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ARIZONA CORPORATION COMMISSION  
DOCKET CONTROL

Federal and State Compliance

Mail Station 9704  
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Phoenix, Arizona 85072-3999  
Tel 602-250-5671  
Elisa.Malagon@aps.com

April 1, 2014

Docket Control  
Arizona Corporation Commission  
1200 West Washington Street  
Phoenix, Arizona 85007

RE: Arizona Public Service Company's Resource Planning Annual Filing for Historical Year 2013; Docket No. E-00000V-13-0070

Pursuant to A.A.C. R14-2-703, Arizona Public Service Company is filing its Historical Resource Planning report for 2013. The confidential portion of this filing is being provided to Staff pursuant to an executed Protective Agreement in this matter.

If you have any questions regarding this information, please contact Gregory Bernosky at (602)250-4849.

Sincerely,

Lisa Malagon  
LM/cd  
Attachment

cc: Brian Bozzo  
Terri Ford  
Barbara Keene

Arizona Corporation Commission  
DOCKETED  
APR - 1 2014

DOCKETED BY	ne
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# ARIZONA PUBLIC SERVICE COMPANY

HISTORICAL RESOURCE PLANNING INFORMATION  
FOR THE HISTORICAL YEAR 2013

APRIL 1, 2014



aps

**ARIZONA PUBLIC SERVICE COMPANY  
2014 RESOURCE PLANNING ANNUAL FILING  
FOR HISTORICAL YEAR 2013**

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**A.A.C. Regulation R14-2-703, Sections A & B**

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- A.** *A load-serving entity shall, by April 1 of each year, file with Docket Control a compilation of the following items of demand-side data, including for each item for which no record is maintained the load-serving entity's best estimate and a full description of how the estimate was made:*
- A.1** Hourly demand for the previous calendar year disaggregated by:
- a. Sales to end users,
  - b. Sales for resale,
  - c. Energy losses, and
  - d. Other disposition of energy, such as energy furnished without charge and energy used by the load-serving entity;
- A.2** Coincident peak demand (megawatts) and energy consumption (megawatt-hours) by month for the previous 10 years, disaggregated by customer class;
- A.3** Number of customers by customer class for each of the previous 10 years; and
- A.4** Reduction in load (kilowatt and kilowatt-hours) in the previous calendar year due to existing demand management measures, by type of demand management measure.
- B.** *A load-serving entity shall, by April 1 of each year, file with Docket Control a compilation of the following items of supply-side data, including for each item for which no record is maintained the load-serving entity's best estimate and a full description of how the estimate was made:*
- B.1** For each generating unit and purchased power contract for the previous calendar year:
- a. In-service date and book life or contract period;
  - b. Type of generating unit or contract;
  - c. The load-serving entity's share of the generating unit's capacity, or of capacity under the contract, in megawatts;
  - d. Maximum generating unit or contract capacity, by hour, day, or month, if such capacity varies during the year;
  - e. Annual capacity factor (generating units only);
  - f. Average heat rate of generating units and, if available, heat rates at selected output levels;
  - g. Average fuel cost for generating units, in dollars per million Btu for each type of fuel;
  - h. Other variable operating and maintenance costs for generating units, in dollars per megawatt hour;
  - i. Purchased power energy costs for long-term contracts, in dollars per megawatt-hour;
  - j. Fixed operating and maintenance costs of generating units, in dollars per megawatt;
  - k. Demand charges for purchased power;
  - l. Fuel type for each generating unit;
  - m. Minimum capacity at which the generating unit would be run or power must be purchased;

**ARIZONA PUBLIC SERVICE COMPANY  
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**B.1 continued**

- n. Whether, under standard operating procedures, the generating unit must be run if it is available to run;
- o. Description of each generating unit as base load, intermediate, or peaking;
- p. Environmental impacts, including air emission quantities (in metric tons or pounds) and rates (in quantities per megawatt-hour) for carbon dioxide, nitrogen oxides, sulfur dioxide, mercury, particulates, and other air emissions subject to current or expected future environmental regulation;
- q. Water consumption quantities and rates; and
- r. Tons of coal ash produced per generating unit;

**B.2** For the power supply system for the previous calendar year

- a. a description of unit commitment procedures,
- b. production cost,
- c. reserve requirements,
- d. spinning reserve,
- e. reliability of generating, transmission, and distribution systems,
- f. purchase and sale prices, averaged by month, for the aggregate of all purchases and sales related to short-term contracts; and
- g. energy losses;

**B.3** The level of self-generation in the load-serving entity's service area for the previous calendar year; and

**B.4** An explanation of any resource procurement processes used by the load-serving entity during the previous calendar year that did not include use of an RFP, including the exception under which the process was used.

**ARIZONA PUBLIC SERVICE COMPANY  
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**R14-2-703 Section A.1.a**

Attached is the response to this section.





Arizona Public Service Company  
 2014 Resource Planning Filing  
 For Historical Year 2013  
 R14-2-703 Section: A.1.a

