

AMENDMENT NO. 2 TO SOLICITATION

DATE: October 18, 2016

TO: ALL VENDORS

FROM: Juaquana Brookins, Procurement Officer

SUBJECT: USC-BVB-3042-JB

DESCRIPTION: Provide HVAC Systems Water Treatment Chemicals & Service for the UCS Columbia Campus & USC School of Medicine

This Amendment No.2 modifies the Requests for Proposals only in the manner and to the extent as stated herein.

Questions & Answers from Suppliers

Revised Bid Closing Date: October 26, 2016, 2:00 PM EST

Attachment A & B

OFFERORS SHALL ACKNOWLEDGE RECEIPT OF AMENDMENT NO. 2 IN THE SPACE PROVIDED BELOW AND RETURN IT WITH THEIR BID RESPONSE. FAILURE TO DO SO MAY SUBJECT BID TO REJECTION.

Authorized Signature

Name of Offeror

Date

Questions and Answers

1. In the bid specification under:

Section III- Scope Of work Paragraph 3 on page 15 it states: "System specifications and Operating Conditions provided must be used....." Without the operating Data, Steam production data, Chiller operating hours and load, it will be impossible to provide an accurate bid. Bidders don't know if USC ran one or all of the boilers; some, or all of the time, etc. This makes a huge difference in the treatment costs. This would be similar to the gas bill for your car if you drove 1,000 miles or 100,000 miles per year. See Attachment A.

There were no operating conditions provided. At minimum Bidders will need, and we ask USC to Provide: See Attachment A. Boilers:

- Annual Steam production totals from each Energy Plant.
- Annual makeup water/ soft water for each Energy Plant
- Percent condensate return, if any, for each energy plant.
- Average hardness in the return condensate for each energy plant.

Cooling:

- Operating hours for each Chiller for 2015 & 2016 at each Energy Plant
- Load estimation for each chiller at each energy plane
- Well water Percentage used for Cooling tower Makeup at each Energy Plant.
- Makeup water totals to Cooling towers, if available, for each Energy Plant
- Do the Chillers at 1600 Hampton have a cooling tower?
 - What are the operating hours per year on these chillers
 - What is the size estimate of the Chilled water loop
- Do the Chillers at USC School of Med have cooling towers?
 - What are the operating hours per year
 - How many Chilled water loops & size estimates.
- Do the chillers at the Remote Library have a cooling tower?
 - What are the operating hours per year.

Chiller Water:

- Makeup water totals for the chilled water loop at each Energy Plant
- 2. Section III, p 17 Reagent Capabilities, Test Equipment and Supplies "All analytical test instrumentation..... will be supplied by the vendor"

There are currently, digital colorimeters, DR890, and titration Burettes.

• Can the vendor substitute simple visual comparators and drop test kits for the lab equipment? No.

- Will test equipment, reagents, supplies be supplied and stocked at Each Energy facility, meaning, 4 sets of all test equipment and supplies? Yes.
- 3. Section III, p 17 Service Costs

"The monthly service cost shall include all required equipment...Chemical Controllers, Chemical pumps..."

The current controllers and pumps are Digital automated controllers; the chemical metering pumps are digital speed control.

Can analog controllers and analog/ manual speed pumps be used as replacements? No, replacements will not be accepted, the make and model that is in place will need to be maintained.

4. How, if any, have new building on campus increased boiler and cooling loads since the last bid period?

• i.e. Horizon I, Horizon II, Darla Moore, and others??

All increases are reflected on the yearly long sheets that are included in Attachment A.

5. How have the Boiler and Cooling loads increased, as a percentage, since the last bid period??

15%, 20%, 25% increase?

All increases are reflected on the yearly long sheets that are included in Attachment A.

7. Cooling Systems

Is there any further water data for the cooling a systems?

- a. Water Meter Make up
- b. Water Meter Blowdown
- c. Volumes of Systems

See Attachment A.

8. Steam

Is the a general boiler mass balance available for the steam systems? No

- a. Depicting
 - i. Make Up
 - ii. Softener Make Up
 - iii. Steam Generation (Ave lbs./hr)
 - iv. Blowdown
 - v. Condensate Return

9. Admin

As for the General Area, if one can respond within 3-4 hours, is that considered within the limits? Yes, the response time is within 4 hours.

10. Who owns the chemical feed equipment? - ie. chemical pumps and controllers? The University owns the equipment.

11. Since we were requested not to scroll through controllers, can it be verified that they are all in working conditions? All controllers are in working conditions.

12. If discovered that equipment is not in working condition, will the University pay for replacement? No.

13. Can it be clarified that who pays for any new equipment? The contractor pays for the new equipment.

14. Who owns the chemical feed tanks? The University owns the chemical feed tanks.

15. Who provides the salt for softeners? The University will provide the salt for softerner through a separate contract that is in place.

16. If the location does not have corrosion coupon holders (med school), will University pay for parts needed? No. Will University install? No.

17. Can full size delivery trucks adequately access West and South energy Plants? A short body truck will be required.

18. Please list the total number and names of the closed loops treated at the USC School of Medicine. See Attachment B

19. What is billing breakdown for your current water treatment vendor: whole contract, annual, and current monthly? This information is not currently available.

20. What percent condensate return is at each energy plant? See Attachment A.

2014	
ATTACHMENT A	

Chiller Operations

South

	Chiller #1A	Chiller #1A Chiller #1B	Chiller #2	Chiller #3A	Chiller #3A Chiller #3B	KWH	KWH	KWH	KWH
	Hrs.	Hrs.	Hrs.	Hrs.	Hrs.	480 V	4160 V	4160 V	Total KWH
July	551	670	386	279	279	Broke	584,000	1,756,300	2,340,300
Aug	299	733	742	66	0	282,830	745,820	139,160	1,167,810
Sept	295	615	644	6	6	315,206	651,180	46,770	1,013,156
Oct	369	380	129	265	122	197,318	337,000	119,127	653,445
Nov	108	312	147	229	58	190,127	337,000	86,592	613,719
Dec	0	0	538	67	47	219,379	210,000	29,413	458,792
Jan									
Feb									
Mar									
Apr									
May									
June									
Totals	1,622	2,710	2,586	915	515	1,204,860	2,865,000	1,204,860 2,865,000 2,177,362	6,247,222
		10							

July Aug Sept Oct Nov Dec Jan	Well Water 175,300 163,200 1,225,400 529,000 800 0 0	CW Make-up 7,340 11,740 20,440 5,710 4,730 4,730	CT Make-up 2,347,477 2,325,964 1,896,980 1,271,208 1,117,240 1,279,264	City Water 3,863,464 3,466,232 3,466,232 3,466,232 3,466,232 3,466,232
Mar Apr May June Totals	2,093,700	54,390	10,238,133	21,194,634

South Energy Boiler Operations

-		-		-	-	1	-				-	1.00			1			-	
Fuel on	Hand		25833	25833	JECOF		25695	25695	JEGOE	CENCZ	25652	JEEEJ	70007	25652	25746		94707	25746	
	ull_odeM %						80.01	78.39	61 20	77.40	77.95	73 83	00.01	61.44	97.05		0.00	98.09	
Steam	Generated		0.00	13,809.00	146 797 00	ATE ACT A0	00.200,c24	13,380,643.00	14 328 126 00		15,165,009.00	14 679 245 00		15,147,478.00	389,500.00		0.00	673,770.00	74,349,439.00
Gallons	Make-up		0.00	8,400.00	30,000.00	38 500 00	00:000/00	1,257,000.00	1,052,400.00		1,416,500.00	1,298,700.00	1 115 202 20	00.202,CLL,L	45,300	0.00	0000	79,200.00	6,341,202.00 Gals
Fuel Oil		c		0	131	С	,	0	0	:	43	0	0	>	0	0		Ч	175
cu ft gas/	lb steam			1.96	1.34	1.21		1.19	1.19	4	67.1	1.20	1 10	CT:-	1.19	0.00		1.21	
Natural	Gas	0	000000	7/000	196000	516000	1 1012000	0002CRCT	17067000	10000000	TOUL ZUUU	17583000	18089000		464000	0		81/000	88783000
Operating	Hours	0	U		40	32	002	120	741	745	CL /	672	742	ć	٦A	0	6L	60	3781 Hrs
Boiler #1 Operating		July	Alig	2ng	Sept	Oct	Nov		Dec	an l		Feb	Mar		Apr	May			Totals

►2013

1 1 1 1 1 1 1 1								
DUIIEL #T	5	Natural	cu ft gas/	Fuel Oil	Gallons	Steam		Filelon
	Hours	Gas	lb steam		Make-up	Generated	% Make 11	Honor Honor
July	744	14360000	1.20	0	1.409.209.00	11 759 857 00	70.00	
Aug	742	14047000	0.80	0	1.089.514.00	17 593 186 00	70.00	20100
Sept	720	13423000	1.20	0	929.700.00	11 491 837 00	00.20	AUL02
Oct	969	14043000	1.30	C	858 400 00	10 6AE 364 00	00.00	50000
Nov	720	17553000	1.20	148	1 122 500	14 212 640	00.10	12022
Dec	741	17602000	1 20		1 062 200	14 574 744	00.00	2/933
Jan			221	>	T,UUZ,ZUU	TT//TOC/7T	IQ	27872
Feb								
Mar								
Apr								
Мау								
June								
Totals	4363	91028000		148	6,471,523.00	80.264.590.00		
						property and an		_

