Lee County Board Of County Commissioners Agenda Item Summary

Blue Sheet No. 20050423

1.	ACTION	REOI	ESTED	/PURPO	SE:
				/1 VIXI V	~-

Approve award of formal quotation (RFP B&R 2661-SM113) and issuance of a purchase order to Thermal Engineering International (TEI), the low price proposer, meeting all specification requirements for a bypass condenser in an amount of \$236,500.00.

2. WHAT ACTION ACCOMPLISHES:

Provides the necessary bypass condenser for the Waste To Energy Expansion Project.

3. MANAGEMENT RECOMMENDATION:

	$A \cap A$	\mathcal{O}		
4. Departmental Category:	08 68		04-12-2005	
6. Agenda:	7. Requirement/Purpos	e: (specify)	8. Request Initia	ted: Lindsey J Sampson
x Consent	Statute		Commissioner	
Administrative	Ordinance		Department	Public Works
Appeals	x Admin. Code	AC4-1	Division	Solid Waste
Public	Other		By: S/Lind	sey J. Sampson
Walk-On				

9. Background:

Sealed quotes were received by the County's design engineer, Burns & Roe, on behalf of the Solid Waste Division on February 3, 2005. On that date three (3) responses were received. On March 3, 2005, the two low proposers were asked to submit alternate pricing considering revised 'fouling factors' included in the specifications. After review, recommendation was made to award to the low-priced proposer meeting all specification requirements. Backup documentation refers to a price of \$242,500.00 that includes \$6,000.00 for the option of a performance bond. The Solid Waste Division does not want to make use of this option.

Funds are available in account string: 200923 40102.506540

Attachments: Burns & Roe bid evaluation dated 3/9/05

Tabulation sheet

Covanta Comments on the B&R bid evaluation dated 3/14/05

Department Director	Purchasing or Contracts	Human Resources	Other	County Attorney		get Services		County Manager/P.W. Director
Layuly	N/A per Janet Sheehan (LJS)	N/A	डीई।०र	To Valle	Analyst Risk	Grants	3 3 / 0 S	Januar 3.28.05
11. Com	mission Action Approved Deferred Denied Other			Rec Data Time	by Coatty 308/05 300 Marded To:	3- 31.	IVED BY ATY ADMIN: () Q8-05 M S5 ATY ADMIN WARDED TO: ()	P. P.



February 25, 2005
Revised March 9, 2005

LEE COUNTY WTE EXPANSION PROJECT FORT MYERS, FLORIDA

RFP 2661-SM113 Bypass Condenser

BID EVALUATION

Burns and Roe Enterprises, acting on behalf of Lee County issued Request for Proposal No. 2661-SM 113 "Bypass Condenser" on December 2, 2004 to the following pre-approved bidders: Alstom Power (Ecolaire); Graham Manufacturing; Holtec International; Thermal Engineering International; and Yuba Heat Transfer. On January 14, 2005 Alstom Power declined to bid and Graham Corporation declined to bid on February 2, 2005. Both declined due to equipment size. On February 3, 2005 bids were received from:

- -Holtec International proposal # H-4965.HX: Rev-0 dated 2/1/05
- -Thermal Engineering International proposal # 05008X dated 2/3/05
- -Yuba Heat Transfer proposal # QC-4673-05 dated 2/2/05

Holtec International was reviewed and determined to be technically unacceptable and as they were high bid, received no further consideration.

RECOMMENDATION:

The recommended award of the contract is to Thermal Engineering International (TEI). Recommended award price of \$242,500 includes 100% Performance and Payment Bonds, FOB Jobsite, Freight Prepaid and Allowed, and does not include Sales or Use Tax. Note: final terms and conditions to be reviewed and accepted by Lee County.

On March 3, 2005, both TEI and Yuba were provided fouling factors of:

0.0005 hr-ft2—F/Btu for the steam side (shell side) and

0.002 hr-ft2-F/Btu for the cooling water side (tube side)

and requested to update their bids. TEI submitted a \$51,000 increase and Yuba a \$244,765 increase.