6/27/2013	3402	3121	3108	3129	3234	3541	3817	4134	4477	5184	5822	6069	6209	6202	6003	5735	5426	5019	4685	4173
6/28/2013	3403	3271	3238	3214	3366	3700	4038	4421	4873	5337	5814	6206	6736	6736	6524	6266	5959	5647	5329	4760
6/29/2013	3404	3272	3239	3215	3429	3730	4168	4654	5236	5770	6293	6737	7366	7366	6966	6241	5961	5647	5329	4760
6/30/2013	3405	3273	3240	3216	3463	3765	4206	4745	5310	5844	6367	6811	7440	7440	7040	6241	5961	5647	5329	4760
7/1/2013	3406	3274	3241	3217	3498	3792	4247	4832	5407	5941	6464	6908	7537	7537	7137	6241	5961	5647	5329	4760
7/2/2013	3407	3275	3242	3218	3531	3819	4288	4923	5493	6027	6550	6994	7619	7619	7219	6241	5961	5647	5329	4760
7/3/2013	3408	3276	3243	3219	3564	3850	4333	5008	5578	6112	6635	7079	7694	7694	7294	6241	5961	5647	5329	4760
7/4/2013	3409	3277	3244	3220	3597	3881	4378	5093	5663	6197	6720	7164	7779	7779	7379	6241	5961	5647	5329	4760
7/5/2013	3410	3278	3245	3221	3630	3912	4418	5143	5713	6247	6770	7214	7829	7829	7429	6241	5961	5647	5329	4760
7/6/2013	3411	3279	3246	3222	3663	3943	4458	5228	5798	6322	6845	7289	7904	7904	7504	6241	5961	5647	5329	4760
7/7/2013	3412	3280	3247	3223	3696	3974	4498	5313	5883	6406	6929	7373	7988	7988	7588	6241	5961	5647	5329	4760
7/8/2013	3413	3281	3248	3224	3729	4005	4538	5398	5968	6491	7014	7458	8073	8073	7673	6241	5961	5647	5329	4760
7/9/2013	3414	3282	3249	3225	3762	4036	4578	5483	6053	6576	7099	7543	8158	8158	7758	6241	5961	5647	5329	4760
7/10/2013	3415	3283	3250	3226	3795	4067	4618	5568	6138	6661	7184	7628	8243	8243	7843	6241	5961	5647	5329	4760
7/11/2013	3416	3284	3251	3227	3828	4098	4658	5653	6218	6741	7264	7708	8328	8328	7928	6241	5961	5647	5329	4760
7/12/2013	3417	3285	3252	3228	3861	4129	4698	5738	6288	6811	7334	7778	8413	8413	8013	6241	5961	5647	5329	4760
7/13/2013	3418	3286	3253	3229	3894	4160	4738	5823	6363	6924	7447	7891	8496	8496	8096	6241	5961	5647	5329	4760
7/14/2013	3419	3287	3254	3230	3927	4191	4778	5908	6444	7035	7558	7992	8607	8607	8207	6241	5961	5647	5329	4760
7/15/2013	3420	3288	3255	3231	3960	4222	4818	5993	6525	7118	7641	8075	8690	8690	8290	6241	5961	5647	5329	4760
7/16/2013	3421	3289	3256	3232	3993	4253	4858	6078	6606	7200	7723	8149	8764	8764	8364	6241	5961	5647	5329	4760
7/17/2013	3422	3290	3257	3233	4026	4284	4903	6163	6687	7281	7804	8248	8863	8863	8463	6241	5961	5647	5329	4760
7/18/2013	3423	3291	3258	3234	4059	4315	4943	6248	6768	7362	7885	8332	8947	8947	8547	6241	5961	5647	5329	4760
7/19/2013	3424	3292	3259	3235	4092	4346	4983	6333	6849	7443	7966	8400	9015	9015	8615	6241	5961	5647	5329	4760
7/20/2013	3425	3293	3260	3236	4125	4377	5023	6418	6930	7524	8047	8491	9106	9106	8706	6241	5961	5647	5329	4760
7/21/2013	3426	3294	3261	3237	4158	4408	5063	6503	7011	7605	8130	8574	9189	9189	8789	6241	5961	5647	5329	4760
7/22/2013	3427	3295	3262	3238	4191	4439	5103	6588	7092	7696	8214	8658	9233	9233	8833	6241	5961	5647	5329	4760
7/23/2013	3428	3296	3263	3239	4224	4470	5143	6673	7173	7788	8308	8752	9327	9327	8927	6241	5961	5647	5329	4760
7/24/2013	3429	3297	3264	3240	4257	4501	5183	6758	7254	7870	8364	8808	9383	9383	8983	6241	5961	5647	5329	4760
7/25/2013	3430	3298	3265	3241	4290	4532	5223	6843	7331	7935	8429	8873	9448	9448	9048	6241	5961	5647	5329	4760
7/26/2013	3431	3299	3266	3242	4323	4563	5263	6928	7408	8038	8532	8976	9551	9551	9151	6241	5961	5647	5329	4760
7/27/2013	3432	3300	3267	3243	4356	4594	5303	7013	7485	8103	8597	9041	9616	9616	9216	6241	5961	5647	5329	4760
7/28/2013	3433	3301	3268	3244	4389	4625	5343	7098	7566	8197	8691	9135	9710	9710	9310	6241	5961	5647	5329	4760
7/29/2013	3434	3302	3269	3245	4422	4656	5383	7183	7634	8246	8740	9184	9759	9759	9359	6241	5961	5647	5329	4760
7/30/2013	3435	3303	3270	3246	4455	4687	5423	7268	7705	8307	8801	9245	9820	9820	9420	6241	5961	5647	5329	4760
7/31/2013	3436	3304	3271	3247	4488	4718	5463	7353	7776	8378	8872	9316	9891	9891	9491	6241	5961	5647	5329	4760
8/1/2013	3437	3305	3272	3248	4521	4749	5503	7438	7847	8449	8943	9387	9962	9962	9562	6241	5961	5647	5329	4760
8/2/2013	3438	3306	3273	3249	4554	4780	5543	7523	7918	8520	9014	9488	10063	10063	9683	6241	5961	5647	5329	4760
8/3/2013	3439	3307	3274	3250	4587	4811	5583	7608	7989	8591	9085	9569	10148	10148	9748	6241	5961	5647	5329	4760
8/4/2013	3440	3308	3275	3251	4620	4842	5623	7693	8060	8672	9156	9640	10233	10233	9843	6241	5961	5647	5329	4760
8/5/2013	3441	3309	3276	3252	4653	4873	5663	7778	8131	8743	9227	9711	10318	10318	9913	6241	5961	5647	5329	4760
8/6/2013	3442	3310	3277	3253	4686	4904	5703	7863	8202	8824	9298	9782	10403	10403	10003	6241	5961	5647	5329	4760
8/7/2013	3443	3311	3278	3254	4719	4935	5743	7948	8273	8905	9389	9863	10488	10488	10088	6241	5961	5647	5329	4760
8/8/2013	3444	3312	3279	3255	4752	4966	5783	8033	8344	8986	9474	9948	10573	10573	10173	6241	5961	5647	5329	4760
8/9/2013	3445	3313	3280	3256	4785	4997	5823	8118	8415	9071	9566	10042	10658	10658	10242	6241	5961	5647	5329	4760
8/10/2013	3446	3314	3281	3257	4818	5028	5863	8203	8486	9152	9647	10126	10742	10742	10326	6241	5961	5647	5329	4760
8/11/2013	3447	3315	3282	3258	4851	5059	5903	8288	8557	9233	9718	10190	10828	10828	10410	6241	5961	5647	5329	4760
8/12/2013	3448	3316	3283	3259	4884	5090	5943	8373	8628	9314	9799	10252	10913	10913	10492	6241	5961	5647	5329	4760
8/13/2013	3449	3317	3284	3260	4917	5121	5983	8458	8699	9395	9880	10316	11003	11003	10574	6241	5961	5647	5329	4760
8/14/2013	3450	3318	3285	3261	4950	5152	6023	8543	8770	9476	9961	10370	11088	11088	10638	6241	5961	5647	5329	4760
8/15/2013	3451	3319	3286	3262	4983	5183	6063	8628	8841	9557	10042	10434	11173	11173	10702	6241	5961	5647	5329	4760
8/16/2013	3452	3320	3287	3263	5016	5214	6103	8713	8912	9638	10113	10505	11258	11258	10766	6241	5961	5647	5329	4760
8/17/2013	3453	3321	3288	3264	5049	5245	6143	8803	8983	9719	10184	10576	11343	11343	10830	6241	5961	5647	5329	4760
8/18/2013	3454	3322	3289	3265	5082	5276	6183	8888	9054	9800	10255	10647	11428	11428	10894	6241	5961	5647	5329	4760
8/19/2013	3455	3323	3290	3266	5115	5307	6223	8973	9125	9881	10326	10718	11513	11513	10958	6241	5961	5647	5329	4760
8/20/2013	3456	3324	3291	3267	5148	5338	6263	9058	9196	9962	10397	10789	11603	11603	11022	6241	5961	5647	5329	4760
8/21/2013	3457	3325	3292	3268	5181	5369	6303	9143	9267	10043	10468	10860	11688	11688	11086	6241	5961	5647	5329	4760
8/22/2013	3458	3326	3293	3269	5214	5400	6343	9228	9338	10124	10539	10931	11773	11773	11150	6241	5961	5647	5329	4760
8/23/2013	3459	3327	3294	3270	5247	5431	6383	9313	9409	10205	10610	11002	11858	11858	11214	6241	5961	5647	5329	4760
8/24/2013	3460	3328	3295	3271	5280	5462	6423	9398	9480	10286	10681	11073	11943	11943	11278	6241	5961	5647	5329	4760
8/25/2013	3461	3329	3296	3272	5313	5493	6463	9483	9551	10367	10752	11144	12028	12028	11342	6241	5961	5647	5329	4760
8/26/2013	3462	3330	3297	3273	5346	5524	6503	9568	9622	10448	10823	11215	12113	12113	11406	6241	5961	5647	5329	4760
8/27/2013	3463	3331																		