Chiller Operations

Anth

	Chiller #1A Chiller #1	Chiller #1B	Chiller #2	Chiller #3A	Chiller #3B	KWH	KWH	KWH	K/V/H
	Hrs.	Hrs.	Hrs.	Hrs.	Hrs.	480 V	4160 V	4160 V	
July	160	141	298	711	712	302 000	136 600	A 0014	
Aug	С	c	766	CVL		202,202	200,002	4,/32,000	04/'0/2'C
Sant	,	>	2004	C+/	/43	282,360	135,010	5,206,584	5,623,954
2001									0
Oct	12	12	0	744	547	177.000	12 000	3 688 968	3 977 050
Nov	0	0	С	503	AEO	1 4 000	000		006'1/0'0
			,	500	400	144,UUU	4,000	2,9//,/36	3,125,736
nec	0	0	0	743	47	82,000	5,000	2.310.744	2.397.744
Jan	0	0	0	746	0	48,000	5 000	2 174 488	001 200 0
Feb	С	c	c	677	007		00010	C) - 1 - 1 - 1 - 0 0	2,221,400
	,	>	>	7/0	13U	44,/00	4,780	2,591,712	2,641,192
Mar	0	0	343	601	103	57,300	122,220	2.171.686	2.351.206
Apr	132	-1	584.0	344	131	71.000	306.000	1 165 520	1 547 520
May	340	0	154	575	618	42,000	138 000	3 679 970	2050000
June	463	282	11	624	550	42.000	258,000	4 058 630	A 358 620
Totals	1,107	436	1,656	7.006	4.039	1 292 360	1 276 690	31 750 040	000 220 20
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		T	T	T	1	T	T	1	T	1		T	T	1
Fuel on	Hand	28.083	28,109	28,109	28.081	27.933	27,872	25.591	18,587	27,563	27,621	27.670	27.529	
	% Make- Up	78.00	52.00	68.00	67.00	66.00	61.00	44.00	49.00	44.00	63.00	79.00	88.00	
Steam	Generated	11,759,852	17.593.186	11,491,837	10,645,364	14,212,640	14,561,711	14,908,006	13,383,530	10,685,727	12,870,494	13,074,214	8,259,998	153,446,559
Gallons	Make-up	1,409,209	1,089,514	929,700	858,400	1,122,500	1,062,200	789,800	780,800	569,400	973,800	1,244,000	989,814	11,819,137
Fuel Oil		0	0	0	0	148	0	26,971	41,466	0	0	0	0	68,585
cu ft gas/	lb steam	1	1	1	1	1	1	1	1	1	1	1	1	
Natural	Gas	14,360,000	14,047,000	13,423,000	14,043,000	17,553,000	17,602,000	13,881,000	9,415,000	12,163,000	14,833,000	15,327,000	9,459,000	166,106,000
Operating	Hours	744	742	720	969	720	741	742	672	742	720	744	616	8,599
Boiler #1		July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	Totals
	Operating Natural cu ft gas/ Fuel Oil Gallons Steam Steam	OperatingNaturalcu ft gas/Fuel OilGallonsSteamHoursGasIb steamMake- upGenerated% Make- Up	Operating Natural cu ft gas/ Fuel Oil Gallons Steam Addmining Hours Gas lb steam Make-up Generated % Make-Up 744 14,360,000 1 0 1,409,209 11,759,852 78.00	Operating Natural cu ft gas/ Fuel Oil Gallons Steam Make-Up Hours Gas lb steam Make-up Generated % Make-Up 744 14,360,000 1 0 1,409,209 11,759,852 78.00 742 14,047,000 1 0 1,089,514 17,593,186 52.00	Operating Natural cu ft gas/ Fuel Oil Gallons Steam Make-up Hours Gas lb steam Make-up Generated % Make- Up 744 14,360,000 1 0 1,409,209 11,759,852 78.00 742 14,047,000 1 0 1,089,514 17,593,186 52.00 720 13,423,000 1 0 929,700 11,491.837 68.00	Operating Natural cu ft gas/ Fuel Oil Gallons Steam Make-Up Hours Gas lb steam Make-up Generated % Make-Up 744 14,360,000 1 0 1,409,209 11,759,852 78.00 742 14,047,000 1 0 1,089,514 17,593,186 52.00 720 13,423,000 1 0 929,700 11,491,837 68.00 696 14,043,000 1 0 858,400 10,645,364 67.00	Operating Natural cu ft gas/ Fuel Oil Gallons Steam Make-Up Hours Gas lb steam Make-up Generated % Make-Up 744 14,360,000 1 0 1,409,209 11,759,852 78.00 742 14,047,000 1 0 1,089,514 17,593,186 52.00 720 13,423,000 1 0 929,700 11,491,837 68.00 696 14,043,000 1 0 858,400 10,645,364 67.00 720 17,553,000 1 148 1,122,500 14,212,640 66.00	Operating Natural cu ft gas/ Fuel Oil Gallons Steam Admate <	Operating Natural cu ft gas/ Fuel Oil Gallons Steam A Hours Gas lb steam Make-up Generated % Make- Up 744 14,360,000 1 0 1,409,209 11,759,852 78.00 742 14,047,000 1 0 1,409,209 11,759,852 78.00 720 13,423,000 1 0 929,700 11,491,837 68.00 720 13,423,000 1 0 858,400 11,491,837 68.00 720 13,423,000 1 0 858,400 14,491,837 68.00 720 17,553,000 1 148 1,122,500 14,212,640 66.00 741 17,602,000 1 26,971 789,800 14,561,711 61.00	Operating Natural cu ft gas/ Fuel Oil Gallons Steam Admate-up Hours Gas Ib steam Make-up Generated % Make- Up 744 14,360,000 1 0 1,409,209 11,759,852 78.00 742 14,047,000 1 0 1,409,209 11,759,852 78.00 720 13,423,000 1 0 1,089,514 17,593,186 52.00 720 13,423,000 1 0 929,700 11,491,837 68.00 720 13,423,000 1 0 11,491,837 68.00 700 720 17,553,000 1 140 0 858,400 10,645,364 67.00 700 720 17,553,000 1 148 1,122,500 14,212,640 66.00 700 74.00 74.01,711 61.00 74.00 74.00 74.05,01,711 61.00 74.00 65.00 74.00 65.00 74.00 74.00 74.00 <	Operating Natural cu ft gas/ Fuel Oil Gallons Steam Admate-Up Hours Gas lb steam Make-up Generated % Make-Up 744 14,360,000 1 0 1,409,209 11,759,852 78.00 742 14,047,000 1 0 1,409,209 11,759,852 78.00 720 13,423,000 1 0 1,409,209 11,491,837 68.00 720 13,423,000 1 0 929,700 11,491,837 68.00 720 13,423,000 1 0 1,122,500 11,491,837 68.00 720 17,533,000 1 148 1,122,500 14,212,640 66.00 741 17,602,000 1 26,971 789,800 14,561,711 61.00 742 13,881,000 1 26,971 789,800 14,561,711 61.00 742 13,881,000 1 26,971 789,800 14,908,006 44.00	Operating HoursNatural Gascu ft gas/ Ib steamFuel Oil GallonsGallonsSteamMake-up Make-upMake-up SteamMake-up Make-upMake-upMake-up 744 $14,360,000$ 1 0 $1,409,209$ $11,759,852$ 78.00 78.00 742 $14,047,000$ 1 0 $1,409,209$ $11,759,852$ 78.00 78.00 720 $13,423,000$ 1 0 $292,700$ $11,491,837$ 68.00 68.00 720 $13,423,000$ 1 0 $929,700$ $11,491,837$ 68.00 66.00 720 $13,423,000$ 1 0 0 $0,0645,364$ 67.00 67.00 720 $17,553,000$ 1 148 $1,122,500$ $14,212,640$ 66.00 66.00 741 $17,602,000$ 1 0 $1,062,200$ $14,561,711$ 61.00 61.00 742 $13,881,000$ 1 0 $1,062,200$ $14,908,006$ 44.00 672 $9,415,000$ 1 0 $1,062,200$ $14,908,006$ 44.00 672 742 $12,163,000$ 1 0 $569,400$ $13,383,530$ 49.00 742 $12,483,000$ 1 0 $13,383,530$ 49.00 720 $14,833,000$ 1 0 0 $13,383,530$ 49.00 720 $14,833,000$ 1 0 0 $14,00$ 720 $14,833,000$ 1 0 0 $13,383,530$	Operating HoursNatural GasLue loi IGallonsSteamSteamIHoursGaslb steamMake-upMake-upGenerated% Make-up74414,360,000101,409,20911,759,85278.0074214,047,000101,089,51417,593,18652.0072013,423,00010929,70011,491,83768.0072013,423,00010929,70011,491,83768.0072013,623,0001111,22,50014,212,64066.0072017,553,000111481,122,50014,212,64066.0072017,553,000111481,122,50014,212,64066.0074117,602,000126,971789,80014,908,00644.0074213,881,000126,971789,80014,908,00644.0074212,163,00010569,40010,685,72744.0072014,833,00010973,80013,383,53049.0074415,327,000100724,00010,685,72744.0074415,327,000101,244,00013,074,21479.00	OperatingNaturalcu ft gas/ GasFuel OilGallonsSteam 1 HoursGaslb steam 1 0 Make-up \mathbf{S} Make-up \mathbf{N} 744 14,360,000101,409,20911,759,85278.00 7 742 14,047,000101,089,51417,59,83768.00 7 720 13,423,00010929,70011,491,83768.00 7 696 14,043,00010858,40011,491,83768.00 7 720 17,553,000111122,50014,491,83768.00 7 720 17,553,000111122,50014,491,83768.00 7 720 17,533,000111122,50014,212,64066.00 7 741 17,602,0001014,81,71161.00 7 742 13,881,000126,971789,80014,908,00644.00 742 13,881,00010569,40013,383,53049.00 742 13,881,00010569,40013,383,53049.00 742 12,163,00010569,40010,685,72744.00 720 14,833,00010784,00013,074,21479.00 744 15,327,000101,244,00013,074,21479.00 744 9,459,0001001,244,00013,074,214<

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	Fuel on	Hand	27.578	NA	28.068	28.120	77 855	666726	20.821	23,118	26,209	26,247	76 283	26 379	22/02
		% Make- Up	89.00	88.00	87.00	82.00	75.00	84.00	76.00	82.00	87.00	88.00	87.00	84.00	
	Steam	Generated	8,815,416	7,713,381	7,685,858	8,096,150	10.555.656	12.085.627	12.776.098	13,488,019	11,478,000	12.886.641	10.749,535	8.166.514	124,496,895
	Gallons	Make-up	1,168,308	1,168,308	801,200	795,700	952,900	1,222,200	1,168.200	1,322,600	1,201,600	1,356,300	1,114,400	818,500	13,090,216
2016	Fuel Oil		0	0	0	0	155	0	15,192	11,216	0	0	0	0	26,563
	cu ft gas/	lb steam	1	1	1	1	1		+1			1	÷	-1	
	Natural	Gas	10,150,000	8,833,000	8,786,000	9,336,000	12,254,000	14,096,000	12,877,000	13,488,019	13,426,000	15,086,000	12,457,000	9,432,000	140,221,019
	Operating	Hours	740	744	720	717	719	744	721	686	627	719	743	720	8,500
	Boiler #1		ylul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	Totals

	1/T/07T						od 10 000 000 000	Steam Integer Meter trinned 10 000 000 on 8/27
	1207170	Total KWH	KWH	444,238	4160 V	Hours	731	Chiller #3B
			KWH	393,000	4160 V	Hours	730	Chiller #3A
			KWH	369,936	480 V	Hours	37	Chiller #2
	700'E		Lbs.	5,739,677	Integrator	Hours	0	Chiller #1B
	0 527	PPH Steam	Hours	599	Hours	Hours	706	Chiller #1A
			Gals.	0	Fuel used	Gallons	12,870	C.W.Feed
-			Gallons	564,600	Boiler Water	Gallons	236,006	Misc. Water
	cu ft/ lb steam		СF	6,611,000	Natural Gas	Gallons	2,372,139	Tower Water
			Hours	732	Pump C	Gallons	3,185,615	Plant Water
% Make. In	82		Hours	731	Pump B	Gallons	208,500	Well Water
≂ Gal. Water Required	687.798		Hours	242	Pump A	Gallons	2,977,115	City Water
								Totals:
599	0	5,739,677]	Difference	1,222,739	47,400	1,102,000	
37,086	171,857	5,470,406		Reading last month	40,333,542	5,978,700	1,630,600	
37.685	171,857	11,210,083	9/1/2016	Reading:	41,556,281	6,026,100	2,732,600	Keading: 9/1/2016
Ler	final oil	Integrator		Boiler	CKT #3	CKT #2	CKT #1	ater I
	Boiler #1							Ĺ
732	731	242	731	730	37	0	00/	
8,671	5,333	3,557	23,718	28,377	62,997	55,557	23,884	
9,403	6,064	3,799	24,449	29,107	63,034	55,557	54,590	Reading. 3/ 1/ 2010
Secondary Pump C	Secondary Pump B	Secondary Pump A	Chiller#3B	Chiller#3A	Chiller#2	Chiller#1B	Chiller#1A	ter Re
444,238	393,000	369,936	2,977,115	12,870	564,600	208,500	000,119,0	
	1,000	1	7	1	-1		1,000	
44,238	393	369,936	398,010	12,870	564,600	208,500	6,611	Ultrerence
14,896,430	6,107	6,114,906	6,978,180	816,540	55,314,800	10,496,500	/27,054	Keading last month
15,340,668	6,500	6,484,842	7,376,190	829,410	55,879,400	10,705,000	/33,665	Keading: 9/1/2016
4, 160.00 (New)	4,150.00	480.00 Meter	Meter	C. W. Idnk Meter	Make-up	Meter	Meter	

