

Seattle City Light

COMPLEXITIES OF IT SOFTWARE **PROCUREMENT & DELIVERY**

Mike Little and Patrick Campbell

Customer Energy Solutions (CES)

October 16, 2018

- Procurement from a business unit's perspective
- Our experience leading up to Accelerated RFP
- Our experience on two recent IT Software Projects: Demand Side Management and Building Analytics
 Scoping/RFI
 - Evaluations
 - o Pre-Award Clarification
 - Project Assurance



ABOUT CUSTOMER ENERGY SOLUTIONS (CES)

- A division in Customer Care, Communications, and Regulatory Affairs Business Unit
- Primary responsibility: save electrical energy
- Growing responsibility: Electric Vehicles & Small-Scale Renewables
- 80 employees
- Annual budget: \$55 million
- Incentive budget: \$25 million
- Consultant budget: ~\$5 million

A BUSINESS UNIT'S PERSPECTIVE

- Need consultants to support and supplement our staff.
- RFP/RFQ primary method for securing services.
- Support for:
 - Technical support for planning, implementation, and evaluation
 - Marketing & communication
 - Software design & implementation



A BUSINESS UNIT'S PERSPECTIVE

- What is a "worst case" scenario?
 - Scope, proposal format, level of proposal details, and evaluation criteria are misaligned, or are in conflict
 - Proposals prepared by sales/marketing
 - Evaluators overwhelmed with material and struggle to find relevant details to make a decision
 - Forge ahead and establish contract
 - Project has potential to go sideways



- Several lessons learned from similar experiences:
 - Work diligently to define evaluation criteria and scope in parallel
 - o Involve others to craft the evaluation criteria
 - o Share evaluation criteria in RFP
 - Think about how to require proposals to:
 - be aligned with **your** evaluation criteria
 - provide information at appropriate level of detail
 - in a format that translates to your evaluation criteria



SAMPLE EVALUATION CRITERIA – SCORING

Seattle City Light Proposal Scoring Sheet

Your Name:			
Proposal:	On Call Technical Services (RFQ #16197)	Scoring Legend	
Firm Name:		1	weak
Date:		2	needs improvement
Area of Service:		3	good
		4	outstanding
		5	exceptional

INSTRUCTIONS: Score the proposal by giving the appropriate number of points (see Scoring Legend above) for each of the criteria below. For finalists, adjust the number of points for each criteria as more information becomes available (reference checks and the interview.)

Overall qualifications and experience of the firm	า	POINTS	WEIGHT
Firm qualifications, resources, and electric utilities experience			10%
Team qualifications, education, and professional affiliations			10%
Sample of work products			20%
Project management skills			5%
Local focus (Northwest, Washington, Puget Sound, Seattle)			5%
	Sub Total	0.00	50%
Overall Quality of Proposal			
Quality of the proposal			10%
Completeness and clarity of proposal			10%
	Sub Total	0.00	20%
Overall approach and strategy			
Creative approach to overall strategy			20%
	Sub Total	0.00	20%



WRAP UP: OUR PREVIOUS EXPERIENCE

- Use a more deliberate alignment of scope, proposals, and evaluation criteria.
- Limit the number of pages in a proposal.
- Ask for proposals that you can evaluate.
- Do not accept <u>any</u> marketing materials.
- Move towards evaluating the Consultant Project Manager role as part of the overall delivery of a scope.



TWO RECENT IT SOFTWARE PROCUREMENTS

• **Demand Side Management (DSM)**

 A single platform to: manage customer and program information; store documents; expedite business workflow; and implement tracking/reporting tools.