Arizona Public Service Company  
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12/22/2013	2838	2840	2878	3005	3189	3296	3258	3128	2918	2780	2651	2528	2547	2688	3060	3343	3361	3358	3286	3156	2970
12/23/2013	2795	2835	2869	3204	3494	3522	3416	3215	2992	2777	2567	2548	2560	2689	3030	3265	3284	3272	3223	3114	2957
12/24/2013	2766	2777	2867	3061	3324	3325	3269	3098	2904	2753	2604	2499	2530	2636	2915	3024	2986	2948	2836	2891	2835
12/25/2013	2672	2639	2683	2792	2946	3017	2992	2865	2706	2584	2487	2343	2379	2459	2716	2914	2960	2973	2950	2855	2700
12/26/2013	2588	2592	2745	2947	3193	3191	3112	2979	2832	2706	2575	2474	2465	2611	2847	3184	3217	3201	3119	2897	2885
12/27/2013	2725	2714	2868	3047	3304	3328	3241	3064	2870	2705	2576	2483	2501	2621	2915	3133	3138	3123	3058	2862	2855
12/28/2013	2886	2675	2881	2881	3057	3067	3061	3016	2919	2777	2663	2593	2634	2708	3035	3197	3167	3140	3042	2862	2900
12/29/2013	2751	2686	2825	2926	3099	3099	3143	3035	2872	2734	2651	2507	2527	2689	2961	3260	3255	3221	3124	3000	2809
12/30/2013	2679	2699	2886	3125	3418	3469	3374	3176	2968	2799	2658	2519	2539	2674	2986	3283	3300	3281	3214	3086	2970
12/31/2013	2816	2810	2980	3202	3465	3468	3381	3175	2940	2751	2616	2503	2522	2647	2957	3171	3108	3027	2954	2887	2863

**ARIZONA PUBLIC SERVICE COMPANY  
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**R14-2-703 Section: A.1.b**

Hourly demand for the previous calendar year is not available. Monthly megawatt-hours (MWh) are listed below.

**SALES FOR RESALE  
2013**

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
ENERGY (MWH)	36,337	40,690	42,591	46,877	61,051	79,376	83,408	76,892	51,228	32,933	23,750	25,065

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**R14-2-703 Section: A.1.c**

Hourly demand for the previous calendar year is not available. Monthly MWh are listed below.

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
ENERGY (MWH)	155,776	135,591	121,976	101,793	149,493	162,398	158,967	143,968	170,042	164,277	82,634	135,444

Energy losses reflect native load.

**ARIZONA PUBLIC SERVICE COMPANY  
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**R14-2-703 Section: A.1.d**

Hourly demand for the previous calendar year is not available. Monthly MWh are listed below.

		COMPANY USE											
		2013											
ENERGY (MWH)		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
		4,986	4,443	4,393	4,266	4,884	5,126	5,192	5,000	7,280	4,837	4,492	4,156

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**R14-2-703 Section A.2**

Coincident peak demand (megawatts) and energy demand (megawatt hours) by month for twelve months ending December 2013 is attached.



Load Research Cost of Service Data  
Year Ended December 31, 2013

\*\*\* Total Residential \*\*\*

	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
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<b>SUMMATION IND MAX (MW)</b>												
Non-Timed	6,722.8	6,229.8	6,025.2	6,152.1	6,520.1	7,524.8	7,646.5	7,482.9	6,981.1	5,662.0	5,589.4	6,486.8
On-Peak	4,774.3	4,435.5	4,347.7	4,762.1	5,451.5	6,388.2	6,587.5	6,476.8	5,983.0	4,588.8	3,955.1	4,747.5
Off-Peak	6,624.3	6,128.5	5,908.0	5,978.3	6,272.3	7,343.4	7,409.0	7,230.8	6,749.5	5,404.2	5,486.1	6,375.5

<b>CLASS PEAK (MW)</b>												
On-Peak	2,771.3	2,286.6	1,845.6	2,762.7	2,831.2	4,407.1	4,485.1	4,305.4	3,974.2	2,229.1	1,728.2	2,308.4
Off-Peak	3,188.2	2,689.3	2,012.5	2,358.0	3,097.1	4,740.2	4,202.4	4,459.1	3,813.9	1,876.2	1,750.0	2,566.9

<b>COINCIDENT (MW)</b>												
System	2,537.0	2,231.0	1,586.2	2,197.7	2,701.1	3,953.0	3,704.5	3,593.1	3,322.0	1,979.5	1,458.5	2,096.1
Time	14th@0800	12th@0800	14th@2000	29th@1700	31st@1800	29th@1700	8th@1700	16th@1700	5th@1700	2nd@1700	12th@1900	9th@0800

<b>ENERGY (MWH)</b>												
On-Peak	173,375	133,178	140,366	171,038	262,588	379,664	457,822	421,431	318,317	187,565	112,384	151,157
%	15.5%	16.2%	17.8%	21.7%	25.3%	25.0%	25.5%	25.8%	24.0%	23.0%	16.0%	16.0%
Off-Peak	945,072	689,852	647,879	616,575	775,446	1,138,039	1,336,226	1,211,568	1,006,661	629,266	590,820	792,534
%	84.5%	83.8%	82.2%	78.3%	74.7%	74.5%	74.2%	76.0%	77.0%	77.0%	84.0%	84.0%
Total	1,118,447	823,030	788,245	787,613	1,038,034	1,517,703	1,794,048	1,632,999	1,324,978	816,831	703,204	943,691

<b>CUSTOMERS</b>												
Monthly Count	1,021,328	1,022,104	1,022,020	1,018,554	1,015,112	1,013,282	1,014,973	1,013,380	1,016,894	1,018,265	1,023,354	1,032,239

<b>FACTORS</b>												
Coincident Factor (CF)	0.377	0.358	0.265	0.357	0.414	0.525	0.484	0.480	0.475	0.350	0.260	0.323
Load Factor (Max) %	22.8%	18.1%	17.9%	17.5%	21.8%	27.6%	32.1%	29.9%	26.0%	19.6%	17.2%	19.9%
Load Factor (NCP) %	48.4%	41.8%	53.7%	39.1%	45.9%	43.9%	54.7%	50.2%	46.7%	50.2%	55.0%	50.4%
Load Factor (CP) %	60.4%	50.5%	67.6%	49.1%	52.6%	52.6%	66.3%	62.3%	54.6%	56.5%	66.0%	61.7%