South Energy Monthly Report

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Fuelon	Pued -		75001	0007	75960		10000		000	19360	27881	27927	7986	28047	
	% Make- Hn	0 BE	DO OR	0.00	0 0	85.38	84	72	Ś	80.00	69.00	91.00	60.00	87.00	
Steam	Generated	6 294 948 00	13 RN7 578 NN		15,198,922,00	11 999 760	14 385 386	17 787 377 00		13,440,000.00	14,443,699.00	11,000,499.00	9,007,819.00	7,025,803.00	133,881,791.00
Gallons	Make-up	641.200.00	1.456.300.00	00000-1	1.675.800.00	1.227.800	698,600	1 565 200 00		1,284,500.00	1,185,900.00	1,203,500	644,600.00	731,200.00	12,314,600.00
Fuel Oil						6189	40	46736		23284	0	0	0	0	76249
cu ft gas/	lb steam	1.19	1.20		1.20	1.10	1.20	0.80		1.10	1.20	1.40	1.00	1.20	
Natural	Gas	7469000	16504000		18772000	13471000	17156000	13117000	1 1 1 1 1 0 0 0	T442TUUU	17129000	15770000	8574000	8261000	150674000
Boiler #1 Operating	Hours	353	732		732	576	738	742	677	7/0	744	717	435	643	7084
Boiler #1		July	Aug	Sept	Oct	Nov	Dec	Jan	Loh L		Mar	Apr	May	June	Totals

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	Chiller #1A	Chiller #1A Chiller #1B	Chiller #2	Chiller #3A	Chiller #3B	KWH	KWH	KWH	KWH
	Hrs.	Hrs.	Hrs.	Hrs.	Hrs.	480 V	4160 V	4160 V	Total KWH
ylut	551	670	386	279	279	Broke	584.000	1.756.300	7 340 300
Aug	299	733	742	66	0	282,830	745.820	139.160	1 167 810
Sept	295	615	644	6	6	315.206	651.180	46.770	1 013 156
Oct	369	380	129	265	122	197,318	337.000	119.127	653 445
Nov	108	312	147	229	58	190,127	337,000	86.592	613,719
Dec	0	0	538	67	47	219,379	210,000	29.413	458.792
Jan	1	2	180	438	61	199,942	67.000	145.712	412,654
Feb	1	1	7	645	0	143,389	6.000	196.640	346 029
Mar	26	364	468	115	45	217,364	284.000	44.561	545,975
Apr	57	235	708.0	94	28	259,908	402,000	32,173	694.081
May	181	261	744	143	113	328,798	438,000	74.267	841065
June	470	622	702	134	167	386,360	618,000	85,304	1,089.664
Totals	2,358	4,195	5,395	2,484	929	2,740,621	4,680,000	2,756,019	10,176,640

- 1		-			-	1		_		_		_	_	_	And in case of the local division of the loc
	City	Water	3,863,464	3,466,232	1,856,910	1,786,822	2,117,364	1,927,222	1,567,135	1,473,186	1,458,450	1,945,174	2,805,524	3,066,351	27,333,834
	CT	Make-up	2,347,477	2,325,964	1,896,980	1,271,208	1,117,240	1,279,264	1,211,341	1,195,014	1,340,573	1,752,098	2,014,233	2,023,675	19,775,067
	C	Make-up	7,340	11,740	20,440	5,710	4,730	4,430	4,610	3,900	8,000	3,670	3,350	2,960	80,880
	Well	Water	175,300	163,200	1,225,400	529,000	800	0	18,400	0	112,100	497,100	355,000	297,700	3,374,000
			July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Мау	June	Totals

2015

Year

SOUTH

	Chiller #1A	Chiller #18	Chiller #2	Chiller #3A	Chiller #3A Chiller #38	KWH	KWH	KWH	KWH
	Hrs.	Hrs.	Hrs.	Hrs.	Hrs.	480 V	4160 V	4160 V	Total KWH
July	249	732	708	313	267	459.312	592 000	160.215	1211527
Aug	292	731	459	390	348	392.729	520.450	209 247	1 100 100
Sept	369	711	708	27	0	350.078	635.700	10 952	024,732.
Oct	308	403	68	305	323	200.755	233.960	176.075	610 790
Nov	333	505	0	197	252	203,844	243.000	133.042	579,886
Dec	0	1	0	531	479	133,761	265,080	6.040	404.881
Jan	0	0	0	537	562	138,352	265,541	5.530	409.423
Feb	1	17	0	520	585	144,703	12.140	279.387	436.230
Mar	397	396	0	275	309	185,233	234,130	154.716	574.079
Apr	569	697	0.0	63	116	222,759	361,890	46.851	631.500
May	299	65	0	726	418	229,445	141,000	311.039	681484
June	702	0	0	589	638	335,222	318,000	332,903	986,125
Totals	3,519	4,258	1,943	4,473	4,297	2996193	3822891	1,825,997	8645081
								•	

	Well	CW	СT	City
	Water	Make-up	Make-up	Water
ylul	1,663,100	2,690	2381163	2474160
Aug	895,700	5,080	2,060,333	2,748,975
Sept	619,000	3,240	1,936,043	2,418,284
Oct	763,300	10,560	1,073,218	1,490,689
Nov	639,700	5,690	1,022,691	1,809,786
Dec	298,600	14,990	670,571	1,947,717
Jan	176,700	4,070	583,816	1,860,052
Feb	360,900	4,170	686,222	2,025,360
Mar	364,400	3,580	1,015,132	2,192,313
Apr	356,400	2,510	1,117,468	2,415,666
May	366,400	2,740	1,253,650	2,345,429
June	352,300	2,130	1,882,285	2,746,656
Totals	6,856,500	61,450	15682592 26475087	26475087

Year

2016

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Chiller Operations South

July 111 July 111 Aug 164 Sept 181 Oct 0	Hrs. 1111 164 181 0 0	Hrs. Hrs. 111 111 111	Hrs.	UIIIIEI #3A		KWH	KWH	КWH	KWH
	× 1 4 7 0 0	Hrs.	Hrs.	Hrs	1				
	1 4 1 0 0	111			HLS.	480 V	4160 V	4160 V	Total KWH
	7 1 0 0	LCC	743	632	452	358.470	427.320	3 314 537	4 100 322
	1100	C82	493	685	678	313.290	345 160	3 890 807	A EAO 247
		209	2	719	719	195,600	OR FED	200'000'C	4,343,342 E 736 440
		0	0	631	530	121 750	5 210	2 616 710	044002/0
Nov	t	0	C	785	027	124 020	01210	21/0T0'C	2/0/27/0/2
						DCD,4C1	4,330	2,330,724	2,4/5,104
		Þ	0	23	735	146,480	4,640	2,459,260	2,610,380
Jan		0	0	697	287	145,980	4.550	2.663.188	2 813 718
Feb 0	_	0	0	672	33	131 860		2 170 570	2 24 5 120
Mar						20001121	0000	2,1/J,UZO	Ø/C'CTC'7
+		23	7	102	617	147,110	19,790	2,290,432	2,457,332
Apr 361	1	391	47.0	195	334	189,500	233,910	1,633,740	2.057.150
May 171	1	181	418	411	197	238.880	273,840	1 839 752	7357477
June 331	1	354	142	464	464	243,090	300.230	3.370.820	3 914 140
Totals 1,359	59	1,554	1,847	5,516	5.516		1 721 750	11	30 67E 6F0
						2-2/222/2	DC1(++1(+	000,100,700	0001070100

		_	7	-	-	-								
City	Water	2,110,082	1,940,462	1,789,814	1,086,620	2,056,028	1,989,680	2,277,660	2,079,590	2,303,840	1,142,196	66,497	316,928	19,159,395
CT	Make-up	1,675,030	1,423,392	1,577,953	953,470	585,591	598,678	598,514	488,396	596,382	1,041,350	1,368,744	1,842,943	12,750,443
CV	Make-up	13,600	7,110	3,840	4,400	8,620	2,800	4,930	5,920	10,170	3,960	4,080	2,170	71,600
Well	Water	159,500	174,000	0	0	0	0	185,000	0	0	0	1,324,900	1,630,100	3,473,500
		July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Мау	June	Totals

2013 .

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South Energy Boiler Operations

D = : = = 44								
boller #1	2	Natural	cu ft gas/	Fuel Oil	Gallons	Steam		Fuel on
	Hours	Gas	lb steam		Make-up	Generated	% Make_ In	hand
July	353	7469000	1.19		641.200.00	6 294 948 00		
Aug	732	16504000	1.20		1.456 300 00	13 807 579 00	00.00	2001
Sept					00:000/00:1-	00.0/0/0/07	c0.00	10007
Oct	732	18772000	1.20		1 675 800 00	15 108 022 00	500	JEOLO
Nov	576	13471000	1.10	6189	1.227 RDD	11 000 760	05.20	2000C2
Dec	738	17156000	1.20	40	698,600	14 385 386	00.00	27054
Jan					2001200	000/000/11	5	+CC/7
Feb								
Mar								
Apr								
May								
June								
Totals	3131	73372000		6229	5,699,700.00	61.681.594.00		

West Energy

Make-Un%	52%	4.20%	1802	0/ 0L	75.%	86%	86.0V	800%	7008	72%	5. %	18%	Make-Up%	65%	13%	10%	10%	64%	58%	103%	14 10%	¢	58%	44%	97%	Make-Up%	308%	INOP	INOP	INOP	INOP	INOP	INCIP	INOP	INOP	INOP	INOP	INOP
Boiler Feedwater gal.	972000	781600	979600	2010600	1661800	1455100	1344200	1102700	976300	1129700	770800	237500	Boiler Feedwater gal.		200300	124500	145000	928700	548700	299000	634900	559600	616000	616000	1670300	Boiler Feedwater gal.	1779900	1362300	919000	2452000	1574000	1266000	1544000	936000	1170000	1168000	1073000	416000
gal. Steam Generated Ibs.	15712952	15083350	17013008	22950008	18368284	14006665	13164555	10326006	10080765	13120110	12622714	10705361	Steam Generated Ibs.	18136567	12385802	10283296	11663001	12084268	7872771	4819308	3735842	Meter INOP	8809302	11714308	14309041	Steam Generated Ibs.	4822235	Meter INOP										
Fuel Oil	35	0	0	0	0	0	0	0	0	0	6332	14	Fuel Oil gal.	78453	20197	0	0	39	0	0	0	0	0	500	26	Fuel Oil gal.	18143	90015	0	0	0	0	0	0	0	4	236	0
Natural Gas C.F.	23119000	21126000	22945000	31026000	25555000	21404000	21220000	20987000	18019000	23572000	21933000	18679000	Natural Gas C.F.	18326000	19818000	21574000	15717000	20640000	15931000	9902000	11411000	16152000	17069000	18678000	34385000	Natural Gas C.F.	26226000	14377000	16942000	25911000	18187000	16933000	16138000	18167000	20442000	24605000	25933000	16167000
Total Hrs	614	691	764	816	748	724	751	875	710	906	899	760	Total Hrs	1093	879	857	721	757	720	460	479	698	743	719	1562	Total Hrs	1611	1626	9/6	1361	1380	1147	1159	1354	1419	1432	1449	955
Boiler 3 Hrs													Boiler 3 Hrs												233	Boiler 3 Hrs	627	810	240	170	485	447	401	451	553	684	695	383
Boiler 2 Hrs	50	55	160	647	233	4	17	131	20	162	179	15	Boller 2 Hrs	412	207	519	582	12	- () (0	0	0	0		S T S	/43	000	272	000	100	325	342	4/3	388	576	110	300
Year: 2013 Boiler 1 Hrs	010	636	604	169	515	/20	734	744	690	744	720		Boller 1 Hrs	001	7/0	338	139	/45	/19	400	4/9	090	/43	61/	_	S T S T	241	155	285	000	288	0/0	410	450	4/0	1/2	243	2002
Year: 2013	<u>rahuary</u>	repruary	INIarch	April	May	June	July	August	September	October	November		Tear.2014	Eabriant	Marah	INIAI CIT	April	INIBY	June		Soptember		October	November		rear.zurb	Fahrian	March	Anril	- Mark	Ividy	Julie		Sentember	Septernoer	Votober	December	necelliner