Revised recommended award is:

Base Price:	\$198,700
100% Performance/Payment Bonds	\$ 6,000
Price reduction:	<u>\$ 13,200</u>
Recommended Award Price:	\$191,500
Adder for Fouling Factor	\$ 51,000
Revised Recommended Award Price:	\$242,500

The budget for the Bypass Condenser is \$222,341. This award is \$20,159 over budget.

"Bypass Condenser" (cont'd...) BID EVALUATION 2661-SM113

COMMERCIAL EVALUATION:

Two (2) of three (3) bids were reviewed based on bidder's compliance with the Scope of the RFP and Contract terms and conditions. Attachment #1 is the bid abstract.

Yuba's base bid is \$218,500. A Letter of Credit was offered in lieu of the Performance/Payment Bonds. Total bid price of \$228,335 is \$36835 higher than TEI's. Submittal of approval drawings and delivery is in accordance with project schedule.

Thermal Engineering International's (TEI) base price was low. TEI's base price of \$198,700. included a 10% performance/payment bond. TEI offered as an option 100% Performance and Payment Bonds at a net increase of \$6,000, thus the price of \$204,700. TEI offered on 2/24/05 a \$13,200 price reduction, bring final recommended award price to \$191,500. The technical questions/clarifications asked had no impact or change in price. Field Service rate is \$1,400 per day which is competitive with other bidder. Submittal of approval drawings/documents is 30 to 45 days after receipt of order. Delivery is March 15, 2006 consistent with project schedule.

Commercially, TEI has proposed the following terms:

Payment Terms:

15% - submittal of approval drawings

35% - receipt of tube by TEI

50% - delivery at site

Deliverables:

a) GA-Drawings:

30 days after receipt of order (ARO)

b) Nozzle locations/sizes

30 days ARO

c) Movements and forces

45 days ARO

d) Loads

45 days ARO

e) Anchor bolt size/locations 45 days ARO f) Equipment:

March 15, 2006

Both TEI and Yuba submitted exceptions/clarifications to the Services/Goods Purchase Conditions. As TEI is evaluated low bidder, only TEI's exceptions were reviewed and recommendations are included as Attachment #3. Final review and acceptance by Lee County is required.

TEI and Yuba updated bids based on revised fouling factors. TEI submitted \$51,000 increase and Yuba a \$244,765. Revised pricing shown on the Bid Abstract. Yuba was requested to re-confirm its price increase, however, they have not responded. TEI remains the recommended bidder.

The Services/Goods Purchase Conditions is with TEI for redlining, then review and acceptance by BRE, Covanta, and Lee County.

BID ABSTRACT Rev.1				BYPA	SS CONDENSER					
turns and Roe Enterprises, Inc.			ises, Inc.							
		1	2	3	4	5				
I/O: 2661 Lee County Expansion Project FP No SM-113 ByPass Condenser BUDGET: \$222,341			Expansion Project							
				HOLTEC	THERMAL ENGINEERING	YUBA HEAT				
М	QTY	UNIT	DESCRIPTION							
	1		ByPass Condenser	\$ 327,000.00	\$198,700.00	\$218,500.00				
丰										
#		†	100% Performance/Payment Bond	??	6,000.00	\$9,835.00				
1								•••		
+			SUB TOTAL	\$327,000.00	\$204,700.00	\$228,335.00				
_			Price reduction TOTAL	n/a \$327,000.00	-\$13,200.00 \$191,500.00	n/a \$228,355.00				
+		P	rice increase for .0005 and .0002 Fouling		\$51,000.00	\$244,765.00				
			Revised Recommended Award Price		\$242,500.00	\$473,120.00				
		+			base	+95%				
		+		Technically						
		1		Unacceptable						
丰				2/15/05	3/4/2005	3/22/05				
	 	+	Pricing Firm Sales/Use Tax	none	3/4/2005 none	none				
+		+	Florida Certified MBE	Yes	No	No				
1			Field Technical Service Rates	<u></u>	\$1,400/day	\$1,430/day				
\pm			Drawings Submitted	4-8 wks	4-6 wks	4-6 wks				
+		+	Delivery	38wks aro	3/15/06	3/1/06				
			PAYMENT TERMS	Milestones. Net 30	Milestone Net 30	Milestone, net 30				
-			FOB Jobsite - Prepaid EXCEPTIONS	Yes	Yes	Yes				
	D RECOMM		ION: Thermal Engineering Inte	ernational		PREPARED BY: D'AMICO	DATE: DATE:			