Used primarily by CES Division

Building Analytics (BA)

- A single database to house building-related data within the service territory.
- Used across the entire utility and potentially other City Departments



SCOPING FOR 2 COMPLEX IT PROJECTS

							1			
PART #3 – CURRENT CO	ONDITION	VS		1			PART #5	- SCOPE	OF WORK	
					PART #4	- DESIRED OUTCON				
Preparing a 'perfect' scope of wor				ONSTRAINTS:						
about the current conditions or er				Identify any current constrain	1.) PROJECT	I/SERVICE GOALS:	1.) DETAILI	ED LIST OF REC	UIREMENTS:	
are. This information can be just a		Critical dat	t	One of the most pressing o	а.	Identify the major goals, expe	a.	Provide all of		
known conditions (as reasonably p		_		with other systems. It remains and what level of access v		A-1 Replace the current suit		is the <u>base ca</u>	PART #6 – PRO	OJECT RISKS
		• Cu	1	CCB/MDM for billing inform		tracking solutions with a Soj		×		
1. CRITICAL DATA:		 Co Pn 	b)	Is there anything that is di		(COTS) system that provides			1.) POTENTIAL RISK	KS TO THE PROJECT:
 a) What critical data do you 		• Pri	~,	challenging for vendors)?		architecture and lessens IT s		DSM Require 20170711		items that may cause the project to <i>not</i> meet expectations.
picture of your current en service expectations. Thin		• M		Unlikelv.		offerings.		20110111		main concerns that you have.
number of stakeholders. v	1	• Pr	 c) 	Are there any future or relate		A-2 Provide a holistic view o				outcomes/approaches/issues you want to be 100% sure we can avoid.
		m	e í	Yes. There are several upco		tracking and reporting the b			c) identity any	outcomes/approaches/issues you want to be 100% sure we can avoid.
There are 80 current use		• Ke		that would ideally be conne		tracking and reporting the b	b.	Describe eac		
no <u>active</u> stakeholders b		re	4	AMI data infrastructure soo		A-3 Streamline and automat		scope of wor		potential items that are beyond the current control of the Owner, Vendor, or Design
				will also be procuring a util		Division, lowering the overh		Fully functi	Professional	l; and any risks that are otherwise unforeseen/undefinable/unknowable at this time)
 Our project tracking 		CES as a di	1	and pull data from to create		productivity, decreasing ave		production		
critical source of data		roughly ha system. O				effectiveness.		into the ne		
database.		our entire		Within CES, we are releasin						
Another source of data	1	benchmar		Analytics system, and we we		A-4 Perform data analysis oj		Test enviro	1	Seattle IT resources and stage gate processes/support.
projects is the Conse		processing	5	Finally, the City will be cond		investment of programs/car				
15,000 project recom in October 2016 but	1	would help		City Departments. While we				User Accep	2	
accessed.				this future system, City Light		A-5 Deliver recurring reports			2	CES Resources and adoption.
 Our final tracking system 		What critica	1	customer experience strateg		ad-hoc analysis.		Historical p		
myriad of excel sprea		vendors?		tracking system.					3	
current focus of the		We lack or in CES.				A-6 Organize and store prog		Vendor sup	5	Vendor Contracting and availability.
multifamily buildings		 Hi 				with state auditor requirem documentation.	_	What are the		
2,100 records		- III.		AY IN THE LIFE OF " [OPTION		accumentation.	С.	to meet the s	4	Potential integration with third-party systems.
The attached Excel c		th	a)	Provide a brief "Day in the Lif		A-7 Streamline program and		See manda		Potential integration with third-party systems.
for data and where t		• Ra	r	 Typically recomment 		meaningful information tha	d	Are you prov		
×		• Bu		encouraged.		, including growing of the content of the	u.		5	Migration of multiple data sources.
Requirements		ot		Energy Advisor (EA): As an		A-8 Establish strict version c		Specific		ingration of maniple data sources.
Current vs Future Vie		 Int int 	t	interested in our incentive p		measures; track version hist		🛛 No add		
Our project tracking data		• Ex		that will best meet their nee			е.	Provide all re	6	New billing system and IT staff availability for integration.
database, and the main r	1	PO		the DSM system when answ		A-9 Establish a flexible and a		See manda		
about 14,000 project spe	1	• De		potential program offerings. populate a project lead que		new and unique program w			_	
half of CES—utilize this d extracting information for		Te		all basic customer and project			2.) SPECIAI	/UNIQUE RE	7	Additional functionality/requirements surfacing during implementation.
extracting information re	1			envisioned scope for the pot		A-10 Eliminate redundant de	a.	Identify any u		
Another source of data f		Additional	•	the system to the appropriat		accurate data collection.		projects that		
is the Conservation Acqu		slice and d		data to for analysis purpose		A-11 Provide secure service		other project	8	Software is not easily able to integrate with existing City and City Light
records and is linked to o		project, bu meaningfu	1	what attributes might be pr		City Light's enterprise system		Program m		architecture
but is currently the only	۱ I	meaningru	-	,		accounting system.		messages.		
				Energy Management Analy		accounting system.				
We house our residentia	2. BAC	KGROUND		or more of CES' programs. I		A-12 Capabilities to offer set	D.	Are there any Possible co	9	Failure to provide ongoing maintenance and support, and upgrades that
in a series of Excel spread	a)	Provide a su		efficiently process their ince		start a project, submit proje			9	meet future needs
house information for th Neighborhoods program		The busine	1	the commercial/industrial s				or finance		
iveignoornoous program		process wo	1	our billing system.	b.	What must the project/service	r	Is there anyth		
L		various tra	1			Project scope and objectives	۰.	This system	10	
	^ا ا									