West Energy

January 611	570	January 611 670 400	1		ruel UII gal.	Steam Generated lbs.	Boiler Feedwater gal. Make-Up%
- IO	0/0	408	159/	24688000	46866		
151	442	344	1394	19527000	36688		732000
	220	380	1149	17256000	0		249000
6/C	298	518	1395	18106000	0		340000
455	446	588	1489	24410000	0		1518000
609	170	331	1110	16626000	0		864000
177	201	360	738	11383000	0		733000
254	421	246	921	15115000	193		740000
September							00000
Boiler 1 H	Hrs Boiler 2 Hrs	s Boiler 3 Hrs	Total Hrs	Natural Gas C.F.	Fuel Oil gal.	Steam Generated Ibs	Boiler Feedwater gal Make IIn%
							dal.
September							
Boiler 1 Hrs	rs Boiler 2 Hrs	Boiler 3 Hrs	Total Hrs	Natural Gas C.F.	Fuel Oil gal	Steam Generated the	Boiler Feedwater col Molec I 120/
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	1 CWCI VY AICI	112121	1274370	0314080	2074762	4031, 10	OF LCOF	3005/150	2065664	200001	1370310	900399	Tower Water	1604971	1563377	1865058	2212850	3399230	4193217	5033036	4635977	4113300	2555210	2298487	1666999	Tower Water	1462128	1423830	2195110	3167370	4316833	5767409	5561535	5118326	4084620	2478651	2180156	
Chi Motor					, ¢	433	507	230	100	130	0	21360	Chl Water	21740	582	468	172	1658	8080	540	640	6380	19280	56600	36730	Chl Water	53960	33070	39260	33915	35315	38441	26809	37410	82220	103640	75080	014040
Wall Water	1113700	1017800	1148900	1163700	1178400	1081200	1050100	1038000	1002800	1111400	1068700	662600	Well Water	1041500	1024600	1171700	1144800	1151500	1094000	1107900	1093100	1046500	1073700	1051200	1107100	Well Water	800700	0	966500	119300	1172400	1093700	1099100	1078800	1041300	847600	871900	1017000
Total Plant Water I	_	2094920	2608996	4553636	4901196	5721044	5992884	5257468	4274552	3636648	2472696	1158524	Total Plant Water	2553208	1591584	2247324	2690916	4626708	5013520	588368	5588580	4933108	3637096	3411888	3828324	Total Plant Water V	3779984	3084004	4102864	6015356	5994756	5916056	5921456	6246732	5485168	3789484	3524308	2422444
Total KWh	634200	617400	2787840	1280200	1580800	2038300	2273400	2101300	1510300	1138000	712500	546200	Total KWh	670100	803900	006606	1174200	1735000	2257000	2513900	2463800	2177500	1467500	1406200	1155100	otal KWh	1010900	868600	1353100	1736500	2182600	2765900	2634500	2486300	2075400	1307700	1182000	1212100
4160V KWh	556800	332800	424000	864000	1088000	1420800	1600000	1476800	1059200	798400	443200	326400	4160V KWh	400000	508800	596800	825600	1177600	1555200	1731200	1700800	1488000	937600	969600	723200	4160V KWh	644800	0009909	892800	1131200	1438400	1935800	1865600	1750400	1436800	860800	769600	760000
Total Hrs 480V KWh	77400	284600	2363840	416200	492800	617500	673400	624500	451100	339600	269300	219800	480V KWh	270100	295100	313100	348600	557400	701800	782700	763000	689500	529900	162100	431900	480V KWh	366100	303000	460300	605300	744200	833100	768900	/35900	638600	446900	412400	452100
	770	639	856	1239	1546	1678	2104	1968	1398	1056	808	632	I otal Hrs	801	930	1202	1195	1717	2289	2513	2359	1992	1255	1037		<u>د</u>	895	202	1044	1693	2119	253/	2533	2343	1907	1136	1106	1227
Chir4 Hrs	0	0	41	55	37	87	144	27	5	ω	41	3	Chir4 Hrs	22	40	13	86	63	251	453	301	189	0	2	33	Chir4 Hrs	24 24	107	0	4 2	797	020	302	2002	22	- ;	6/	/3
Chir3 Hrs	0	0	0	195	67	151	497	458	143	120	0			5	212	189	398	43/	610	5/3	500	605	25/	180	3/9	CIII S HIS	221	777	102	200	349	ROC	144	700	384	9.5	40	120
Chir1 Hrs Chir2 Hrs Chir3 Hrs Chir4 Hrs	191	275	161	447	719	720	735	739	559	184	302		5	400	012	700		070	60/	7.44	(40	4/9	/97	80			534	734	121	121	740	217	745	000	027	302	00	200
	579	364	654	542	693	/20	728	$\downarrow$		/44	465	4// Chl-4/11	201	20	040	040 000	022	190	RI /	743	140	AL/	141	120	1		185	601	716		710	CV2	C+2	710	E 1 /	7101	2007	400
Year: 2013	January	February	March	April	INIAY	aune	July	August	September	October	November	Voor 2011		Fahrian	March	Anril		l'inc	Julie		Contombor	Septernoer October	Octobel	December	Vear:2015		February	March	Anril	Mav	-line	VIII/	Aurist	Sentember	October	November	Doombor	necelliner

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728400         2907792         1034800         242           890500         2657680         967200         842           1473000         25944520         464400         718           1582400         3799484         438800         145           2046500         5491240         1018300         2485           2046500         6391240         1018300         2485           2055200         6341488         998300         12100           2750600         6399288         998300         12100           2750600         6399288         990500         5900           2750600         6399288         990500         5900           2750600         6399288         990500         5900           2750600         6399288         990500         5900           2750600         6399288         990500         5900           2750600         6399288         990500         5900           201         Total Plant Water         Well Water         Chi Water           1         Total Plant Water         Well Water         Chi Water           1         Total Flant Water         Well Water         Chi Water           1         Total Pl	Year: 2016 Chir1 Hrs Chir2 Hrs Chir3 Hrs Chir4 Hrs Total	Chir1 Hrs	Chir2 Hrs	Chlr3 Hrs	Chlr4 Hrs		Hrs 480V KWh	4160V KWh	Total KWh	Total Plant Water   Well Water	Well Water	Chl Mator	Towner White
Harty         T28         0.8         935         355500         565200         3667500         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200         367200	January	129	616	0	45	790	326800	4001600	728400	2907792	1034800		1020550
71         622         632         228         72         1540         963000         963200         1473000         716           741         669         67         73         616100         73600         173600         73600         716           720         671         382         529         730         17660         5491240         178300         2485           720         675         529         2306         737000         1985200         275600         6399288         986300         5900           151         723         731         621         451         2337700         1985200         2756600         6399288         996300         5900           161         723         741         621         451         2337700         1985200         2756600         6399288         996300         710           161         773         731         621         233         755600         6399288         996300         710           1700         1985200         2756600         6399288         996300         710           1701         74448         74448         74448         74448         74448           1710         74444 </td <td>rebruary</td> <td>661</td> <td>178</td> <td>0</td> <td>96</td> <td>935</td> <td>335300</td> <td>555200</td> <td>890500</td> <td>2657680</td> <td>967200</td> <td>842</td> <td>1468961</td>	rebruary	661	178	0	96	935	335300	555200	890500	2657680	967200	842	1468961
780         662         181         206         1730         476900         166200         378936         438600         145           720         675         382         523         77300         1393000         2465         37900         2465           721         731         621         431         2300         755400         1995200         53928         995300         7100           Rith         721         731         621         431         2300         755400         1995200         2750600         6393028         995300         7100           Rith         721         731         621         431         2300         755400         1995200         2750800         6393028         995500         7100           Rith         741         511         2330         755400         1995200         2750800         639328         995500         7100           Rith         741         511         230         755400         1995300         7100         745         710           Rith         741         511         741         7541         741         741         741         741         741           Rith         741	March	752	632	228	-72	1540	509800	963200	1473000	2964520	464400	718	2570504
141         699         87         222         1749         616100         1430400         2204500         5491240         1013300         2435           1730         731         821         529         2305         73100         139300         3780         3780           1741         821         631         2451         530         755400         159200         59020         3780           175         731         821         1451         2530         755400         1995200         641438         990500         5900           18         141         141         141         141         141         141         141         141         141         141         141         141         141         141         141         141         141         141         141         141         141         141         141         141         141         141         141         141         141         141         141         141         141         141         141         141         141         141         141         141         141         141         141         141         141         141         141         141         141         141         14	April	689	652	181	208	1730	476800	1105600	1582400	3799484	438800	145	2058805
1         720         675         382         529         2305         70300         195000         255200         62192         360200         3780           Rt         7/3         6/1         6/3         5/3         2405         73700         195100         639200         5780         100           Bernber         7/3         6/1         451         2530         755400         1937200         5392268         989300         100           Bernber         7/1         1         503         2405         737700         1935200         5392268         989300         1010           Bernber         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1	May	741	669	87	222	1749	616100	1430400	2046500	5491240	1018300	2485	2697660
743         744         415         603         2405         731700         131200         562500         6444485         983000         17100           Ber         727         731         621         451         2500         73100         136100         59000         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900         5900	June	720	675	382	529	2306	707800	1950400	2658200	6219192	080200		51001000
ist         727         731         621         451         2530         756400         1995200         590500         590500         590500         590500         590500         590500         590500         590500         590500         590500         590500         590500         590500         590500         590500         590500         590500         590500         590500         590500         590500         590500         590500         590500         590500         590500         590500         590500         590500         590500         590500         590500         590500         59000         59000         59000         59000         59000         59000         59000         59000         59000         59000         59000         59000         59000         59000         59000         59000         59000         59000         59000         59000         59000         59000         59000         59000         59000         59000         59000         59000         59000         59000         59000         59000         59000         59000         59000         59000         59000         59000         59000         59000         59000         59000         59000         590000         590000         590000	July	743	744	415	503	2405	731700	1931200	2662900	6444488	008300	10100	5727901
ember         entroper         entroper <t< td=""><td>August</td><td>727</td><td>731</td><td>621</td><td>451</td><td>2530</td><td>755400</td><td>1995200</td><td>2750600</td><td>6300788</td><td>000000</td><td></td><td>100/000</td></t<>	August	727	731	621	451	2530	755400	1995200	2750600	6300788	000000		100/000
Ber         Imber         I	September								1	0042200	000000	0080	0180083
mber         mber <th< td=""><td>October</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	October												
minder         minder<	November												
2017         Chirl Hris Chir3 Hris Chir3 Hris Total Hris Total Hris 480V KWh         4160V KWh         Total Rum         Weil Water         Chi Water         Ch													
aty         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i	_	Chlr1 Hrs	Chir2 Hrs	Chir3 Hrs	Chlr4 Hrs	Total Hrs	480V KWh	4160V KWh	Total KWh		Woll Wotor	Chi Motor	Town Viston
matrix         interfer         <	January												I OWEL VIAIEL
h         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i	February												
st	March												
ist         ist <td>April</td> <td></td> <td>- a a a</td>	April												- a a a
st	May												
st         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i	June												
stt         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i         i	July												lan a
Ember         Ember <th< td=""><td>August</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	August												
Der         Der         Imber         Der         Imber	September												
mber         mber <th< td=""><td>October</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	October												
mber         mber           2018         Chir1 His         Chir3 His         Chir4 His         480V KWh         4160V KWh         Total Flant Water         Well Water         Chi Water           2018         Chir3 His         Chir4 His         Total His         Chir4 His         7         7           2018         Chir4 His         Chir4 His         Chir4 His         Chir4 His         7         7           2019         Chir2 His         Chir4 His         Chir4 His         7         7         7           2017         Liny         Chir4 His         Chir4 His         7         7         7           2018         Chir4 His         Chir4 His         Chir4 His         7         7         7           2018         Chir4 His         Chir4 His         7         7         7         7           2019         Chir4 His         Chir4 His         7         7         7         7         7           2010         Chir4 His         Chir4 His         7         7         7         7         7           2011         His         2         7         7         7         7         7           2011         His         2	November												
2018       Chir1 Hrs       Chir3 Hrs       Chir4 Hrs       Total Hrs       480V KWh       4160V KWh       Total RWh       Total Plant Water       Well Water       Chi Water <td>December</td> <td></td> <td>1.000</td>	December												1.000
IIIV		Hrs	Chir2 Hrs		Chir4 Hrs		480V KWh		Total KWh		Mol Mator		
February         February           March         March           March         March           April         April           May         Intervice           July         Intervice           July         August           November         Intervice           Dictober         Intervice           Dictober         Intervice           Dictober         Intervice           Dictober         Intervice           Dictober         Intervice           Dictober         Intervice           Intervice <td>January</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>_</td> <td></td> <td></td> <td></td> <td>_</td> <td>I OWEL Water</td>	January							_				_	I OWEL Water
March         March <th< td=""><td>February</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	February												
April         April           May         May           June         June           June         June           Jurie         June	March												
May         May           June         June           Juny         V           July         V           July <t< td=""><td>April</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	April												
June       July	May												
July       July       July       July         August       August       July       July         August       July       July       July         September       July       July       July         October       July       July       July       July         November       July       July       July       July         December       July       July       July       July	June												
August       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I <td>July</td> <td></td>	July												
September       September         October       Image: September         October       Image: September         November       Image: September         December       Image: September	August												
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# West Energy Monthly Operating Report