BYPASS CONDENSER SM-113 TECHNICAL BID EVALUATION (Revision 1, 3/8/05)

Bids were received from the following three (3) vendors for supply of the Bypass Condenser:

- TEI proposal number 05008X dated 2/3/05
- YUBA Proposal number QG-4673-05 dated 2/2/05
- Holtec International proposal number H-4965.HX: Rev-0 dated 2/1/05

TEI's initial price was \$198,700 while YUBA's initial price was \$218,500. Holtec was deemed technically unacceptable.

Both TEI and YUBA initially bid a bypass condenser utilizing standard fouling factors including a cleanliness factor of 85% on the tubeside. Both were asked to rebid using the following Covanta requested fouling factors:

Tube Side
$$-0.002 \text{ hr} - \text{ft}^2 - \text{F/Btu}$$

Steam Side
$$-0.0005 \text{ hr} - \text{ft}^2 - \text{F/Btu}$$

Of significance is the tubeside fouling factor of 0.002 hr-ft²-F/Btu which essentially doubled the surface area. Both TEI and YUBA provided revised pricing as follows to meet the above specified fouling factors.

Both TEI and YUBA were reviewed for technical acceptability. Both bid a 2 pass, vertical channel down "U" tube heat exchanger with 317L SS tubes. Each included the specified coal tar epoxy coating for the channel and a 1-1/4 Cr Alloy steam inlet nozzle.

Both TEI and YUBA are technically acceptable. TEI is the low bidder with a bid price of \$242,500 and, therefore, is recommended as the successful vendor.

SPECIFICATION SM-113 BYPASS CONDENSER BID TABULATION (Revision 1, 3/8/05)

	BIDDER								
DESCRIPTION	TEI	YUBA	HOLTEC INTERNATIONAL						
Total Price	\$242,500 FOB Jobsite	\$473,120 FOB Jobsite	Technically Not Acceptable						
Size	62" ID x 120"	66 – 140							
Туре	Vertical U-Tube	Vertical U-Tube							
Total Sq. ft (Gross)	4,588	4,505							
Condensing Zone	3,158 ft ²	3, 087 ft ²							
Drain Subcooling Zone	600 ft ²	640 ft²							
U Factor Condensing Zone Subcooling Zone	247 189	251 176							
Number of Passes	2 Zones	Two (2)							
Position	Vertical Channel Down	Vertical Channel Down							
Condensing Zone Heat Load (Design)	178,885,000 B/hr	178,885,000 B/hr							
Drain Subcooling Zone Heat Load (Design)	19,900,000 B/hr	19,944,000 B/hr							
Tubes	317L SS, 1.0 OD/8 BWG Wall, 120" long	317L SS, 1-1/4" OD, .060" wall, 11'-8" straight							
Number of Tubes	768	520							
Tube Diameter	1" OD	1-1/4" OD							

	<u>, ,</u>	BIDDER	1
DESCRIPTION	TEI	YUBA	HOLTEC INTERNATIONAL
Tube Attachment	Rolled	Rolled	
Tube Side Relief Valve	Included	By Others	·
Shell and Bundle	37,000 lbs		
Bundle	21,000 lbs		
Flooded	57,000 lbs		
Steam Inlet Size	18" BW	20" BW	
Drains Outlet Size	6' FLG	8" FLG	
Circulating Water Connections	30" size (FLG)	30" Size (FLG)	
Coal Tar Epoxy Coating for Channel	Yes	Yes	
1-1/4 Cr Alloy Steam Inlet Nozzle	Yes	Yes	