- Released the Draft SOWs to the vendor community
 - o July 14, 2017

Information Session for interested vendors

 July 20, 2017

Received vendor responses
 Aug 1, 2017



Key feedback we wanted from the vendors:

- Is our SOW achievable and realistic (as drafted)?
- What information should be added to enable vendors to provide an accurate proposal?
- Are there other options, innovations, or technology updates missing from our SOW?
- What can City Light begin working on now to be ready for implementation?



Building Analytics

- o 6 vendor responses
- o 27 pages of content beyond the original RFI

• <u>Demand Side Management</u>

- o 13 vendor responses
- o 67 pages of vendor feedback on draft SOW



SECTION 4: Request for Information RESPONSE FORM

Please respond to the questions in Section 3. You are encouraged to be open & candid in your responses.

- 1. Is the Scope (as drafted in Appendix A) achievable? Please provide feedback if the Scope is realistic or not, or what changes you would recommend and why?
 - (1-page maximum please indicate Yes/No to the questions).

		AEG	Aiqueous	ANB	EnergySavvy	ESG	Nexant
в	The draft Scope of Work provided in APPENDIX A is clear for Software Vendors to prepare an accurate proposal with minimal cost contingency.	Yes	No	Yes. The draft scope of work is quite clear. The number and types of programs with program manuals would be helpful additional information.	Yes	No	No
с	The description of City Light's existing/current systems, documents, templates, and procedures is clear.	No	No	Yes. The information is well written and sufficient.	Yes	Yes	Yes
D	The roles and responsibilities of the selected Software Vendor are clear regarding the initial discovery and implementation phases of the project.	Yes	Yes	Yes. The information is clear	Yes	Yes	Yes
E	City Light is planning to interview the following individuals during the RFP Evaluation stage. The intent is to interview the key personnel from each Software Vendor's project team that would be assigned to work with City Light	No	No	Yes. However, in small organizations like ours the same individual will have multiple roles.	No	Yes	Yes

2. What information should be included in the final Scope of Work to enable your firm to submit an accurate proposal (with minimal uncertainty and contingency included in the cost)? | Please be as specific as possible. You are encouraged to provide a bullet point list of information

requested. City Light intends to fulfill as many of these requests as is possible.

(2-pages maximum)

- List of reports and dashboards, with examples of each (if not available, provide examples of
 current reports that the solution will be responsible for replacing with systematized reports and
 dashboards). If no examples are available, provide a short description of each report in the list.
- List of programs to be implemented in the solution, what external implementers run them if they
 are outsourced, and/or whether they are run in-house. If reported programs are different from
 marketed programs, please provide mapping on how this works (for example, regulators may
 require C/I programs to be reported under "C/I Prescriptive" and "C/I Custom", but the programs
 are actually tracked and marketed as "C/I Large Prescriptive", "C/I Small Prescriptive", "C/I Retro
 Commissioning", "C/I Performance Lighting", "C/I SBDI", etc.)
- Provide Program documentation including program manuals, copy of latest TRM, workflow diagrams, application forms, measure lists and calculations, etc.
- Integration diagrams or descriptions: What systems will be integrated with the solution, what
 data is required to be passed, and in which direction will the data flow, for each system. Describe
 use cases for the integration (for example "CC&B account data will flow into the solution so that
 applications will auto-validate account number and pre-fill customer contacts data".)
- Interval meter data: is there a requirement to store interval meter read data? If so, for what
 program participants, customers, and period?
- Historic Data: What time period of historic data will be imported into the system? What programs
 will be included in the historic data? What programs have data that is consistent across the
 historic period vs what programs have data elements that changed over the historic period? Is it
 acceptable to have aggregated historic data for any component of the historic load?
- Key milestone dates: Contract Start Date; Contract Period, in years; <u>Anticipated</u> system go-live date; Phases and associated dates, if the implementation will be phased.
- If the solution is being implemented during the transition from one program biennial to the next, what date will final program requirements, measure calculations, etc. be available.