	Sec. Pump C 70520 72 72	4 76898780 76793497 105283	421171	Feedwater to Boiler 791491 773618 17873 100 1787300
Chir4 4160V KWh Meter 3038 3015 23 1600 36800	Sec. Pump B S 79016 78417 599 1381	rs 3 84174030 83939180 234850 234850	Misc. Water Usage	Condensate F Return to DA 268795 255533 13262 100 1326200
V         Back 4160V           ter         KWh Meter           4602         4602           4376         226           3200         723200           1212100         723200	Sec.Pump A 108637 107927 710	Tower Water Meters           2           62650100           61654800           995300           2044933	Misc. V	Previous Difference Constant Total
Side 480V KWh Meter 9262 9033 229 229 45800 45800	Chiller #4 76082 76009 73	Tov 1B 5107800 5106900 900	KWh Meter 41406	40651 755 ler systems.
Front 480V KWh Meter 145931 141868 4063 4063 406300	Chiller #3 109628 109508 120 27	1A 47793700 47085100 708600	4 33950 34459800 34459800	30900         155100         327000         54228300         40651           30900         155100         327000         231500         755           186000         327000         231500         755           Comments:         Installed to accurately measure the boiler systems.
ter Well Water Meter 0 41304800 0 40287000 0 1017800 1017800 3133144	Chiller #2 70741 70173 568 1227	Today Last Month Consumption Total		to accurately m
City Wai Meter 524380 496100 282800 7.48 211534	Chiller #1 83370 82904 466		2B 36899 36899 36899 City Water 2 13872600	155100 155100 000 wice' installed (
C.W. Tank Water Meter 9822590 9571550 251040 1 251040 7 70tal	Boiler #3 6345 5962 383	Boiler #3	2A 10918 City Water 1 5594100	30900 30900 186000 Comments: No metering devic
Soft Water Makeup Meter 12518000 12518000 12518000 416000 416000 416000	Boiler #2 6676 6310 366 955	Boiler #2 0 cf/lb	1B 40977 40977 40977 45456 45456	otal
Natural Gas Meter 25826456 16167 16167 16167 16167000	Boiler #1 3425 3219 206	Boiler #1 #DIV/0! 0 #DIV/0!	1A 44484 50675 5075	454 454 18307 18307 18298 18298 18298 0 0
Reading Date: 1/1/16 Reading Last Month Difference Meter Constant Consumption	Hour Meter Today Hour Meter Last Month Hours Operated Total Hours Operated	Monthly Steam Total Total Steam generated Total CF Gas/Total Steam Total Steam / 8.345= % Make-up	Chiller Purge hours	Consumption Fuel Oil Previous Month Received Past Month Total Oil Inventory This Month Oil Used

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# West Energy Monthly Operating Report

	Sec. Pump C 72455 71831 624	4 80278624 79160716 1117908	461587		Feedwater to Boiler 945193 932956 12237 100 1223700
Chir4 4160V KWh Meter 3771 3528 243 1600 388800	Sec.Pump B 8 82464 82460 4 1372 1372	ers 3 86506113 85688120 817993	Misc. Water Usage		Condensate Return to DA 355956 348131 7825 100 782500
OV         Back 4160V           iter         KWh Meter           6841         6841           6359         482           482         482           3200         1542400           2662900         2662900	Sec.Pump A 113673 112929 744	Tower Water Meters           2           71100100           8           69503100           1597000           5237801	Misc.		Today Previous Difference Constant Total
Side 480V KWh Meter 1300 718 582 582 582 200 116400 266	Chiller #4 77613 7710 503	To 1B 6504000 5625200 878800		KWh Meter 2726 1112 1220	ler systems.
Front 480V KWh Meter 178898 172745 6153 6153 6153 615300	Chiller #3 110921 110506 415 2405	1A 54514400 53688300 826100	4 34195	CT blowdown 36952000 36326200 625800	Comments: No metering device' installed to accurately measure the boiler systems.
ter Well Water Meter Meter 0 48319300 0 47321000 998300 1 8 998300 6444488	Chiller #2 74937 74193 744 24	Today Last Month Consumption Total	3 49582	Well Water ( 64084000 63614000 470000	to accurately m
City Water Meter 1744200 1016100 728100 7.48 5446188 6444	Chiller #1 87805 87062 743		2B 36932	North Energy City Water 2 15284400 14866000 418400 418400 400	vice' installed t
C.W. Tank Water Meter 10076600 10064500 12100 12100 12100 7otal	Boiler #3 9284 8924 360	Boiler #3	2A 10922	City Water 1         City 5868400         1           5793400         1         75000         493400	Comments: No metering de
Soft Water Makeup Meter 18242000 17509000 733000 733000 733000	Boiler #2 3206 3005 201 738	Boiler #2 0 cf/lb	1B 6.3	Chiller 2 Hrs. 49464 48724 740 Total	
Natural Gas Meter 2714619 2703236 11383 1000 11383000	Boiler #1 6925 6748 177	Boiler #1 #DIV/0! 0 #DIV/0!	1A 802	Chiller 1 Hrs. 55739 54998 741	Tank #1 18350 0 18410 18410 0
Reading Date: 8/1/16 Reading Last Month Difference Meter Constant Consumption	Hour Meter Today Hour Meter Last Month Hours Operated Total Hours Operated	Monthly Steam Total Total Steam generated Total CF Gas/Total Steam Total Steam / 8.345= % Make-up	Chiller Purge hours	Today Last Month Consumption	Fuel Oil Previous Month Received Past Month Total Oil Inventory This Month Oil Used

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# West Energy Monthly Operating Report

0V Chir4 4160V er KWh Meter		3771	237	1600				A Sec.Pump B Sec.Pump C		4 7	128 736	1512	Actors		3 4 8777765 01200070	0/14/10L REFORT	1241647		Misc. Water Usage 443495									363061	355956	ce 7105 16033	710500 16
Back 4160V KWh Meter	7346	6841	505	3200	1616000	2750600		Sec.Pump	114321	113673	648		Tower Motor Motore		77540600	71100100	1449500	5190893	Σ									Today	Previous	Constant	Total
Side 480V KWh Meter	2096	1300	796	200	159200	275		Chiller #4	78064	77613	451	The second s	F		6974600	6504000	470600						KWh Meter	4422	2726	1220			ller systems.		
Front 480V KWh Meter	184860	178898	5962	100	596200			Chiller #3	111542	110921	621	20		4 4	55523100	54514400	1008700		4	34203			CT blowdown	37540700	36952000	588700		-	easure the boi		
Well Water Meter	49309800	48319300	990500	-	990500	1288		Chiller #2	75668	704	/31	0562			Todav	Last Month	Consumption	Total	e	49599	-		Well Water 0	64554800	64084000	470800			o accurately m		
City Water Meter	2467300	1744200	723100	7.48	5408788	6399288		Chiller #1	88532	3/8/8	171								2B	36934		<b>North Energy</b>	City Water 2	15686800	15284400	402400	00	a halladadi laaliy	vice installed t		
U.W. Iank Water Meter	10082500	10076600	5900	-	5900	Total		Boiler #3	9530	9284	240		Boiler #3						2A	10922			-	5940200	5868400	71800	474200	Comments: No motoring do	IND INTELEMING DEVICE INSTAILED TO ACCURATELY MEASURE THE DOILER SYSTEMS.		
Soft vvater Makeup Meter	19001000	18242000	759000	-	759000			Boiler #2	3627	3200	144	170	Boiler #2		0	cf/lb		the second second	<del>1</del> 8	22	No. Contraction		Chiller 2 Hrs.	50206	49464	742	Total				
Meter	2729734	2714619	15115	1000	15115000		100 - Mar	Boiler #1	6/1/ 6075	0320	107	the other that	Boiler #1			#DIV/0!	0	:0/NIC#	1A 240	812			Chiller 1 Hrs.	56482	55739	743		Tank #1 18410		18217	18217
	Reading Date: 9/1/16	Reading Last Month	Difference	Meter Constant	Consumption				Hour Meter Loday	HOULING CLAST MUTLIN	Total Hours Operated		3	Monthly Steam Total	Total Steam generated	Total CF Gas/Total Steam	Total Steam / 8.345=	% Make-up				1		loday		Consumption	and the second s	Fuel Oil Previous Month	Received Past Month	Total Oil Inventory	This Month