ATTACHMENT 1 (Revision 1 3/8/05)

SUBMITTED TECHNICAL DATA

SPECIFICATION SM-113

BYPASS CONDENSER

						, ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	JOBY VCA	
۱.	Castomer Lee County	FIC	rida			Data 12-10		
[Engineer/Consultant Bucos	35	Cust, Ident. No.					
	Address			· ·		Mfg. Idant. No.		
	Plant Name Lee County)	VTE	Expansio	Λ		Proposal No.		
ſ	Plant Location Fort Myers		Job No.					
1	Service of Unit Bypass C					Item No.		
2	Size 62" IDX /20" T	pe \	vertical 1	J-Tube		Prepared By	A.S.	
2	Surface Per Shell 375		Effective	Sq. Ft.		Total 458	8 Sq. Ft.	
4	No. of Shells Per Unit		No. of	Units	P	osition Vertic	cal Channel Do	
·		PER	FORMANCE	OF ONE S		Design Co		
}		7		II Sida			e Side	
_}	nest a second se		Steam	Dra	itra	Fee	dwater	
5	Fluid Circulated Total Fluid Entering #/H			3.74.00	11113		20,9200	
6	Total Fluid Entering #/HD	-11	62,000				~ 	
7	Inlot Enthalpy . BTU/					. 63	7.1	
8			410.6	1 <	8.03		8.0	
9	Outlet Enthalpy BTU/				50.0	- g		
10	Inlet Temperature		164 (331	S SALL			30	
11			218		~- 		0	
12	Operating Pressure PSI		14.7 @ Jal	ZONES				
13	Number of Passes	- -					60°F	
14	Velocity FT./SE		DSH V A	pplicable DC • '	~	1-1-5-94	NV 1	
15	Prassure Drop P	-					Reference	
	Heat Ex BTU		Surface Effective	LMTD 'F.	Transfer R BTU/HR SQ. FT./*	./ Balfle I	Temperature Differences	
16	Desuperheating Zone		٠			•	TTD 217.9.F	
17	Condensing Zone 179.88	5,00	四315 を	229,4	247			
LB	Drain Subcooling Zone 19,9	ی ره د	ග ලිළුව	176.2	189		DCA, 124 °F	
ł	,	COL	NSTRUCTION	EACH S	HELL	<u> </u>		
-		T	She	ll Side		Tul	e Side	
19	Design Pressure PSI		450 Psig or	d Full Vac	energy.	10		
20	Test Pressure PSI		. 5	85			30	
21	Design Temperature *F		HELL 830	SKIRT		35		
22	Tubes 317LSS No. 768 1			D. 18 BW		Length 120		
23	Shell Steel	62	." LD.		CKINESS	The second secon	" TRIANGULAR	
24	Shell Cover Steel —	Velde	d to Shell		, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	R-MO .25		
25	Channel Steel			Char	anel Cover	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Steel	
26	Tubesheet Steel			Over		· · · · · · · · · · · · · · · · · · ·		
27		ir Be			Baffie St		<u> </u>	
28	Shrouds: DSH NA	Γ	C	Impi	ngement B	uffles 35		
29	Type Joints—Shell Side				: Side	· · · · · · · · · · · · · · · · · · ·		
30 J	Gasket-Shell			Char				
31	Connections: Steam—Inlet / 8	,,,	(W.E.) (F26D)		Drains	Inlet NA (V	/.E.) (FLGD)	
82		5 4	(W.E.) (FLGD)					
33		0"	(FLGD)				ME) (FLGD)	
34			VIII DIV.	Heat Exche				
35			دود	Bundle	21000			
96	Accessories: Shell Relief Valve	Вy	CUS TO MI	5代 Tube	Side Relie	Valve Cons	SOLIDATED	
37	Shell Gage Glass						·	
38]	Method of Tube Attachment (Roll	") (be	Weldeti)					
39	Remarks:			····				
40					.,			
#1 [**************************************	
42 <u> </u>								
48							AND THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER.	