NOTE: Integration with the new SCL Account System due to go live 1/2/18 is the largest risk for delivery of this solution. It is imperative that vendors understand when the Accounting System will be implemented to the point where detailed solution requirements can be documented; when SCL IT resources become freed up enough to dedicate a percentage of their time to the integration project; and when the Accounting System will be ready to produce and accept data integration test files.



EVALUATIONS

Evaluation Criteria	Weight	Blind?	Committee Score	Numerical Score
Pricing Response	15	No		\checkmark
Inclusion Plan	10	No	\checkmark	
Execution Methodology	5	YES	-	
Risk Assessment	15	YES	\checkmark	
Value Assessment	10	YES	\sim	
Past Performance Surveys	05	YES		~
Functional Tech. Req.	-	No		
Project Team	-	No		
List of Subcontractors	-	No		
Interviews	20	No	\checkmark	
Software Verifications	20	No	\checkmark	



EVALUATION OVERVIEW

Proposals

- Distilled memos 8 pages in total
- Simple high, medium, low scoring
- Look for the best team
- Onus on vendors to distinguish themselves
- Forces vendors to forgo the marketing angle

Interviews

- Meet with actual team we will work with
- Great insight from non-sales team



- Demonstrations
 - Software treated like another team member
 - Scripted demo, ideally run by an actual user of the system rather than the company itself
 - Made for a more honest portrayal of software operation
- Overall Take:
 - Refreshingly straightforward
 - Yet, also challenging; mental adjustment to finally click
 - Remember this mantra: you're looking for the best team



- Lucid approach to grading proposals; no room for fluff or chicanery from vendors
- Ability to evaluate the actual team you'll be working with was a huge boon
 - E.g., conversed with a system architect who provided genuine insight into technical specifics
- Far faster and more effective than other technical RFPs I've participated in



- One-to-two month period to work with vendor prior to signing contract clarifying scope and objectives
- Clarification document is the cornerstone for tracking all activities and outcomes
- Ultimate intent: Reduce risk and uncertainty of project
- Critical to ensure alignment between the vendor and client-side project teams
- Clarification summary meeting ties everything together



PRE-AWARD CLARIFICATION

• Example of the clarification process in action:

ScopeClarifications(what's in vs. what's out)

During Pre-Award Clarification, the intent is to have a clear understanding of all assumptions contained within <u>Carahsoft's</u> proposal. City Light and City IT request a transparent review of major assumptions and description of items that Carahsoft considers to be "in vs. out" of the scope.

- Storing electronic documents. Detail on how this is in scope and what the details are and cost. Types of docs, amount of storage, location, permissions, access, and retention.
 Based upon the licenses provided for the proposal, the SCL/CES database would have 1.62 GB of data storage (i.e., data stored in records) and 162 GB in file storage (i.e., attachments of all types - images, PDFs, Microsoft Office docs).
- Licenses. What is the process for this? End User licenses to Single-Function licenses, what are the differences for these and how many are included? To be provided in a separate license glossary.
- Plugin/integration with Adobe Sign. Is this incorporated in the scope? Implementation of the AdobeSign connector (see

https://appexchange.salesforce.com/appxListingDetail?listingId=a0N300000016ZmCE AU) is in scope for the project, because it is free with an Enterprise Level Adobe Sign package. Carahsoft has not included pricing for the Enterprise-Level Adobe Sign package.