West Energy

January 611			AOK	-1			Steam Generated Ibs.	er gal.	Make-Up%
	608	010	344	1901	24688000	46866		1288000	
-	461	298	390	1140	17756000	30088		732000	
	579	298	518	1395	18106000			249000	
	455	446	588	1489	24410000	0		340000 1518000	
	609	170	331	1110	16626000	0		864000	
	177	201	360	738	11383000	0		733000	. 80
	254	421	246	921	15115000	193		750000	
September								00086	
October									
November									
December									
Year:2017 Boiler	1 Hrs	<b>Boiler 2 Hrs</b>	Boiler 3 Hrs	Total Hrs	Natural Gas C.F.	Fuel Oil gal.	Steam Generated Ibs		Make Ino/
January							2	dai.	202
February									
August									
September									- 10
October									
November									1
December									
Year:2018 Boiler 1	Hrs	<b>Boiler 2 Hrs</b>	Boiler 3 Hrs	Total Hrs	Natural Gas C F	Fuel Oil gal	Steam Generated Ihe		/0-
January							orvani ocilciaca no.	DUIGI LECUWALEI YAI. IMAKE-I	%d
February									
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September									
October									
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Year: 2016	Chlr1 Hrs	Chir2 Hrs	Year: 2016 Chir1 Hrs Chir2 Hrs Chir3 Hrs Chir4 Hrs Total	Chlr4 Hrs	Hrs	480V KWh	4160V KWh	Total KWh	Total Plant Water	Well Water	Chl Water	Tower Water
January	129	616	0	45	790	326800	4001600	728400		1034800	233940	1232550
February	661	178	0	96	935	335300	555200	890500	2657680	967200	842	1468961
March	752	632	228	-72	1540	509800	963200	1473000	2964520	464400	718	2570594
April	689	652	181	208	1730	476800	1105600	1582400	3799484	438800	145	2958835
May	741	669	87	222	1749	616100	1430400	2046500	5491240	1018300	2485	3687550
June	720	675	382	529	2306	707800	1950400	2658200	6219192	980200	3780	5122476
July	743	744	415	503	2405	731700	1931200	2662900	6444488	998300	12100	5237801
August	727	731	621	451	2530	755400	1995200	2750600	6399288	990500	5900	5190893
September												
October												
November												
December												
Year:2017	Chlr1 Hrs	Chir2 Hrs	Chir2 Hrs Chir3 Hrs	Chir4 Hrs	Total Hrs	480V KWh	4160V KWh	Total KWh	Total Plant Water	Well Water	Chl Water	Towar Water
January												100001 436101
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Year:2018	Chlr1 Hrs	Chlr2 Hrs	Chir3 Hrs Chir4 Hrs		Total Hrs	480V KWh	4160V KWh	Total KWh	Total Plant Water	Well Water	Chl Water	Chl Water Towar Mater
January										אאמום אאמום		
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37,582,000 197,542 000 250,791,000 60,926,000 13,854,855 99,034,000 57,473,985 11,446,206 26,813,304 40,784,550 6,600,500 9,170,500 3,419,430 7,192.6 ) 1,573,998 1,209,600 579,870 15.308 3,810 13,523 2,526,240 5,036 Totals Yearly 0.59 16.743 4844 5164 6,562 5,796 4,385 221,97% 3186 412: 5060 5115 315 2781 462 12,055,000 1,605,000 32,339,325 18,146,000 1,684,000 8,766,000 1,425,408 1,107,694 4,017,615 1,229,300 3,223,845 181,440 145,920 799,300 1,505 87,551 13,803 871,900 226,459 327,360 Jun 0.99 112 -304 12.509 425 452 662 425 3229 1,290 989 486 693 484 427 248 419 623 52 10,575,000 14,045,000 2,279,910 20,129,000 21,148,000 16,966,000 2,343,000 620,590 1,671,860 3,734,430 578,000 2,579,290 801,100 209,324 955,400 1,246 1.249 64,556 132,000 155,040 May 3,300 23,040 0.82 12.576 349 152 745 1,512 112 744 389 1 2 723 722 2,581 24 744 0 0 3,995,000 16,096,000 1,526,000 1,565,484 2,198,552 1,490,823 3,033,960 2,120,890 868,000 162,569 106,560 146,880 408,100 196,000 ,005 42,417 Apr 1.251 0.81 2.278 25,967 1 434 40,320 7,666 283 263 153 152 691 541 181 702 295 656 483 311 80 9 2,844,000 6,579,000 18,807,000 9,004,000 23,344,000 2,430,173 3,224,000 2,532,686 1,740,952 376,200 ,240,111 375,100 733,300 133,860 189,631 299,180 1,211 1.241 39,750 120,960 61,440 182,400 Mar 415 335 360 0.77 335 110 293 206 267 143 1,075 8.825 746 329 461 2 9 0 3,235,000 11,623,000 23,539,000 2,284,297 17,399,000 18,640,000 18,889,000 1,863,000 13,012,000 4,422,000 2,563,282 1,707,472 639,100 58,560 163,200 1.213 1.246 434,300 64,300 251,228 984,735 Feb 234,907 40,010 191,180 104,640 0.75 573 192 448 175 106 428 286 73 53 172 1,191 668 214 882 4 0 2,393,000 23,465,000 2,561,472 917,383 1 259 1,279,469 2,763,420 809,700 498,259 65,280 189,120 585,000 437,900 249.178 Jan 1,230 68,309 123,840 365 719 0.41 7,391 146 455 380 403 319 ,588 1,062 744 49 269 87 2 2 2 14,470,000 21,932,000 1,066,000 2,373,782 870,653 1.221,206 2,477,535 171,589 762,100 329,386 183,600 303,700 562,317 168,480 56,290 Dec 97,920 1,111 1.261 70.560 694 58 359 0.42 221 1,415 1,154 8.354 262 65 331 307 745 408 51 7,297,000 14,503,000 16,710,000 17,056,000 21,416,000 2,553,000 2,277,760 234,506 172,173 1,209,979 2,333,820 736,500 839,300 265,469 116,160 63,360 179,520 812,697 Nov 1.256 1,163 66.800 45,675 721 0.40 1,476 7.047 579 555 123 123 1 242 666 433 143 0 58 0 85 38 2,608,000 21,322,000 2,254,916 6,805,000 875,313 2,113,940 3,395,355 878,200 359,113 988,200 913,068 1,199 1.276 143,200 101,280 188,640 87,360 69,472 46,313 0.44 0 0 0 401 454 106 630 405 2,208 1,520 344 7,678 627 737 401 39 67 40 10,979,000 14,052,000 2,495,000 17,860,000 578,000 1,976,408 1,106,000 1,665,610 3,083,925 784,667 4,238,700 307,600 854,300 135,320 228,480 Sept 49,130 4,715 320,978 92,160 27,862 1.271 0.47 710 576 240 880 3,057 4 219 232 711 701 1,631 721 720 190 N 5,977,000 15,991,000 19,992,000 2,174,500 8,222,000 1,792,000 815,898 1,069,200 1,603,136 3,662,991 4,889,063 544,800 359,436 953,500 184,320 383,040 Aug 1,106 1.250 37,155 198,720 50,828 0.43 3,682 348 532 226 725 20 36,671 734 734 725 744 0 486 744 741 1,971 C 4,881,000 9,422,000 1,904,000 18,498,000 3,555,000 1,941,392 1,800,212 1,112,000 4,092,923 222,111 5,186,182 667,068 191,040 214,080 958,600 568,700 363,402 23,040 July 190 1.243 3,746 62,789 73.807 228 520 442 0.37 732 734 726 723 724 482 744 1,970 107 0 c Boiler Feed water Totals Chiller Hour Meter Totals Sec Chill Water pump #1 -bs. Corrected Steam/8.345 Sec Chill Water pump #1 Sec Chill Water pump #1 Sec Chill Water Pump Totals Boiler #1 Steam Totals Boiler #2 Steam Totals Boiler #3 Steam Totals Boiler Soft water totals Chiller 2-A Hour Meter Chiller 2-B Hour Meter **Fower #1 Water Meter** Chiller 1-A Hour Meter Chiller 1-B Hour Meter Chiller 3-A Hour Meter Chiller 3-B Hour Meter **Fower #2 Water Meter** ower #3 Water Meter otal 480V KWH Meter ower #4 Water Meter Boiler Steam Totals Chiller 4 Hour Meter Chill water make up Natural Gas Totals Back 480 volt KWH ower water totals Front 480 volt KWH Biomass KW Meter **Diesel Fuel totals** Boiler Hour Totals Misc. Water Used Well Water Meter Boiler #1 Hours Boiler #2 Hours Boiler #3 Hours City Water Meter % Make Up

East Energy Plant - 2013 Fiscal Year

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Monthly Averages 420 318 390 1,127	8,252,833 5,077,167 3,131,833 16,461,833	4,789,499 1,154,571 1.276 0.59 20,899,250 39	265.50
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39 265,50 344 422 404 430 430 26,25 2317,58 550,042 550,042 559,383 953,851 131,167 2,234,442 2,234,442 483 483	00 2 2 00	210.520
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C04,900	100,800	109,720	210,520	18,498	