<b>CUSTOMER AVERAGES</b>												
Energy Use (kWh)	1,095	805	771	773	1,023	1,498	1,768	1,611	1,303	802	687	914
Incl. Max Demand (kW)	6.58	6.10	5.90	6.04	6.42	7.43	7.53	7.38	6.87	5.56	5.47	6.28
Coincident Demand (kW)	2.48	2.18	1.56	2.16	2.66	3.90	3.65	3.55	3.27	1.94	1.43	2.03

TOU Periods On-Peak Off-Peak  
All Months: 12 noon - 7 pm, M-F 7 pm - 12 noon, M-F & All Weekends & Holidays

SUMMER (May-Oct)	WINTER (Nov-Apr)	ANNUAL
7,646.5	6,722.8	7,646.5

Summation Ind Max by Season	
7,646.5	6,722.8
6,587.5	4,774.3
7,409.0	6,624.3

Class Peak by Season	
4,486.1	2,771.3
4,740.2	3,188.2
4,740.2	3,188.2

Coincident Peak by Season	
3,953.0	2,537.0
3,953.0	2,537.0

Energy Summation by Season	
2,027,383	861,497
26.0%	17.1%
6,097,205	4,282,733
76.0%	82.9%
8,124,588	5,164,230
13,289,823	13,289,823

Customer Averages by Season	
1,015,318	1,023,267
1,015,318	1,023,267

Seasonal Factors	
0.517	0.377
24.3%	17.5%
38.1%	37.2%
50.1%	56.2%

Seasonal Averages	
1,334	841
6.87	6.06
3.16	1.97



Load Research Cost of Service Data  
Year Ended December 31, 2013

\*\*\* General Service E-20 \*\*\*

	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
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<b>SUMMATION IND MAX (MW)</b>												
Non-Timed	17.7	16.5	15.7	19.2	21.0	28.4	25.5	28.7	25.3	15.2	15.3	15.9
On-Peak	12.6	12.1	12.2	14.2	17.8	21.5	19.9	22.9	20.2	11.9	11.9	12.6
Off-Peak	17.6	16.3	15.4	18.8	20.3	28.1	25.2	28.3	24.8	15.0	14.7	15.5

<b>CLASS PEAK (MW)</b>												
On-Peak	6.5	6.6	6.8	7.0	8.7	10.5	9.6	11.8	11.4	7.2	6.7	7.7
Off-Peak	14.2	11.5	12.0	15.3	16.2	24.0	21.2	23.9	21.1	11.9	10.4	10.1

<b>COINCIDENT (MW)</b>												
System	4.4	4.3	3.6	3.8	4.6	6.5	5.6	6.6	5.8	4.9	4.2	3.7
Time	14th@0800	12th@0800	14th@2000	28th@1700	31st@1800	8th@1700	16th@1700	5th@1700	2nd@1700	12th@1900	9th@0800	

<b>ENERGY (MWH)</b>												
On-Peak	829	806	746	1,029	1,357	1,444	1,626	2,105	1,508	862	869	905
%	29.4%	29.4%	31.0%	34.3%	37.3%	33.1%	35.6%	34.7%	34.7%	36.5%	31.4%	28.7%
Off-Peak	1,960	1,935	1,668	1,972	2,281	2,918	2,942	3,642	2,838	1,499	1,898	2,248
%	70.6%	70.6%	69.0%	65.7%	62.7%	66.9%	64.4%	64.8%	65.3%	63.5%	68.6%	71.3%
Total	2,819	2,741	2,403	3,001	3,638	4,362	4,568	5,947	4,346	2,361	2,767	3,153

<b>CUSTOMERS</b>												
Monthly Count	407	432	381	419	408	414	384	435	411	416	417	403

<b>FACTORS</b>												
All load factors are calculated based on 730 hours per month.												
Coincident Factor (CP)	0.248	0.261	0.229	0.198	0.219	0.229	0.220	0.230	0.229	0.322	0.275	0.233
Load Factor (Max) %	21.8%	22.8%	20.9%	21.4%	23.7%	21.0%	24.6%	28.4%	23.6%	21.2%	24.6%	27.2%
Load Factor (NCP) %	27.3%	32.6%	27.5%	27.0%	30.7%	24.9%	34.1%	28.3%	27.2%	36.4%	42.7%	42.7%
Load Factor (CF) %	88.0%	87.3%	91.4%	108.2%	108.3%	91.9%	111.7%	123.4%	102.6%	66.0%	90.2%	116.7%

<b>CUSTOMER AVERAGES</b>												
Energy Use (kWh)	6,926	6,345	6,307	7,182	8,917	10,536	11,896	13,671	10,574	5,675	6,685	7,824
Ind. Max Demand (kW)	43.52	38.09	41.32	45.77	51.56	68.67	66.31	66.02	61.50	36.83	36.58	39.35
Coincident Demand (kW)	10.79	9.95	9.45	9.07	11.27	15.70	14.58	14.11	11.78	10.07	9.18	9.18

TOU Periods - All Months: On-Peak 11 am - 9 pm, M-F Off-Peak 9 pm - 11 am, M-F & All Weekends

SUMMER (May-Oct)	WINTER (Nov-Apr)	ANNUAL
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Summation Ind Max by Season		
28.7	19.2	28.7
22.9	14.2	22.9
28.3	18.8	28.3

Class Peak by Season		
11.8	7.7	11.8
24.0	15.3	24.0

Coincident Peak by Season		
6.6	4.4	6.6

Energy Summation by Season		
8,902	5,183	14,085
35.3%	30.7%	33.5%
16,320	11,701	28,021
64.7%	69.3%	66.5%
25,222	16,884	42,106

Customer Averages by Season		
411	410	411

Seasonal Factors		
0.230	0.229	0.230
20.1%	20.1%	16.7%
24.0%	25.3%	20.0%
102.8%	104.2%	85.8%

Seasonal Averages		
10,212	6,867	8,639
58.45	40.77	49.51
13.77	9.75	11.76



Load Research Cost of Service Data  
Year Ended December 31, 2013

\*\*\* General Service E-221 \*\*\*

	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
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SUMMATION IND MAX (MW)												
Non-Timed	129.5	125.2	138.5	140.3	143.3	162.6	151.5	155.6	148.3	150.2	131.6	118.3
On-Peak	105.3	104.1	120.4	119.0	124.2	143.2	135.6	132.2	124.3	130.7	111.4	100.1
Off-Peak	121.2	122.4	137.9	139.2	141.9	160.6	149.8	153.9	147.1	147.0	131.1	115.4

CLASS PEAK (MW)												
On-Peak	44.2	44.5	58.1	65.6	69.7	83.6	84.5	79.3	63.0	71.1	57.3	42.1
Off-Peak	53.9	52.9	61.7	79.2	85.4	102.7	97.8	91.5	83.9	79.0	69.5	56.6

