize crew wait time, and automate the effort to update the evergreen list. This solution also provides the option for the RPU duty supervisor to perform the call-outs (once notified by the operator), thereby eliminating this task from the operator which frees him or her up to address the system emergency. Today, RPU currently tracks reporting using a manual process for crew data analytics. This current method does not provide detailed reporting for call-outs nor does it provide forensics (detailed reporting down to the granular level) for call-out responses.

RPU is seeking an enterprise solution that will work well with the Grid Control Center, both the Water and Electric Divisions, and all field personnel. The value of the ARCOS Solution with Call-out is that it provides RPU the capabilities to work using its existing work streams and business processes while providing automation for call-outs and notifications (for both planned and emergency events). The solution is flexible to allow both divisions to use stand-by crews for planned events (should either division choose to do so). This flexibility makes it ideal for both planned and emergency scenarios. The need to save on costs and time associated with extended times to call-out crews or technicians leads to less efficient outcomes for customers because delays translate to extended outage restoration times (thereby lowering performance to the utility's Key Performance Indicators for outage restoration metrics).

Because we live in Southern California, we are always subject to seismic activity. The ARCOS Solution with Call-out enables RPU to respond, restore, and report during "Blue Sky" (major events) and facilitates the critical processes of notification, activation and mobilization of crews and to do so while coordinating with other utilities. If RPU does not have this capability, it means in the event of a major emergency (such as a powerful earthquake), RPU would not have the optimized capabilities to coordinate emergency response actions with those utilities that are using this system (such as Southern California Edison). RPU would lose opportunities for inter-agency coordination that can expedite coordinated allocation of resources in a major event.

Without ARCOS, RPU will not be able to automatically launch call-outs and receive multiple responses at once nor would RPU be able to reprioritize on the fly resource scheduling. RPU will not have the option to choose if they wish to use stand-by crews, but will have to continue needing to compensate groups of employees to be on stand-by throughout the year regardless of whether an event requires a crew or multiple crews. Grievances that are caused by human error where the union provisions are deemed to have been violated will continue to occur. Morale issues associated with these issues/grievances will continue to persist. Management will not receive the automated reporting that ARCOS provides for call-outs and notifications (and will not have data to track performance). These tools assist management with substantiating call-outs whenever a perceived discrepancy is thought to have occurred.

The ARCOS Solution with Call-out can automatically launch call-outs and receive multiple responses at once, enabling the City of Riverside (RPU) to reprioritize resource scheduling. This would provide the capability

to decide if a Division no longer wished to continue to schedule and compensate groups of employees to be on standby throughout the year, or do so selectively based upon the nature of a planned event, scope of work, and resources required. The option to use or not use stand-by crews provides an opportunity for avoided cost savings associated with the stand-by time itself.

The total-Cost-of-Ownership versus on-premise alternatives eliminates City IT maintenance because ARCOS is offered as a secure on-demand SaaS solution and the impact on each of ARCOS customer's internal infrastructure and resources is minimal. All equipment, telecommunications, software, application services and support are included. ARCOS offers high availability, reliability, scalability, and redundancy with no incremental expense. Because ARCOS is offered as an on-demand SaaS solution, and since it is maintained and expanded by Arcos, all infrastructure enhancements and expansion are included as part of the ARCOS service fee and there are no City IT maintenance costs (which represents additional avoided cost benefits since City IT department maintenance is not needed).

ARCOS reduces grievances and all associated time costs to process and resolve them because ARCOS is schedule aware, always knowing who is available and adheres to complex business processes and call-out rules, ensuring the equitable distribution of overtime, every time, without error. ARCOS also provides comprehensive reporting to provide detailed call-out and performance data eliminating the need to expend labor for manual report generation. The elimination of human error for call-outs reduces the costs associated with grievances (management's time to hear, process, and possibly arbitrate), including back pay to union members (if warranted).

#### **Sole Source Summary:**

Unlike Outage Management Systems providing detection and analysis of customer service interruptions, ARCOS Resource Management Suite provides industry specific tools for utilities to manage their people, schedules, & equipment. The ARCOS solution helps improve CAIDI/SAIDI metrics by reducing callout durations through automation, providing real-time resource availability (people and equipment) for quicker and more accurate work assignment, and obtaining external resources more quickly by automating the acquisition and assignment of contracted resources.

There is no other solution on the market that encompasses all of the above resource management capabilities in a single platform, while also allowing a utility to enable key capabilities in a scalable manner if/when it makes sense to do so. Any similar solution would require the procurement of multiple vendor solutions, complex integrations of those solutions, extensive and expensive project management of the overall implementation, and would ultimately lack the "real-time" schedule aware employee information that is critical to the success of the entire platform.



## **ARCOS Sole Source Justification**

*ARCOS is the only company whose primary product offering focuses on helping utilities plan, respond, restore and report more quickly, safely and accurately. Our solutions provide automation around complex rules-based crew callout and employee scheduling, internal and 3rd party crew management and location services, damage assessment, field inspections, and are designed specifically for electric and gas utilities. The unique features of the ARCOS platform are fully integrated to provide the only Event and Resource Management solution for the energy utility industry.*

- ARCOS is the only off-the-shelf Event and Resource Management System that is configurable by the customer for ever-changing crew callout rules, centralized electronic crew boards, event management templates and storm role activation and mobilization, without the need for custom programming.
- ARCOS is the only Event and Resource Management System provider who can supply 180+ utility company references for its solutions.
- ARCOS supports the callout rules of over 300 separate union bargained agreements and thousands of local rules for utilities of all sizes, including 100% of the top 25.
- ARCOS is the only utility solution that supports ICS activation and mobilization.
- ARCOS is the only utility solution that provides 100% situational awareness for both crews and resources, allowing a utility to track normal working schedules as well as last minute "schedule exceptions" such as sick, rest, union business, out of service, etc., that may affect a person's or resource's ability to report for emergency work and for the utility to have complete situational awareness 24x7x365.

## **ARCOS Is the Only Error Proof Crew Callout System**

- ARCOS' rule compliancy is so strong that ARCOS customers consider it "callout grievance proof". A well-known arbitration case by an ARCOS customer's union where the customer prevailed is further proof that the ARCOS System's record keeping and compliance to union callout rules are 100% consistent and unmatched by any other vendor.
- No other system, off-the-shelf or in-house built, has been able to support utility industry callout rules without overfilling callouts or breaching the callout rules.
- Systems that have entered the market over the years and failed – Evoxis (2004), Dialogics (2007), TeleStaff (2011) – failed due to their inability to support complex callout rules, callout list sorting, and complex crew callouts across multiple locations. None of these vendors can provide even one referenceable utility customer and all are focused on callout only, lacking many of the features of the ARCOS Event and Resource Management System.

## **ARCOS Is the De Facto Standard for the Utility Industry**

- Consolidated Edison hired Edison Electric Institute to do a callout survey to 22 electric IOU's for their sole source procurement in 2009. They found that 18 had ARCOS, 3 had home-grown callout list management systems, and one did callouts manually.
- Kansas City Power & Light also hired Edison Electric Institute to conduct a survey of companies to determine which callout systems were in use across the utility industry and again found that the majority of companies surveyed used ARCOS and all were highly satisfied.