631 501 610 418 443 283 554 597 328 358 358 1,529 1,416 1,600 7,484,000 7,484,000 7,486,000 0 5,262,000 9,196,000 19,978,000 7,486,000 7,873,000 0 5,262,000 9,196,000 7,486,000 7,486,000 7,873,000 0 2,5262,000 9,196,000 7,487,000 17,730,00 1,847,000 0 2,5262,000 9,196,000 7,487,000 19,470,00 19,470,00 0 2,631,329 1,783,730 17,330,30 17,387,74 1,394,680 0 2,633,460 2,831,329 1,785,774 1,394,680 1046 13 2,659,465 2,631,329 1,785,774 1,394,680 1046 13 2,659,465 1,046 1,046 1046 1046 13 2,659,460 2,831,329 1,785,774 1,394,680 1041,000 13,200 12,055 1,7		July	Aug	Sept	Oct	Νον	Dec	Jan	Feb	Mar	Anr	May	-	Yeany
0 0 0 0 10 110 120	Boiler #1 Hours	0	0	0	0	38	574	631	501	610	140	6 m		Totals
0 0 0 0 100 1730 1418 1000 14180 1480	Boiler #2 Hours	0	0	0	0	318	265	293	534	507	0 0 0	440		3,215
0 0 0 1	Boller #3 Hours	0	0	0	0	720	941	605	381	393	422	122		2,693
0 0 0 0 713,000 1,134,500 7,430,00 7,430,00 7,440,00 <	BOILET HOULT LOTAIS	0	0	0	0	1,076	1,780	1,529	1,416	1,600	1,168	924	0	9,493
0 0	Boiler #1 Steam Totals	0	0	0	0	473,000	6 105.000	10.828.000	11 396 000	11 078 000	000 101 2	000 007 1		
0 0 0 0 0 5/5/500 5/5/500 5/57500 5/57500 5/57500 5/57500 5/57500 5/57500 5/57500 5/57500 5/57500 5/57500 5/57500 5/57500 5/57500 5/57500 5/57500 5/57500 5/57500 5/57500 7/5600	Boiler #2 Steam Totals	0	0	0	0	0	4.707.000	5 262 000	9 196 000	10 469 000	1 500 000	7 072 000		55,742,000
0 0 0 0 6 51,000 28,37,000 73,35,000 71,35,000	Boller #3 Steam Totals	0	0	0	0	5,678,000	9,619,000	12,537,000	6,905,000	6.628 000	5 266 000	1 847 000		42,097 000
1 1,044,002 0 349 1,134,582 1,383,590 1,383,590 1,383,546 2,283,466 2,393,53 1,381,74 1,381,74 1,381,74 1,381,76 0,381,700 1,381,76 0,381,700 0,381,7100 0,381,7100 0,381,7100	boller Steam Totals	0	0	0	0	6,151,000	20,431,000	28,627,000	27,497,000	29,075,000	17,350,000	17,188,000	0	146,315 000
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6. 0.000 0.	Boiler Soft water totals	764,422	0	0	0	1 319 444	1 903 412	2 660 405	047,000,1	1,301,207	1,208,493	986,790		11,559,245
0.00 0.00 <th< td=""><td>Lbs. Corrected Steam/8 345</td><td>0.000</td><td>0.000</td><td>0.000</td><td>0.000</td><td>737.088</td><td>1 208</td><td>2,003,400</td><td>1 000</td><td>2,031,329</td><td>1,/85,/74</td><td>1,394,680</td><td></td><td>15,287,507</td></th<>	Lbs. Corrected Steam/8 345	0.000	0.000	0.000	0.000	737.088	1 208	2,003,400	1 000	2,031,329	1,/85,/74	1,394,680		15,287,507
9,642,000 0 0 0,643,000 24,361,00 36,036,00 36,361,00 36,036,00 36,361,00 36,036,00 36,361,00 36,036,00 36,361,00	% Make Up	00.00	0.00	0.00	0.00	C	78.00	78.00	00.08	007	1.233	1.048		737,094 632
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Natural Gas Totals	9,642,000	0	0	0	18.993.000	24.674.000	22 598 000	29 951 000	25 020 000	0.00	0.68		23.79
6/1 561 324 373 0 0 10 100 703 743 547 349 565 203 216 76 132 715 557 735 554 557 716 733 541 347 565 203 201 755 554 655 476 665 697 716 541 655 713 659 673 713 653 657 716 657 716 657 716 673 701 703 713 653 657 716 653 301 0	Diesel Fuel totals	26	37	4	-53	409	-121	75.684	19.808	00000	441,000	16,014,000		181,342,000
671 531 324 373 0 0 21 1 220 706 743 547 407 555 107 763 107 743 743 547 347 565 203 211 76 192 175 555 557 553 557 571 556 570 743 559 511 50 743 559 511 50 743 556 517 50 743 556 517 50 743 556 517 50 743 556 516 517 50 743 50 743 565 517 50 743 516 50 743 516 516 516 516 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>,</td> <td>-</td> <td>></td> <td></td> <td>181,08</td>										,	-	>		181,08
517 407 289 107 0 0 100 103 113	Chiller 1-A Hour Meter	671	591	324	373	0	c	24	T	000	001			
542 349 565 203 216 78 193 127 175 657 716 713 684 695 713 693 714 771 655 647 0 0 0 684 695 713 633 693 714 17.13 655 444 0 0 0 76 343 3.044 3.067 553 655 444 0	Chiller 1-B Hour Meter	517	407	289	107	0		5 C	- 0	100	100	(43		3652
541 347 563 203 710 716 193 171 175 565 716 684 695 713 699 614 727 554 655 476 0	Chiller 2-A Hour Meter	542	349	565	203	216	70	100	0	160	202	743		293(
684 665 713 659 614 727 553 655 464 0 0 0 844 695 713 669 679 707 553 655 464 0	Chiller 2-B Hour Meter	541	347	563	203	2013	10	100	121	c/L	567	716		3731
664 655 1/3 693 673 7/1 559 476 0	Chiller 3-A Hour Meter	684	695	713	600	544	0/	192	121	164	565	697		3670
4 0	Chiller 3-B Hour Meter	684	695	713	680	670	121	554	655	476	0	0		5817
15 3.64 3.167 2.274 1.710 1.583 1.513 1.559 1.741 2.589 3.101 0 1011/700 1.082006 639.500 577.100 577.100 21633 1.513 1.559 1.741 2.589 3.101 0 843.170 577.100 577.100 577.100 21630 3367.600 137.400 144.4900 1574.300 9541 4.8 0 21838 1.5571 216373 281.77 145.60 $216.335.600$ $133.66.60$ 1289.800 1574.300 9541 4.8 0 254.148 $1.335.44$ $92.442.726$ $1.261.900$ 216.600 216.350 214.7272 28.900 59.905 95.905 95.905 95.905 95.905 95.905 95.905 95.905 95.905 95.905 95.905 95.905 95.905 95.905 95.905 95.905 95.905 95.905 95.955 95.955 <	Chiller 4 Hour Meter	4	0	2	600	6/0	102	503	655	464	0	0		5835
-1011/700 -1001 $-1/61$ $-1/10$ 1.583 1.513 1.513 1.513 1.741 2.589 3.101 0 1011700 1052000 $637/00$ 774100 1.36731 1.3600 25.300 13500 477900 1.7413000 1.7413000 1.7413000 1.7413000 1.7413000 1.7417200 3.89173000 0.0000000000000000000 $1.71130000000000000000000000000000000000$	Chiller Hour Meter Totals	3642	2 004	2 407		5	0	0	0	82	42	202		330
		25	2,004	701 °C	2,2/4	1,710	1,588	1,513	1,559	1,741	2,589	3,101	0	2596
843.300 609.900 670.400 579.100 261.300 98.000 276.400 1774 176.700 176.700 1774.900 176.700	Tower #1 Water Meter	1,011,700	1,052,000	639,700	474,100	100	13.600	25.300	13.500	477 900	1 444 000	1 674 200		
1,632,652 1,703,720 2,152,760 1,561,031 1,050,239 733,947 166 5,000 9,541 46 0 21,633 133,645 0 7,174 126,850 61,061 383,165 5,000 9,541 48 0 21,633 15,571 21,613 3,34,65 9,2442 1,213,913 1,555,097 2,442,729 3,359,073 0 14,245 13,280 20,978 15,571 21,673 28,127 13,556 20,399 21,306 53,953 740 76 14,245 13,280 20,978 15,571 21,673 28,127 13,556 20,399 21,306 730 740 743 740 743 740 743 743 745 750 746 720 743 743 745 746 730 743 740 743 745 746 745 740 745 746 745 746 745 746 745 746 745	I ower #2 Water Meter	843,300	609,900	670,400	579,100	261,300	98,000	222,600	143 000	216.400	036 600	1 260 000	an series of	CU1,121,0
9,541 48 0 $21,836$ $182,660$ $133,465$ 0 $7,174$ $126,850$ $61,061$ $390,65$ $3,497,193$ $3,365,666$ $3,462,860$ $2,642,350$ $1,534,148$ $1,335,544$ $92,442$ $1,26,850$ $61,061$ $390,65$ $3,239,073$ 0 $14,245$ $13,280$ $20,976$ $15,574$ $21,673$ $228,127$ $13,656$ $2,427,229$ $3,239,073$ 0 $14,245$ $13,280$ 2697 $2,42,729$ $3,239,073$ 0 730 $28,722$ $28,722$ $28,742,729$ $3,239,073$ 0 14 719 76 410 687 722 744 $1,366$ 740 $29,72$ 742 $28,937$ 0	I ower #3 Water Meter	1,632,652	1,703,720	2,152,760	1,567,312	1,090,068	1.084 475	744 542	1 050 239	733 017	160	1,203,000		1 4'0C8'C
3.497,193 3.365,668 3.462,860 2,642,350 1,535,544 992,442 1,213,913 1,555,097 2,442,729 3,239,073 0 14,245 13,280 20,978 15,571 21,673 28,127 13,655,097 2,442,729 3,290,73 0 14,245 13,280 20,978 15,571 21,673 28,127 13,655 97 2,442,729 3,290,73 0 14 719 76 410 687 722 744 1 360 659 3,03 203 3	I ower #4 Water Meter	9,541	48	0	21,838	182,680	139,469	0	7.174	126.850	61 061	3,000		11, /65,691
14,245 13,280 20 978 15,571 $21,673$ $28,127$ 13,656 $20,399$ $21,306$ $8,772$ $28,953$ $70,050$ $730,050$ 737 719 719 76 410 687 722 744 1 360 659 30 203	I ower water totals	3,497,193	3,365,668	3,462,860	2,642,350	1,534,148	1,335,544	992.442	1 213.913	1 555 097	2 447 729	3 230 073	c	0201,040 75 204 64 7
113 716 410 687 722 744 1 360 659 30 203 11 128 719 737 719 46 0 743 312 54 536 740 11 537 719 544 39 415 381 355 308 356 740 743 16 1,384 1,514 1,691 1,445 1,125 1,099 980 1,069 1,386 740 743 3567.600 791,500 367,000 3,951,000 3,951,000 4,325,000 3,660,000 743 743 743 367.600 791,300 887,600 3,247,500 3,667,000 3,660,000 4,68,800 668,800	Chill water make up	14,245	13,280	20,978	15,571	21,673	28,127	13,656	20,399	21.306	8.772	28.953		20,101,102,02
(13) (10) 410 687 722 744 1 360 559 30 203 203 203 203 203 203 203 203 203 203 203 740 <th< td=""><td>Sar Chill Mater summe 44</td><td>071</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td><td></td><td>apala</td><td></td><td>FD0:007</td></th<>	Sar Chill Mater summe 44	071								-		apala		FD0:007
11287197377194607433125463674015377195443941538135530835672074315371,5141,6911,4451,1831,1251,0999801,0691,68603,678,5482,977,0952,986,2531,761,0002,460,7503,247,5003,867,0003,951,0004,326,0004,000,500887,600791,300993,300875,300883,10001220,0000000270,388389,447495,015-21,621458,185-19,584293,71774,9681,333,00663,325295,494827,60081,60081,600984046,08024,000000000270,388389,447495,015-21,621 35185 -19,584293,71774,9681,333,00666,00082,56062,40081,600984046,08024,00020,16041,16091,200146,88016,3680132,960136,800101,76073,92072,90072,00071,04079,680107,04016,06418,55513,30816,28915,52672,90092,160107,04091,07,04071,94016,064195,560218,400119,4696,00095,16071,94070,040107,04071,94016,06418,55513,30816,28915,	Coc Chill Water pullip #1	212	9/	410	687	722	744	T	360	659	30	203		A 611 1
1 33/ 719 544 39 415 361 355 308 356 720 743 743 Is 1,384 1,514 1,691 1,445 1,183 1,125 1,099 980 1,069 1,686 0 3,678,548 2,977,095 2,986,253 1,761,000 2,460,750 3,247,500 3,857,000 3,951,000 4,326,000 4,000,500 1	Sec Chill Water pump #1	128	719	737	719	46	0	743	312	54	636	740		1834
1,384 1,514 1,691 1,445 1,183 1,125 1,099 980 1,069 1,386 1,686 0 3,678,548 2,977,095 2,986,253 1,761,000 2,460,750 3,247,500 3,857,000 3,951,000 4,326,000 4,000,500 1 0		100	ALA	544	39 1	415	381	355	308	356	720	743		5 117
3.678 548 2.977,095 2.986,253 1.761,000 2.460,750 3.247,500 3.867,000 3.951,000 3.660,000 4,000,500 966,000 91,46 91,71 74,968 1,333,006 63,325 295,494 91 91 91 91 91 91 91 91 91 91 91 91 91 91 91 91 91	Sec Crimi Water Pump Lotals	1,384	1,514	1,691	1,445	1,183	1,125	1,099	980	1,069	1,386	1.685	0	14,56.7
887,600 791,300 993,300 875,300 883,100 0 120,000 0	City Water Meter	3,678,548	2,977,095	2,986,253	1,761,000	2,460,750	3.247.500	3.867.000	3 951 000	4 326 000	3 660 000	4 000 E00		00011000
270,388 389,447 495,015 -21,621 458,185 -19,584 299,717 74,968 1,333,006 63,325 295,494 82,560 62,400 81,600 48,000 99,840 46,080 24,000 20,160 44,160 91,200 146,880 163,680 132,960 136,800 101,760 73,920 72,000 72,000 71,040 79,680 107,040 246,240 195,360 101,760 73,920 72,000 72,000 71,040 79,680 107,040 16,064 18,663 13,308 16,289 15,526 16,371 22,345 25,370 29,508 21,337 24,387	weil water Meter	887,600	791,300	993,300	875,300	883,100	0	120.000	C		640 000	1,000,000		060'CL6'02
82,560 62,400 81,600 48,000 99,840 46,080 24,000 20,160 44,160 91,200 146,880 163,680 132,960 136,800 101,760 73,920 72,960 72,000 71,040 79,680 107,040 246,240 195,360 149,760 119,040 95,000 92,160 110,7040 253,920 0 16,064 18,663 16,289 15,526 16,371 22,345 25,370 29,508 21,337 0	MISC Water Used	270,388	389,447	495,015	-21,621	458,185	-19,584	299,717	74.968	1.393.006	63 375	205,000		0,165,400
82,560 62,400 81,600 48,000 99,840 46,080 24,000 20,160 44,160 91,200 146,880 163,680 132,960 136,800 101,760 73,920 72,960 72,000 71,040 79,680 107,040 246,240 195,360 218,400 149,760 119,040 95,000 92,160 115,200 107,040 107,040 16.064 18,663 13,308 16,289 15,526 16,371 22,345 25,370 29,508 23,555 21,387	1									-	240500	+0+'004		0,030,050
163,680 132,960 136,800 101,760 73,920 72,960 72,000 71,040 79,680 107,040 246,240 195,360 218,400 149,760 173,760 119,040 96,000 92,160 115,200 107,040 253,920 0 16,064 18,663 13,308 16,289 15,526 16,371 22,345 25,370 29,508 23,655 21,387	Front 480 volt KWH	82,560	62,400	81,600	48,000	99,840	46,080	24,000	20,160	44.160	91.200	146 880		746 000
246.240 195,360 218,400 149,760 173,760 119,040 96,000 92,160 115,200 170,880 253,920 0 16,064 18,663 13,308 16,289 15,526 16,371 22,345 25,370 29,508 23,655 21,387	Dack 400 VOIL NVM	163,680	132,960	136,800	101,760	73,920	72,960	72.000	72.000	71 040	70 680	107 040		1 002 040
r 16,064 18,663 13,308 16,289 15,526 16,371 22,345 25,370 29,508 23,655 21,387	TULAI 400V KVVH METER	246,240	195,360	218,400	149,760	173,760	119,040	96,000	92,160	115.200 1	170.880	253.920		1,000,040
	biomass KVV Ivieter	16.064	18,663	13,308	16,289	15,526	16,371	22,345	25.370	29,508	23,665	24 387	>	1,030,120