COINCIDENT (MW)												
System	31.5	28.9	28.4	38.3	35.3	40.2	35.2	34.6	28.3	39.8	31.3	34.8
Time	14th@0800	12th@0800	14th@2000	29th@1700	31st@1800	29th@1700	8th@1700	16th@1700	5th@1700	2nd@1700	12th@1900	9th@0800

ENERGY (MWH)												
On-Peak	5,564	4,799	5,514	6,511	9,181	9,590	10,504	9,032	6,999	8,692	7,871	5,871
%	28.3%	27.6%	26.0%	26.3%	26.3%	23.7%	25.8%	24.5%	24.7%	30.4%	27.2%	27.3%
Off-Peak	14,098	12,588	15,695	18,246	25,727	30,673	30,211	27,833	21,338	19,763	21,067	15,833
%	71.7%	72.4%	74.0%	73.7%	73.7%	76.3%	74.2%	75.5%	75.3%	69.6%	72.8%	72.7%
Total	19,662	17,387	21,209	24,757	34,908	40,463	40,715	36,865	28,337	28,395	28,938	21,504

CUSTOMERS												
Monthly Count	1,448	1,465	1,452	1,398	1,387	1,472	1,426	1,445	1,442	1,425	1,441	1,414

FACTORS												
All load factors are calculated based on 730 hours per month.												
Coincident Factor (CF)	0.255	0.231	0.205	0.273	0.246	0.247	0.232	0.222	0.191	0.265	0.238	0.294
Load Factor (Max) %	21.8%	19.0%	21.0%	24.2%	33.4%	34.1%	36.8%	32.5%	26.2%	25.9%	30.1%	24.9%
Load Factor (NCP) %	50.0%	45.0%	47.1%	42.8%	56.0%	54.0%	57.0%	55.2%	48.3%	49.2%	57.0%	52.0%
Load Factor (CF) %	85.5%	82.4%	102.3%	88.5%	135.5%	137.9%	159.4%	146.0%	137.2%	97.7%	126.6%	84.8%

CUSTOMER AVERAGES												
Energy Use (KWH)	13,579	11,868	14,807	17,709	25,168	27,488	28,562	25,512	19,651	19,926	20,082	15,208
Ind. Max Demand (kW)	85.28	85.48	95.37	100.37	103.28	110.43	106.26	107.66	102.96	105.38	91.35	83.67
Coincident Demand (kW)	21.77	19.73	19.56	27.40	25.45	27.31	24.68	23.94	19.83	27.93	21.72	24.61

TOU Periods - All Months: On-Peak 11 am - 9 pm, M-F Off-Peak 9 pm - 11 am, M-F & All Weekends

SUMMER (May-Oct)	WINTER (Nov-Apr)	ANNUAL
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Summation Ind Max by Season		
162.6	140.3	162.6
143.2	120.4	143.2
160.6	139.2	160.6

Class Peak by Season		
84.5	65.6	84.5
102.7	79.2	102.7

Coincident Peak by Season		
40.2	36.3	40.2

Energy Summation by Season		
83,938	36,130	90,069
25.7%	27.1%	26.2%
155,745	97,327	253,071
74.3%	72.9%	73.8%
209,683	133,457	343,140

Customer Averages by Season		
1,433	1,436	1,435

Seasonal Factors		
0.247	0.273	0.247
29.4%	21.7%	24.1%
46.6%	38.5%	38.1%
136.0%	87.6%	111.3%

Seasonal Averages		
24,383	15,509	19,946
105.98	91.25	98.12
24.82	22.46	23.64



Load Research Cost of Service Data  
Year Ended December 31, 2013

\*\*\* General Service SCHOOL TOU \*\*\*

	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
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SUMMATION IND MAX (MW)												
Non-Timed	10.0	8.8	12.6	12.8	13.2	12.8	26.3	27.2	28.0	21.2	20.9	25.6
On-Peak	8.3	6.9	10.7	12.5	13.2	12.7	25.8	26.5	27.4	20.0	17.3	17.5
Off-Peak	10.0	8.8	12.1	12.4	12.7	11.9	24.8	26.2	27.0	20.0	20.3	25.4

CLASS PEAK (MW)												
On-Peak	7.6	6.5	9.1	11.6	11.8	10.5	22.0	21.9	22.1	13.4	13.9	13.6
Off-Peak	9.2	8.4	10.7	11.0	11.7	10.3	19.9	23.1	22.5	13.7	17.8	23.0

COINCIDENT (MW)												
System	8.8	8.0	4.4	9.1	6.0	6.3	17.9	17.5	16.6	12.4	10.5	23.0
Time	14th@0800	12th@0800	14th@2000	28th@1700	31st@1800	29th@1700	8th@1700	16th@1700	5th@1700	2nd@1700	12th@1900	9th@0800

ENERGY (MWH)												
On-Peak	677	801	1,461	1,653	2,123	1,961	3,068	3,286	2,867	2,363	1,778	1,365
%	35.5%	36.2%	36.7%	43.8%	44.0%	37.7%	39.4%	40.6%	40.3%	40.7%	36.5%	30.3%
Off-Peak	1,231	1,413	2,315	2,121	2,703	3,240	4,719	4,808	4,247	3,443	3,094	3,185
%	64.5%	63.8%	61.3%	56.2%	56.0%	62.3%	60.6%	59.4%	59.7%	59.3%	63.5%	69.7%
Total	1,908	2,214	3,776	3,774	4,826	5,201	7,787	8,094	7,114	5,806	4,872	4,570

CUSTOMERS												
Monthly Count	18	19	37	39	41	53	93	76	76	77	69	68

FACTORS												
All load factors are calculated based on 730 hours per month.												
Coincident Factor (CF)	0.877	0.906	0.350	0.710	0.453	0.491	0.681	0.644	0.593	0.584	0.502	0.898
Load Factor (Max) %	26.0%	34.4%	41.2%	40.3%	49.9%	55.6%	40.6%	40.8%	34.9%	37.5%	31.9%	24.4%
Load Factor (NCP) %	28.4%	36.1%	48.6%	44.6%	56.2%	68.0%	48.4%	48.1%	43.3%	58.1%	37.4%	27.2%
Load Factor (CP) %	29.7%	37.9%	117.6%	56.8%	110.2%	113.1%	59.6%	63.4%	58.7%	64.1%	63.6%	27.2%

CUSTOMER AVERAGES												
Energy Use (kWh)	106,000	116,526	102,054	96,769	117,707	98,132	83,731	106,500	91,205	75,403	70,609	67,206
Ind. Max Demand (kW)	557.63	484.67	339.39	328.71	322.91	241.88	282.70	357.30	358.81	275.60	303.18	376.63
Coincident Demand (kW)	488.89	421.05	118.92	233.33	146.34	118.87	192.47	230.26	212.82	161.04	152.17	336.24

TOU Periods - All Months: On-Peak 11 am - 9 pm, M-F Off-Peak 9 pm - 11 am, M-F & All Weekends

SUMMER (May-Oct)	WINTER (Nov-Apr)	ANNUAL
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Summation Ind Max by Season		
28.0	25.6	28.0
27.4	17.5	27.4
27.0	25.4	27.0

