



District of Columbia Housing Authority

1133 North Capitol Street, NE Washington, DC 20002-7599

202-535-1000

Adrienne Todman, Executive Director

ADDENDUM

ADDENDUM NO. 2

ISSUED: October 26, 2015

SOLICITATION NO.: 0038-2015
Combined Cooling Heating and Power System @ Langston Terrace

All respondents shall acknowledge receipt of this addendum in their proposal. **Failure to acknowledge receipt of this addendum may be cause for rejection of your proposal.** Respondents are informed that the above named solicitation is modified as follows:

Site Visit Sign in Sheet & Tour Questions and Reponses

DCHA CCHP Site Visit Sign in Sheet

NAME	COMPANY	PHONE	E-mail
Bruce Meredith	Bruce Meredith Inc.	202.248.9071	bmeredith@rcn.com
Craig Kinnear	Constellation	410.470.4036	d.kinnear@constellation.com
Edward Baker	Doosan Fuel Cell America, Inc.	860.727.2220	ed.baker@doosan.com
Mark James	Urban Green, LLC	202.559.9068	mjames@urbangreenllc.com
Michael Durso	WGL	202.624.6109	mdurso@washgas.com
Duncan Campbell	ENER-G Rudox Inc.	917.281.0027	duncan.campbell@energ-rudox.com
Al Williams	AMERESCO	410.375.7190	awilliams@ameresco.com
Irene Corea	Fuel Cell Energy	802.734.6904	icorea@fce.com
Roger Turner	E-finity Distributed Generation (Capstone Authorized Distributor)	202.746.7100	rturner@e-finity.com

DCHA CCHP Site Visit Questions (14 OCT 2015)

THERMAL LOAD AND INTERCONNECTION QUESTIONS

- Q.1. Can you further clarify scope related to utility interconnections?
- R.2. For electrical interconnection, DCHA will be responsible for upgrading existing PEPCO equipment. CCHP provider is responsible for their electrical equipment including, transformers, switchgear, conduit, etc., and routing to the point of interconnection with PEPCO equipment. CCHP provider should provide interconnection specifications (voltage, current, etc.) of their electrical equipment to inform the renovation of PEPCO infrastructure.
- R.1.B. For gas interconnection, DCHA will be responsible for upgrading existing WGL equipment. CCHP provider is responsible for their gas equipment including, compressors, piping, etc., and routing to the point of interconnection with WGL equipment. CCHP provider should

provide interconnection specifications (pressure, flow, etc.) of their gas equipment to inform the renovation of WGL infrastructure.

R.1.C. For water interconnection, DCHA will be responsible for upgrading existing DC WASA equipment. CCHP provider is responsible for their water equipment including, pumps, piping, etc., and routing to the point of interconnection with WASA equipment. CCHP provider should provide interconnection specifications (pressure, flow, etc.) of their water equipment to inform the renovation of WASA infrastructure.

R.1.D. For thermal products, DCHA will be responsible from the flange of the piping connected to the pumping skid of the campus loop. CCHP providers will be responsible from the flange of the piping connected to the thermal outputs of their plant. The flanges will be connected and represent the border between DCHA and CCHP responsibilities. CCHP provider is responsible for connection to the 4-pipe campus loop (supply and return) and for providing 3 thermal products: heating hot water in the heating season, chilled water in the cooling season (via the absorption chiller) and domestic hot water year round. CCHP provider should provide interconnection specifications (temperature, pressure, flow, etc.) of their thermal product equipment to inform the renovation of campus loop infrastructure.

Q.2. Can you provide monthly heating hot water, domestic hot water and chilled water load estimates?

R.2. The table below provides monthly utility data for total electricity and gas usage at the site from 2012-2014. Space heating and domestic hot water gas use were derived from weather normalized fits of total gas use and leveraged the fact that space heating is only provided during the heating season.

Month	Total Electricity (kWh)	Total Gas (Therm)	Estimated Space Heating Gas Usage (Therm)	Estimated DHW Heating Gas Usage (Therm)
01/01/2012	197,419	36,535	30,485	6,049
02/01/2012	162,972	27,736	21,842	5,894
03/01/2012	158,288	15,253	9,894	5,359
04/01/2012	147,403	26,015	20,720	5,294
05/01/2012	154,357	4,457	-	4,457
06/01/2012	156,702	4,377	-	4,377
07/01/2012	210,686	3,961	-	3,961
08/01/2012	228,621	4,519	-	4,519
09/01/2012	208,631	4,914	-	4,914
10/01/2012	148,205	11,571	6,394	5,178
11/01/2012	157,180	33,974	28,175	5,799
12/01/2012	175,373	39,530	33,675	5,855
01/01/2013	192,025	37,886	31,815	6,071
02/01/2013	169,997	38,696	32,539	6,157
03/01/2013	181,291	36,984	31,069	5,915
04/01/2013	181,957	17,223	11,951	5,272
05/01/2013	169,791	6,380	1,449	4,932
06/01/2013	181,877	5,232	723	4,509
07/01/2013	201,676	3,832	-	3,832