East Energy Plant - Fiscal Year

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Monthly Averages	292 245	326	791	5,067,455	3,827,000 4,407,273	12,193,250	1,050,840	1,389,773	67,008.603	23.79	16,485,636	8,708	
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8,708	332.00 266	339 334	529 531	30.00	2164 08	611,555 531,855	1,069,608 85,257	2,106,751	18,815	419 439 465
							-	2		

419 439 465	1,214	3,355,968	560,491
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	Yeary	Totals	3,52.4	4,254	C+0'+	12,654	61,342,011	85,377,000	61,557,000	208,276,011	13,202,199	21,634,218	15.116	1.14	201 685 820	135,392		6635	423	308	305	380	1000	005	200	\$ 1402	12,051,200	5,564,700	8,881,350	2,870,957	29,368,217	154.505		5 170	5 066	4 166	14.402		40,788,750	10,854,900	348,62.4		1,097,280	1,361,280	2,458,560 323,551	The second secon
	-	unc				Þ	11	3,379,000	5,116,000	8,495,011	401,701	666,218	0.890	0.65	7,558,000	167		714	643	330	324	399	600	033	3107	2610	1,193,700	560,800	1,799,066	214,997	3,768,563	37.596		720	382	375	1 477		4,031,250	937,200	484,573	000 10	87,360	163,200	26.953	
2	May	IVIA Y		340	101	49	331,000	2,623,000	3,658,000	6,612,000	469,238	788,526	1.383	1.00	9,143,000	77		602	617	203	196	209	400	18	2 R61	100'7	1,484,500	368,900	1,052,696	43,121	2,949,217	5,428		609	214	154	1 226		2,797,500	967,200	21,529	010	20,040	120,960	27,222	
20	Anr		200	433	920	0	5,095,000	13,721,000	5,476,000	24,292,000	415,555	731,859	0.349	0.25	8,477,000	0		516	330	70	59	476	478	14	1 943	2421-	914,200	137,900	1,081,416	26,199	2,159,715	3,870		0	710	641	1,351		2,422,500	925,200	445,556	30.360	00,500	122 020	24,920	
ear	Mar	306	737	453	1 406		5,072,000	10,663,000	4,563,000	20,298,000	1,858,583	2,830,991	1.611	1.16	32,690,000	0		261	60	473	465	218	223	11	1.711		409,800	788,900	366,970	30,905	1,596,575	339		0	742	424	1,166		3,365,250	936,000	-141,333	EE 2AD	00,240	151 680	29,704	
َ Fiscal Year	Feb	560	358	440	1 367		0,239,000	884,000	10,000	6,138,000	1,787,222	3,030,290	2.900	4.12	17,820	98,222		451	121		1	75	96	0	745		560,200	1,200	152,605	201,802	915,807	301		37	672	111	820	010 100	000,218,2	/ 03,300	067'044-	90.240		90.240	34,507	
l . L .	Jan	CVE	414	594	1 350		000,622,1	6,302,000	10,000,010	24,185,000	1,470,622	2,164,319	0.823	0.75	19,893,000	35,229		611	102	0	0	0	0	0	713	Ň	662,800	2,400	22	1/9,997	845,219	60,981		20	230	576	826	0 004 750	2,031,730	510,000	10100	89 280		89.280	34,955	
East Energy Plant	Dec	373	214	489	1.076	260.000	4,330,000	000'9/1/c	1 1 202 202	14,501,000	990,187	1,033,017	1.264	0.92	18,331,000	0		454	127	0	0	239	265	0	1,085		466,900	0	386,744	140,105	662'366			453	e	314	170	7 150 750	000 000	37 043	210'10	83.520	204 960	288,480	31,437	
East Ene	Nov	591	514	464	1,569	11 135 000	000 100 00	6 865 000	44 264 000	44,301,000	1,917,175	001'166'2	1/-0	0.65	34,272,000	1,697		307	149	0	0	402	412	0	1,270		415,500	0	822,736	33,114	1,337,950	13,886		720	0	10	730	3 506 250	RE DO	-173.042		57,600	78.240	135,840	26,575	
	Oct	185	368	694	1,247	000 200	6 21 A 000	7,093,000	10 101 000	13,404,000	979,539 1 826 525	1,000,000	1.103	0.79	21,403,000	5	101	024	145	127	127	602	710	0	2,313		747.200	100 00-	1,/b6,485		2,741,985	15,515		744	1	489	1,234	3 609 000	939 100	-55,837		37,440	129,120	166.560	29,046	
	Sept	368	124	395	887	6.398.000	4 108 000	7.439.000	18 035 000		1,034,283	0.000	0.000	0.00	10,382,000	-	702	100	462	417	417	484	374	131	2,922	1 205 100	1,525,100	1 745 400	061,C42,1	1 000 00 00 0	3,549,638	8,935		614	624	124	1,362	3 863 250	923,600	25,742		102,720	155,520	258,240	25,704	
	Aug	219	494	336	1,049	3.107.000	2 356 000	4,147,000	9.610.000		1 369 812	1 770	140	1-13	000,470,71		726	001	1.30	/33	(32	97	0	385	3,419	1 000 000	1 360 000	000 200	865,285	1 760 604	4'<00'234	7,651		/44	144	330	1,824	4.825.500	953 500	125,743		194,880	173,760	368,640	29,099	
	July	535	346	147	1,028	7,285,000	3.500.000	1,560,000	12.345.000	062 745	2.427.960	1 400	1 60	17 436 000		>	744	AAT .	144	134	(34	5 0	0	343	3,299	005 150 6	1 385 300		816.544	A 736 166 1	CCI '0074		100	Anc	- 647	210	C02'I	4,764,750	1,878,400	44,761		192,000	155,520	347,520	3,429	
		Boiler #1 Hours	Boiler #2 Hours	Boiler #3 Hours	Boiler Hour Totals	Boiler #1 Steam Totals	Boiler #2 Steam Totals	Boiler #3 Steam Totals	Boiler Steam Totals	Boiler Feed water Totals	Boiler Soft water totals	Lbs. Corrected Steam/8 345	% Make Un	Natural Gas Totals	Diesel Fuel totals		Chiller 1-A Hour Meter	Chiller 1-B Hour Meter	Chiller 2 A Hour Mater	Children D. Hour Meter	Children A Hourt Meter	Chiller 3 D Lour Meter	Chilor 4 Hour Marker	Criller 4 Hour Meter	Chiller Hour Meter Totals	Tower #1 Water Meter	Tower #2 Water Meter	Tower #3 Water Meter	Tower #4 Water Meter	Tower water totals		Chill water make up	Sec Chill Mater areas	Sec Chill Motor	Sec Chill Wrater pump #1		account water Funtip 10tals	City Water Meter		Misc Water Used		Front 480 volt KWH	Back 480 volt KWH	I otal 480V KWH Meter	Biomass KW Meter	

Monthly Averages	320	389	441	1,055		5,111,834	7,114,750	5,129,750	17,356,334		1,100,183	1,802,852	1.260	1.14	16,807,152	11,283	
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11,283	552.92 353 257 255	317 317 306 82.08 2122.75	1,004,267 463,725 740,113 239,247 2,447,351	15,450 431 422 347 1,200
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3,399,063	904,575	29,052	91,440	113,440	204,880	26,963	

²iscal Year
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Plant
East Energy

USC School of Medicine Water Treatment

Building #1

- A) Hot Water Loops
 - 1) Attic heating hot water loop
 - 2) Basement heating hot water loop
- B) Chill Water Loop
 - 1) Basement
- C) Cooling Towers
 - 1) 1 & 2 Cooling towers

Building # 2

- A) Hot Water Loop
 - 1) Basement heating hot water loop

Building # 3

- A) Hot Water Loop
 - 1) Basement heating hot water loop
- B) Chill Water Loop
 - 1) Basement chill water loop
- Building #4
 - A) Chill Water Loop
 - 1) Basement chill water loop
- Building # 101
 - A) Chill Water Loop
 - 1) Basement chill water loop

Building Med Park # 15

- A) Chill Water Loop
 - 1) Upstairs Mezzanine chill water loop