Class Peak by Season		
22.1	13.9	22.1
23.1	23.0	23.1

Coincident Peak by Season		
17.9	23.0	23.0

Energy Summation by Season		
15,668	7,766	23,435
40.4%	36.7%	39.1%
23,160	13,358	36,517
59.6%	63.3%	60.9%
38,828	21,114	59,942

Customer Averages by Season		
70	42	56

Seasonal Factors		
0.640	0.898	0.640
31.7%	18.8%	24.4%
38.4%	20.9%	29.7%
49.5%	21.0%	36.2%

Seasonal Averages		
95,446	83,194	94,320
306.53	395.03	350.78
176.97	292.10	234.53



Load Research Cost of Service Data  
Year Ended December 31, 2013

\*\*\* General Service E-32 \*\*\*  
0-20 kW

Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
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SUMMER (May-Oct)	WINTER (Nov-Apr)	ANNUAL
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SUMMATION IND MAX (MW) Non-Timed	844.1	776.1	754.7	733.5	763.0	842.1	865.4	854.0	835.6	704.1	729.6	778.4
On-Peak	748.8	657.9	693.0	692.6	727.2	802.1	825.6	812.0	805.8	653.2	650.0	663.9
Off-Peak	808.7	743.7	683.4	657.9	681.7	789.8	795.7	754.5	626.0	673.8	752.2	

Summation Ind Max by Season	865.4	844.1	865.4
	825.6	748.8	825.6
	795.7	808.7	808.7

CLASS PEAK (MW)	415.0	351.8	390.0	441.2	452.5	554.9	557.5	544.8	398.0	381.0	387.3	442.1
On-Peak	460.6	392.2	312.3	368.1	395.5	471.3	510.5	483.6	339.6	336.6	442.1	

Class Peak by Season	557.5	441.2	557.5
	510.5	460.6	510.5

COINCIDENT (MW)	247.1	238.9	224.7	288.2	265.1	268.9	332.7	311.0	295.4	218.2	260.4	260.4
System Time	14th@0900	12th@0900	14th@2000	29th@1700	31st@1800	29th@1700	8th@1700	18th@1700	5th@1700	2nd@1700	12th@1900	9th@0800

Coincident Peak by Season	332.7	288.2	332.7
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ENERGY (MWH)	41,702	37,916	45,093	49,094	59,113	52,190	57,453	48,617	45,347	42,656	40,480	41,702
On-Peak	33.8%	33.2%	36.3%	39.9%	42.3%	39.0%	41.1%	40.2%	40.1%	40.5%	35.5%	32.3%
Off-Peak	66.4%	66.8%	63.7%	60.2%	57.7%	61.0%	58.9%	59.8%	59.9%	59.5%	64.5%	67.7%
Total	124,113	114,206	124,224	123,952	139,748	133,821	139,788	144,984	121,259	111,969	120,159	125,325

Energy Summation by Season	320,986	256,942	577,938
	40.6%	35.1%	37.5%
	470,533	474,437	944,970
	59.4%	64.9%	62.1%
	761,529	731,379	1,522,908

CUSTOMERS	103,439	103,728	103,976	103,783	102,230	99,943	99,064	99,206	99,605	101,865	104,762	104,962
Monthly Count												

Customer Averages by Season	100,319	104,107	102,213
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FACTORS	0.293	0.308	0.288	0.393	0.347	0.319	0.384	0.365	0.420	0.299	0.395	0.384
Coincident Factor (CF)	20.1%	20.2%	22.5%	23.0%	25.1%	21.8%	22.1%	23.3%	21.8%	22.6%	22.1%	20.1%
Load Factor (Max) %	36.9%	39.9%	43.6%	38.3%	42.3%	39.0%	34.3%	36.9%	30.5%	38.5%	43.2%	36.8%
Load Factor (NCP) %	68.8%	65.5%	75.7%	58.6%	72.2%	66.2%	57.8%	63.9%	54.4%	51.9%	75.4%	65.9%

Seasonal Factors	0.384	0.341	0.384
	20.8%	19.8%	20.1%
	32.4%	36.3%	31.2%
	64.3%	64.1%	62.3%

CUSTOMER AVERAGES	1,200	1,101	1,195	1,189	1,367	1,411	1,461	1,217	1,089	1,147	1,194	1,243
Energy Use (kWh)	8.16	7.48	7.26	7.07	7.46	8.43	8.74	8.61	8.39	6.91	6.96	7.42
Ind. Max Demand (kW)	2.39	2.30	2.16	2.76	2.59	2.89	3.36	3.13	3.06	2.90	2.08	2.66

Seasonal Averages	1,316	1,171	1,243
	8.09	7.39	7.74
	2.96	2.37	2.66

TOU Periods - All Months: On-Peak 11 am - 9 pm, M-F Off-Peak 9 pm - 11 am, M-F & All Weekends



Load Research Cost of Service Data  
Year Ended December 31, 2013  
\*\*\* General Service E-32 \*\*\*  
21-100 kW

Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
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SUMMER (May-Oct)	WINTER (Nov-Apr)	ANNUAL
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SUMMATION IND MAX (MW)	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
Non-Timed	510.6	480.9	479.1	529.2	644.0	763.7	831.6	806.5	770.2	574.3	447.2	447.3

Summation Ind Max by Season	831.6	529.2	831.6
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On-Peak	467.5	420.4	449.3	507.7	600.8	736.1	799.1	784.5	735.4	549.7	415.4	403.1
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On-Peak	799.1	507.7	799.1
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Off-Peak	490.9	446.8	442.7	485.2	595.2	723.6	777.4	756.1	701.8	517.2	413.9	430.6
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Off-Peak	777.4	490.9	777.4
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CLASS PEAK (MW)	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
On-Peak	315.8	274.1	290.1	351.5	412.3	543.7	601.6	559.9	543.4	366.6	284.3	262.7

Class Peak by Season	601.6	351.5	601.6
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Off-Peak	330.8	262.8	262.1	312.5	377.3	487.1	549.6	526.7	500.2	332.4	256.2	278.2
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Off-Peak	549.6	330.8	549.6
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COINCIDENT (MW)	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
System	236.0	220.8	189.5	278.7	289.8	314.7	402.4	380.7	357.6	300.4	196.7	183.5

Coincident Peak by Season	402.4	278.7	402.4
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Time	14th@0800	12th@0800	14th@2000	29th@1700	31st@1800	29th@1700	8th@1700	18th@1700	5th@1700	2nd@1700	12th@1900	9th@0900
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On-Peak	62.880	53.988	63.353	71.707	92.759	92.482	110.608	110.055	91.362	75.641	63.411	58.700
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Energy Summation by Season	572,908	374,039	946,946
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%	34.3%	33.6%	35.2%	38.1%	39.2%	35.9%	38.3%	37.2%	37.3%	38.7%	35.3%	32.9%
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%	37.7%	34.9%	36.6%
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Off-Peak	120,443	106,692	116,628	116,500	143,871	165,127	176,187	153,575	119,813	116,223	119,720	67.1%
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Off-Peak	946,366	696,206	1,542,571
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%	65.7%	66.4%	64.8%	61.9%	60.8%	64.1%	61.7%	62.8%	62.7%	61.3%	64.7%	67.1%
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%	62.3%	65.1%	63.4%
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Total	183,323	160,680	179,981	188,207	236,630	257,609	288,795	295,847	244,637	195,454	179,634	178,420
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Total	1,516,272	1,070,245	2,589,517
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CUSTOMERS	Monthly Count	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
Monthly Count	15,502	15,244	15,300	15,368	17,145	19,188	20,447	20,048	19,824	17,496	14,993	15,043	