FEEDWATER HEATER SPECIFICATION SHEET

	CUSTOMER: BURNS AND ROE DATE: 3/07/05									
	CUST.INQ.NO: 2661-SM-113 ADDRESS: ORDELL, NJ CUSTOMER ORDER NO: N/A									
	ADDRESS: ORDEL									
	PLANT LOCATION:	LEE COUNTY, FL	ORIDA		JOB N		73-05,Rev1			
1	SERVICE OF UNIT: BYPASS DUMP CONDENSER ITEM: EH-1									
2	SIZE: 66-140	TYPE: U-TUE		·	ENGR:	,				
3	SURFACE PER SHEL		FFECTIVE:	3,727	GROSS	: 4,505				
4	NO.OF SHELLS PER		NO. OF	JNITS: 1	POSITIO	ON: VERT. CH	HANNEL DOWN			
		PERFORMAN	CE OF ON	e sheli	J					
ĺ	SHELL SIDE TUBE SIDE									
5			STEAM		DRAINS	FELI	OWATER			
6	TOTAL FLUID ENTE					8,0	000,000			
7	INLET ENTHALPY	BTU/Li					62.1			
8	OUTLET ENTHALPY	BTU/LI		186.2	G7.77\		87.0 94.0			
9 10	INLET TEMPERATUR OUTLET TEMPERATU			(337.9			118,9			
11	OPERATING PRESSU	A 1/1-		114.			50.0			
12	Of live a feed of	* CO.	<u> </u>							
13	NUMBER OF PASSES		C	OND. & St	JBCL.		TWO			
14	VELOCITY	FT/SEC					9.95 @ SG =1			
15	PRESSURE DROP	PS.	DESUP	SU	DECL 0.2		5.8			
		HEAT TRANSFERRED	SURFACE	LMTD	HT TRANS.RAT	e Baffle Pitch	ref Temperature			
		HTU/HR	SQ. FT	o.h.	8Q. FT / °)	1	DIFFERENCE			
16	DESUPERHEATING						0 E.			
17	CONDENSING	178,858,000	3087	230.0	251	<u></u>	TTD 219.0			
18	DRAIN COOLING	19,944,000	640	176.2	176		DCA 124.0			
		CON	STRUCTIO		CH SHELL					
3.0	DESIGN PRESSURE	PSIG		HELLSIDE	10		ESIDE			
19 20	TEST PRESSURE	PSIG	450	& FULL V.	AC .		ODE			
21	DESIGN TEMPERATU		ELL 830		SKIRT 830		390			
22	MINIMUM DESIGN M				40		40			
23	TUBES SA-249-TP:			OD 1 1/ TUBE PI			11'- 8" STR			
24	SHELL COVER	ALLOY STEEL,		SHELL S			EEL, 1 1/4 Cr			
26	CHANNEL (SR)	STREL			COVER	STEEL	and the same of the same			
27	TUBE SHEET	STEEL		IMPINGE	ement plate	STAINLESS	STEEL			
28	SUPPORT PLATES	STEEL		ZONE BA		STEEL				
29 30	SHROUDS-DSH TYPE JOINTS-SHELL	LSIDE WELI	ven	SUBCOOR		STEEL BOLTED				
31	GASKETS-SHELL		, <u>au</u>	CHANNEI	· · · · · · · · · · · · · · · · · · ·	IRON CLAI)			
32	CONNECTIONS: STE	AM INLET 20" W	.E., 1 1/4 C				W.E.			
33	DRAINS (8" FLG	W.E. E	MERGENCY DRN		W.E.			
34		ER INLET		W.E. O		30" FLG	W.E.			
35 36	CODE REQUIREMENTS WEIGHTS (LB) SH		4 SECTION V	BUNDLE		JLL OF WATER				
37	SHELL SAFETY VALV				RELIEF VALVE		CONTROL NO DESCRIPTION OF THE PARTY OF THE P			
38	SHELL GAUGE GLASS									
39		BES ROLLED INTO								
11	2. SHELL SIDE FOUL 3. STEAM INLET NO									
I.	4. CHANNEL COATED					30 MILS DET	And a second control of the second control o			
11.	5. CONDENSER IS DI						TTACHMENT A-2			
43	BUYER TO PROVI				HE WATER LEVE	Li.				
44	6. *0.109" MIN. TI	HICKNESS FOR IN	INER MOST T	UBE ROW.						