- ESRI's ArcGIS platform. Can this be incorporated for some users since this was in the
 value assessment however not in the scope of RFP? ArcGIS online can be integrated
 with Salesforce.com via the MapAnything and MapAnything Connector for ArcGIS
 Salesforce apps. Carahsoft did not include the cost of these applications and the labor
 required to configure them with the SCL / CES Salesforce.com instance. Pricing can be
 obtained from Carahsoft based on the number of CES users who want access to the
 ArcGIS platform, with a labor estimate for configuration.
- How much does the ongoing technical support cost? Is this in scope of the licenses we
 purchase? What type of license? What type of support, web, phone, in-person? Are
 there different costs for these aspects listed: Quarterly mandatory system improvements
 and upgrades, 3rd party native App patches and updates, custom one-off report and/or
 dashboard creation, troubleshooting assistance, etc.? The annual technical support cost
 is included in the Hosted Software Costs supplied by Carahsoft. All items identified in
 the above list are included assuming no more than 400 hours per year in
 support.
- What kind of training documentation is in scope? In-person training, training manuals, and standard operating procedure (SOP) guides are included in Scope.
- What content does Carahsoft intend to cover in a training document/resource? User interface and architecture, "how to" perform activities, tasks, and workflows associated with specific roles, understanding dashboards, and using plug-ins. Specific third-party application training will be provided to the CES Administrators.
- CES Communication plan. What is including in a communication plan for the total CES Division regarding this project as it is taking place? Types of communication, quantity, Q&A references...? Defined in greater detail in revised Execution Methodology narrative.

ExecutionMethodology

During Pre-Award Clarification, the intent is to expand upon the Execution Methodology section of the proposal to describe the major project phases, activities, and deliverables from contract award to "Go Live" (along with anticipated timelines and sequencing).

- Do we need to modify our schedule? There was concern that we might need more time up front for the requirements gathering. Yes, to be discussed on July 11th Execution Methodology Call.
- In the interviews you mentioned that the system will allow us to improve our processes rather than replicate existing inefficient processes. What do we need to provide now to ensure we have this process improvement work included in the scope? Do we need to identify where we hope to improve processes, or will that be embedded in the process? This will be part of the requirements gathering process. 'Current' swim-lane diagrams and 'Future-state' will be mapped out (by program). One SCL/CES Action Item is to provide a "CES Program Portfolio Inventory" listing programs, staff (e.g., manager, process manager, other staff, and third parties involved), as well as process maps.
- At what point do we need to determine the number of trade ally users for the licensing and training? If we underestimate, how is adding users handled? During the pre award clarification. Trade Ally licensing pricing will be set from the outset. Additional training/re-training for new programs/trade allies that are not defined in the original scope would incur additional costs.
- At what point do we need to identify what custom workflows we will need? This will be part of requirements gathering, but likely implemented in the last phase of the project.
- With the waterfall-sprint process plan, how do you envision the programs/workflows to be phased? Do you prioritize small, easy processes first, or largest ones that impact the most programs? Large/complex then Small/simple processes
- During Configuration stage how much training will CES Admins get to learn how to independently buildout dashboards, reports, commemails, and workflows? This will happen during UAT, but there is also training via <u>SalesForce</u> Trailhead if users want additional training materials. Getting users familiar with basic functionality before taking on more complex tasks is how we typically approach user on-boarding.
- Will training references for new staff members be created for CES for onboarding? What
 if members are unable to attend a hands-on training, what training will be provided to
 them? Yes, training will also be recorded.
- Expand upon testing and the UAT plan what is the plan to ensure the system
 effectively fits into workflows that users will need? The UAT process will be built based
 upon testing out specific program workflows and functions that were built from input
 provided by program staff. Participants will have specific scripts. We have built in time
 to make revisions based upon feedback.
- Describe anticipated schedule roughly assuming contract award in August. See updated schedule on <u>SmartSheets</u> and revised Execution Methodology narrative.