Customer Averages by Season	19,025	15,242	17,133
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On-Peak	0.462	0.479	0.401	0.527	0.450	0.412	0.484	0.472	0.484	0.523	0.440	0.433
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Seasonal Factors	0.484	0.527	0.484
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Load Factor (Max) %	49.2%	47.8%	52.1%	48.7%	50.3%	46.2%	47.8%	50.3%	43.6%	46.8%	55.0%	54.6%
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Load Factor (Max) %	41.7%	46.2%	36.5%
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Load Factor (NGP) %	75.9%	77.8%	85.0%	73.4%	78.6%	84.9%	65.9%	72.4%	61.7%	73.0%	86.5%	87.8%
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Load Factor (NGP) %	57.7%	69.5%	49.1%
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Load Factor (CP) %	106.4%	99.7%	130.1%	92.5%	111.9%	112.1%	98.3%	106.5%	93.8%	89.1%	125.1%	126.3%
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Load Factor (CP) %	86.2%	126.3%	73.5%
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CUSTOMER AVERAGES	Energy Use (kWh)	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
Energy Use (kWh)	11,826	10,541	11,763	12,247	13,802	13,426	14,124	14,757	12,356	11,171	11,981	11,861	

Seasonal Averages	13,273	11,703	12,488
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Ind. Max Demand (kW)	32.94	30.24	30.92	34.43	37.56	39.80	40.67	40.23	38.85	32.82	29.83	29.73
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Ind. Max Demand (kW)	38.32	31.35	34.84
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Coincident Demand (kW)	15.22	14.48	12.39	18.14	16.90	18.40	19.68	18.99	18.04	17.17	13.12	12.86
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Coincident Demand (kW)	17.86	14.37	16.12
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TOU Periods - All Months: On-Peak 11 am - 9 pm, M-F Off-Peak 9 pm - 11 am, M-F & All Weekends



Load Research Cost of Service Data  
Year Ended December 31, 2013

\*\*\* General Service E-32 \*\*\*  
0- 100 kW

	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
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SUMMATION IND MAX (MW)	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
Non-Timed	1,354.7	1,237.0	1,227.8	1,262.7	1,407.0	1,605.8	1,697.0	1,660.4	1,605.7	1,278.4	1,178.8	1,225.7
On-Peak	1,216.3	1,078.3	1,142.3	1,200.3	1,328.0	1,538.2	1,624.7	1,596.5	1,545.2	1,202.8	1,065.4	1,067.1
Off-Peak	1,299.6	1,190.6	1,126.2	1,143.0	1,276.8	1,513.4	1,573.1	1,548.4	1,456.3	1,143.2	1,087.7	1,182.8

CLASS PEAK (MW)	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
On-Peak	730.6	626.1	667.2	784.3	848.6	1,070.9	1,158.3	1,089.2	1,082.3	759.3	660.9	650.1
Off-Peak	790.4	674.0	665.6	680.7	757.6	950.2	1,080.2	1,094.0	972.2	672.1	596.1	720.2

COINCIDENT (MW)	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
System	483.1	459.7	414.2	568.9	554.9	583.6	735.1	691.7	662.7	595.8	414.9	453.9
Time	14th@0800	12th@0800	14th@2000	29th@1700	31st@1800	28th@1700	8th@1700	16th@1700	5th@1700	2nd@1700	12th@1900	9th@0800

ENERGY (MWH)	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
On-Peak	104,562	91,905	108,447	120,801	151,872	144,672	168,061	168,331	139,978	120,988	106,067	99,180
%	34.0%	33.4%	35.8%	38.8%	40.4%	37.0%	39.2%	38.2%	38.2%	39.4%	35.4%	32.7%
Off-Peak	202,854	182,981	195,758	190,758	224,506	246,756	280,522	272,480	226,198	186,435	193,726	204,565
%	66.0%	66.6%	64.4%	61.2%	59.6%	63.0%	60.8%	61.8%	61.8%	60.6%	64.6%	67.3%
Total	307,438	274,886	304,205	311,559	376,378	391,430	428,583	440,811	366,176	307,423	299,793	303,745

CUSTOMERS	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
Monthly Count	118,941	118,972	119,276	119,151	119,375	119,131	119,511	119,254	119,429	119,361	119,755	119,995

FACTORS	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
Coincident Factor (CP)	0.357	0.372	0.337	0.449	0.394	0.363	0.493	0.417	0.413	0.466	0.353	0.370
Load Factor (Max) %	31.1%	30.4%	33.9%	33.8%	36.6%	33.4%	34.6%	36.4%	31.2%	32.9%	34.9%	33.9%
Load Factor (NCP) %	53.3%	55.9%	62.5%	54.4%	60.8%	50.1%	50.7%	55.2%	46.3%	55.5%	62.1%	57.8%
Load Factor (CP) %	87.2%	81.9%	100.8%	75.3%	92.9%	81.9%	79.9%	87.3%	75.7%	70.7%	99.0%	91.7%

CUSTOMER AVERAGES	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
Energy Use (kWh)	2,585	2,311	2,550	2,615	3,153	3,286	3,586	3,696	3,066	2,576	2,503	2,531
Ind. Max Demand (kW)	11.39	10.40	10.29	10.60	11.79	13.48	14.20	13.92	13.45	10.71	9.83	10.21
Coincident Demand (kW)	4.06	3.86	3.47	4.76	4.65	4.90	6.15	5.80	5.55	4.99	3.46	3.78

TOU Periods - All Months: On-Peak 11 am - 9 pm, M-F Off-Peak 9 pm - 11 am, M-F & All Weekends

SUMMER (May-Oct)	WINTER (Nov-Apr)	ANNUAL
1,697.0	1,354.7	1,697.0

Summation Ind Max by Season	Value
On-Peak	1,624.7
Off-Peak	1,573.1

Class Peak by Season	Value
On-Peak	1,158.3
Off-Peak	1,094.0

Coincident Peak by Season	Value
System	735.1

Energy Summation by Season	Value
On-Peak	893,903
Off-Peak	1,416,898
Total	2,310,801

Customer Averages by Season	Value
Monthly Count	119,344

Seasonal Factors	Value
Coincident Factor (CP)	0.433
Load Factor (Max) %	31.1%
Load Factor (NCP) %	45.5%
Load Factor (CP) %	71.8%

Seasonal Averages	Value
Energy Use (kWh)	3,227
Ind. Max Demand (kW)	12.92
Coincident Demand (kW)	5.34