Month	Total Electricity (kWh)	Total Gas (Therm)	Estimated Space Heating Gas Usage (Therm)	Estimated DHW Heating Gas Usage (Therm)
08/01/2013	205,119	4,081	-	4,081
09/01/2013	198,056	4,169	-	4,169
10/01/2013	152,316	13,166	8,048	5,117
11/01/2013	157,013	31,882	26,083	5,799
12/01/2013	190,009	40,627	34,643	5,984
01/01/2014	204,076	40,115	33,703	6,412
02/01/2014	166,638	40,425	34,250	6,174
03/01/2014	194,656	32,137	26,183	5,954
04/01/2014	160,036	20,321	14,988	5,333
05/01/2014	167,101	6,121	1,267	4,854
06/01/2014	169,362	5,307	-	5,307
07/01/2014	175,571	4,578	-	4,578
08/01/2014	190,708	4,847	-	4,847
09/01/2014	211,262	5,917	1,291	4,625
10/01/2014	175,574	11,584	6,493	5,091
11/01/2014	168,789	33,502	27,764	5,738
12/01/2014	192,843	35,042	29,118	5,924

Currently, there is not a good characterization of cooling load from direct utility data. Therefore, an eQUEST model was constructed to estimate cooling load for the case in which all dwelling units are provided with cooling. The table below provides modeled estimates of the average monthly cooling load and monthly peak cooling load for Langston Terrace.

Month	Monthly Cooling Load (kbtu/month)	Peak Monthly Cooling Load (Ton)
n	-	0
Feb	-	0
Mar	18,746	150
Apr	148,661	601
May	370,647	793
Jun	760,214	833
Jul	1,147,479	856
Aug	1,026,479	921
Sep	655,168	825
Oct	124,098	539
Nov	16,998	170
Dec	-	0
Total	4,268,490	

Q.3. How will the interruptible rate tariff being investigated affect the project pricing?

- R.3.** The Authority is working with WGL to verify natural gas line capacity and will seek an Interruptible Sales Service Rate Schedule No. 3 as the tariff for the incoming gas serving the plant. The Authority understands the Interruptible Delivery Rate Schedule 3A is a viable alternative. As a worst case scenario the Offeror should utilize the Interruptible Delivery Rate Schedule 3A costs in estimating the delivered price of natural gas to the Site.

LANGSTON SITE and BUILDING RELATED QUESTIONS

- Q.4. What is the air permit status of the site itself?
- R.4.** Currently there is not an active operating or construction permit in place. The Selected Offeror will be responsible for retaining the construction air permit and operating air permit working with the support of the Authority.
- Q.5. Given the historic preservation nature of the building, what approvals are required for penetrating the facade?
- R.5.** No façade penetration is anticipated beyond the areas where an existing inlet or outlet exists. The Offeror can clearly detail any requirements in the proposed design.
- Q.6. The site has security concerns, is the Authority responsible for providing security to the site during and post construction?
- R.6.** Yes the Authority will be securing the site as part of the site redevelopment plan.
- Q.7. There is confusion of the interior structural design of the existing building, can you clarify what the interior will look like, what will be required to remain and what space is available?
- R.7.** The Authority intends to deliver the site as originally designed with everything removed. An original drawing showing the empty space can be utilized as a design guideline. As-built documents will be provided as addenda.
- Q.8. If remediation (asbestos/lead) is required in the site, does the building renovation schedule take this into consideration? Insurance requirements for on-site construction will require a certified clean site, will this be provided?
- R.8.** The Authority is beginning the site redevelopment process in November/December timeframe. An update on the schedule is not anticipated to be available prior to the bid proposal due date. The RFP requests a construction schedule from the Offeror for the installation of the proposed solution. This will be used to back in a site delivery schedule as well. The Authority will deliver a certified clean site prior to release of notice to proceed for Offeror solution construction. The selected Offeror will work closely with the Authority construction team to integrate schedules.
- Q.9. In general, what limitations are there with respect to historic preservation, what modifications to the site are allowed or can be suggested to provide direction regarding the roof space, coal storage facility and the pad above the coal storage site?
- R.9.** The Authority is seeking further clarification from DC Governments Office of Planning Historic Preservation Office regarding the buildings utilization, however it does not anticipate any issues with the utilization of the building and site.
- Q.10. On the same note, is it possible to utilize the existing stack?
- R.10.** The Authority is seeking further clarification from DC Governments Office of Planning Historic Preservation Office regarding the utilization of the existing stack and does not anticipate any issues with the utilization of the stack and it would be preferred to the installation of a new stack.

RFP SPECIFIC CLARIFICATION

Q.11. Will subsequent site visits prior to RFP response submission be allowed? How can it be authorized?

R.11. One follow-on site visit will be scheduled for October 28, 2015 11:00-12:30 AM.

Q.12. Need clarification - on page 4 and 5 the RFP states the Offeror is both responsible for and Not responsible for providing natural gas pricing. Who owns the gas and how is it to be applied to the RFP price calculation?

R.12. In section B.1. page 4 the RFP states: *The Offeror is responsible for:*

- *Pricing and procuring natural gas required to fuel system operation and should be included as a line item in the pricing of the Power Purchase Agreement. "*

While in Section B.1 page 5 the RFP states: *The Offeror is NOT responsible for:*

- *Delivery, price, or availability of, in the case of the CCHP unit, natural gas, or in the case of the backup generator, propane or diesel fuel."*

For clarification, the intent is to calculate a delivered price per kWh within the PPA contract. The inclusion of the pricing and delivered cost for the volume of natural gas necessary to operate the plant needs to be detailed as a line item in the calculation of the PPA price being offered. The unit price (in MMBtus or therms) for the incoming natural gas commodity should be included in the calculation. Please see Exhibit 1 for line item pricing for both fixed and variable gas pricing scenarios.

ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.

END OF ADDENDUM NO. 2



Cheryl Moore
Contracting Officer

Acknowledgement of Receipt:

Respondent: _____

Name: _____

Title: _____