PRE-AWARD CLARIFICATION

• Example of the clarification process in action:

Со	mpl	ete	ed Action Items -			
	VEND	OR				
Assigned To	Status	At Risk	Task Name	Duration	Start Date	End Date
		F	Carahsoft Action Items			
	Complete	-	Guidance document on license types, costs, and uses	10d	07/06/18	07/19/18
	Complete	F	Description of who is on the team and where they're located and their role	5d	07/06/18	07/12/18
	In Progress		Description of actual time onsite	10d	07/06/18	07/19/18
	Not Started		Discovery process checklist for CES to prepare for kickoff meetings	5d	08/13/18	08/17/18
	Complete		Estimate of data storage based upon proposed user count	5d	07/06/18	07/12/18
	Complete		Add discussions from kickoff meeting into the Execution Methodology narrative	5d	07/06/18	07/12/18
	Complete		Clarify / specify the number of training sessions and timing	5d	07/06/18	07/12/18
	Complete	E.	Schedule / provide Lunch & Learn on document management app and retention mgt (DocuVault Spri	10d	07/11/18	07/24/18
	In Progress		Provide rate card for additional development labor	5d	07/11/18	07/17/18
	Complete	- F	Provide SLA documentation in Execution Methodology	5d	07/11/18	07/17/18
	Complete		Identify desirable features that will and will not come along with the Mandatory Requirements	10d	07/11/18	07/24/18
	Not Started		Schedule Einstein Analytics Lunch & Learn	10d	09/10/18	09/21/18
	Not Started	F	Provide information on how / whether Constant Contact can integrate with Salesforce or Campaigns	10d	09/10/18	09/21/18
	Complete		Provide Master Services Agreement and End User License Agreement	1d	07/13/18	07/13/18
	Complete		Revise Implementation Plan and explicitly identify SCL deliverables in Execution Methodology	5d	08/13/18	08/17/18



PRE-AWARD CLARIFICATION

• Example of the clarification process in action:

Completed Action Items - SCL

igned To	Status	At Risk	Task Name	Duration	Start Date	End Date
			CES Action Items			
	Complete	F	Send Data Architecture - Column headings / sample rows for CITS, CATS, the Excel Jungle	6d	07/06/18	07/13/18
	Complete	F	Send Data Architecture - Documentation (e.g., network diagrams) created by consultant on CITS, CA	6d	07/06/18	07/13/18
	Complete	F	Send Data Architecture - Documentation on CCB data extracts	6d	07/06/18	07/13/18
	Complete	F	Send CES Program Portfolio Inventory (include supplemental info to help prioritize - \$\$, kWh, # of an	15d	07/06/18	07/26/18
	Complete	F	Develop SCL user count and high level description of user functionality	12d	07/06/18	07/23/18
	Not Started	F	Set up two "hot desks" for Carahsoft team member presence	21d	07/06/18	08/03/18
	Complete	F	Set up C&I measure calculator meeting	6d	07/06/18	07/13/18
	Complete	F	Set up BA/DSM integration meeting & "user stories" or use cases for the potential integration	9d	07/06/18	07/18/18
	Complete	F	Set up IT integration meeting - data QA/QC, Security (at rest / in transit), Active Directory	6d	07/06/18	07/13/18
	In Progress	F	Schedule change management call with Sadie Bronk and SCL			
	Complete	F	Build out several program workflows and associate with portfolio inventory			
	Not Started	F	Review and provide feedback on revised implementation plan plus proposed SCL deliverables	3d	08/27/18	08/29/18



PRE-AWARD CLARIFICATION IMPRESSIONS

• DSM:

- Helped us identify numerous shortcomings and open questions in our RFP that the vendor had
- Enabled us to adjust scope and budget appropriately prior to signing contract, resulting in far fewer surprises midway through implementation

• Building Analytics:

- We actually cancelled the Building Analytics project after several weeks of conversation with vendor
- Helped SCL avoid committing too many resources to a project that was not panning out as initially conceived



 City Light & the City of Seattle recognizes the importance of unbiased, accurate, and real-time metrics for project control.

• CES worked with Seattle IT's Project Quality Manager to develop a Project Assurance requirement for the BA and DSM projects.



- Took some adjustment for members of evaluation and vendor teams to understand the intent of the process
- Overall, a very positive experience that results in lower risk and less time commitment from evaluation team
- Ensure contracting starts at the same time as preaward to avoid delays