Lindsey Sampson - Bypass Condenser - Vendor Selection and Recommendation

From:

"Young,Peter"

pyoung@CovantaEnergy.com>

To:

"Lindsey Sampson" <SAMPSOLJ@leegov.com>, "Dennis Iavarone" <diavarone@roe.com>,

"D'Amico,Don" <ddamico@roe.com>

Date:

3/14/2005 6:05 PM

Subject: Bypass Condenser - Vendor Selection and Recommendation

CC:

"Stuhrke, Steve" <sstuhrke@roe.com>, <rgaspercic@roe.com>, "Anacker, Dennis"

<danacker@CovantaEnergy.com>, "Jim Kelly" <jkelly1119@yerizon.net>

Based on B&R's Bypass Condenser Bid Evaluation, Rev. 1, dated March 9, 2005, Covanta concurs with B&R's recommendation to purchase the subject package from Thermal Engineering International (TEI). The following comments are for your consideration and guidance:

- 1. Commercial Terms & Conditions The attached T&C's represent Covanta's suggested changes (in red) to the changes TEI proposed (in green). County to determine final acceptable T&C's.
- 2. Price: The "Revised Recommended Award Price" includes a fouling factor consistent with the Existing Facility's bypass condenser design which Covanta continues to recommend. In response to D. Anacker's March 9, 2005 email (below) requesting confirmation whether the pressure drop will meet the specification, TEI increased its price by \$5,000 (per attached email). If B&R concurs with this, the purchase order price changes to \$241,500, excluding the bond cost. This amount compares to the last Project Estimate cost of \$236,500; a negative \$5,000 variance.
- 3. Bond: The above pricing excludes \$6,000 (or 2.5%) for a 100% performance bond. The benefit of a 100% bond is limited and the County could consider reducing or deleting the bond for this equipment supply. Note that payment terms proposed require 50% of the contract price paid prior to delivery to the jobsite.
- 4. Delivery Date of March 15, 2006 is consistent with the current Project's Master Project Schedule based on the GC mobilizing by November 2005.

B&R should proceed immediately in completing and submitting 1) a purchase order term sheet that reflects the final agreements and understandings to be incorporated into the purchase order, and 2) a conformed specification, with all data sheet data filled-in, for inclusion in the purchase order.

County needs to address the open items listed above; eg: T&C's and bonding.

B&R's original and current schedule for issuing this PO is March 7, 2005 and March 18, 2005, respectively. Covanta recommends that the County approve TEI's award and release no later than three (3) weeks from B&R's bid Evaluation (by March 29, 2005).

Peter

----Original Message----From: Anacker, Dennis

Sent: Friday, March 11, 2005 4:35 PM

To: Young, Peter

Cc: Stuhrke, Steve; Bob Gaspercic (rgaspercic@roe.com)

Subject: Bypass Condenser Bid Evaluation Rev. 1, Covanta Purchase Recommendation

I have reviewed Burns and Roe's revised evaluation of the bypass condenser and concur with their recommendation to purchase the unit from TEI.

I advised Burns and Roe that the TEI data sheet submitted with their evaluation still did not include the data sheet materials designations I had requested be filled in. They also need to confirm that the water side pressure drop (also not included on the data sheet), is in conformance with the specified 6 psi maximum of the specification, because it is a required guarantee of the specification. On this item, it is up to Burns and Roe as to whether to accept a marginally higher pressure drop as long as it does not impact their circulating water design requirements, and as long as it does not exceed the specification limit by more than 2 psi.

Bob Gaspercic advised me that he will follow up with the TEI.

Upon resolution of these and any other commercial issues, they should proceed with the purchase.

Thanks

Dennis Anacker