Load Research Cost of Service Data  
Year Ended December 31, 2013

\*\*\* General Service E-32 \*\*\*  
101-400 kW

	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
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SUMMATION IND MAX (MW)												
Non-Timed	716.8	662.7	673.5	719.9	742.0	811.6	812.8	845.0	824.0	705.5	651.4	650.1

On-Peak	655.6	603.2	657.4	705.6	729.2	792.3	795.4	829.9	810.4	691.0	634.6	601.9
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Off-Peak	700.7	647.6	633.8	676.6	689.9	777.5	773.8	807.6	779.9	662.7	616.4	633.6
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CLASS PEAK (MW)												
On-Peak	498.6	452.3	493.6	562.0	583.9	640.4	637.2	693.9	680.5	558.0	491.7	437.0

Off-Peak	537.5	489.1	444.0	521.4	543.8	581.7	597.4	647.1	637.5	519.3	463.8	475.9
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COINCIDENT (MW)												
System	435.1	408.0	359.2	445.8	413.6	434.3	497.6	514.2	506.9	474.6	363.0	370.7

Time	14th@0800	12th@0800	14th@2000	28th@1700	31st@1800	29th@1700	8th@1700	16th@1700	5th@1700	2nd@1700	12th@1900	9th@0800
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On-Peak	82,994	77,717	89,014	101,033	119,924	108,496	120,532	126,015	107,213	96,665	85,606	81,587
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%	34.5%	34.0%	35.0%	38.1%	39.1%	35.1%	37.9%	37.3%	37.1%	38.5%	35.1%	33.3%
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Off-Peak	157,567	150,861	165,313	164,145	186,787	200,608	196,336	211,771	154,413	158,287	163,420	163,420
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%	65.5%	66.0%	65.0%	61.9%	60.9%	64.9%	62.2%	62.7%	62.9%	61.5%	64.9%	66.7%
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Total	240,561	228,578	254,327	265,178	306,711	309,104	318,868	337,843	298,994	251,078	243,993	245,007
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CUSTOMERS												
Monthly Count	4,341	4,354	4,306	4,321	4,271	4,474	4,294	4,338	4,362	4,513	4,280	4,305

FACTORS												
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Coincident Factor (CF)	0.607	0.616	0.533	0.619	0.557	0.535	0.612	0.609	0.615	0.873	0.557	0.570
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Load Factor (Max) %	46.0%	47.2%	51.7%	50.5%	56.6%	52.2%	53.7%	54.8%	48.0%	48.8%	51.3%	51.6%
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Load Factor (NCP) %	61.3%	64.0%	70.6%	64.6%	72.0%	66.1%	68.5%	66.7%	58.2%	61.6%	67.9%	70.5%
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Load Factor (CF) %	75.7%	76.7%	97.0%	81.5%	101.8%	97.5%	87.8%	90.0%	78.1%	72.5%	92.0%	90.5%
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CUSTOMER AVERAGES												
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Energy Use (kWh)	55,416	52,498	59,063	61,370	71,812	69,089	74,259	77,860	66,250	55,634	56,984	56,912
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Ind. Max Demand (kW)	165.12	152.21	156.40	166.61	173.74	181.40	189.29	194.79	186.91	156.32	152.19	151.02
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Coincident Demand (kW)	100.23	93.71	83.42	103.17	96.84	97.07	115.86	118.53	116.21	105.16	84.81	86.11
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TOU Periods - All Months: On-Peak 11 am - 9 pm, M-F Off-Peak 9 pm - 11 am, M-F & All Weekends

SUMMER (May-Oct)	WINTER (Nov-Apr)	ANNUAL
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845.0	719.9	845.0
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Summation Ind Max by Season		
829.9	705.6	829.9

807.6	700.7	807.6
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Class Peak by Season		
693.9	562.0	693.9

647.1	537.5	647.1
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Coincident Peak by Season		
514.2	445.8	514.2

Energy Summation by Season		
676,646	517,951	1,196,796

37.5%	35.1%	36.4%
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1,133,743	956,589	2,090,336
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62.5%	64.9%	63.6%
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1,812,668	1,477,544	3,290,132
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Customer Averages by Season		
4,375	4,318	4,347

Seasonal Factors		
0.509	0.619	0.609

49.0%	45.9%	44.4%
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59.5%	60.0%	54.1%
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83.2%	91.0%	75.5%
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Seasonal Averages		
69,164	57,041	63,097

180.74	157.26	169.00
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108.28	91.91	100.10
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Load Research Cost of Service Data

Year Ended December 31, 2013

\*\*\* General Service E-32 \*\*\*  
401-989 KW

Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
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SUMMER (May-Oct)	WINTER (Nov-Apr)	ANNUAL
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SUMMATION IND MAX (MW)	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
Non-Timed	455.7	421.3	410.9	414.8	419.5	436.5	438.8	474.4	480.8	421.9	388.9	372.8
On-Peak	425.5	386.7	401.2	408.6	413.0	428.1	430.4	468.1	472.5	414.3	376.8	352.4
Off-Peak	446.8	412.1	395.2	398.2	402.4	424.2	424.0	460.4	465.2	401.8	373.9	363.7

Summation Ind Max by Season	Summer	Winter	Annual
	480.8	455.7	480.8
	472.5	425.5	472.5
	485.2	446.8	465.2

CLASS PEAK (MW)	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
On-Peak	336.7	316.1	322.7	342.6	347.7	356.2	356.9	390.6	405.3	353.6	316.3	279.4
Off-Peak	365.3	334.0	305.9	326.1	335.9	338.7	346.5	377.7	391.8	330.9	304.6	292.1

Class Peak by Season	Summer	Winter	Annual
	405.3	342.6	405.3
	391.8	365.3	391.8

COINCIDENT (MW)	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
System	293.9	288.2	254.5	300.5	274.6	240.9	294.3	306.4	322.5	311.1	253.3	207.4
Time	14th@0800	12th@0800	14th@2000	29th@1700	31st@1800	29th@1700	8th@1700	16th@1700	5th@1700	2nd@1700	12th@1900	9th@0800

Coincident Peak by Season	Summer	Winter	Annual
	322.5	300.5	322.5

ENERGY (MWH)	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
On-Peak	56,456	51,489	53,004	56,705	66,030	55,656	60,050	65,278	56,615	60,566	53,181	49,009
%	33.8%	33.2%	33.0%	35.4%	36.1%	32.7%	35.3%	34.4%	34.1%	36.1%	33.4%	32.6%
Off-Peak	110,574	103,599	107,613	103,476	116,878	114,545	110,063	124,483	109,410	107,207	106,045	101,325
%	66.2%	66.8%	67.0%	64.6%	63.9%	67.3%	64.7%	65.6%	65.9%	63.9%	66.6%	67.4%
Total	167,030	155,088	160,617	160,183	182,908	170,201	170,113	189,761	166,025	167,773	159,226	150,334

Energy Summation by Season	Summer	Winter	Annual
	384,194	319,844	684,038
	34.8%	33.6%	34.2%
	682,587	632,634	1,315,221
	65.2%	66.4%	65.8%
	1,046,781	952,478	1,999,259

CUSTOMERS	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
Monthly Count	840	813	761	728	711	695	672	722	748	776	737	720

Customer Averages by Season	Summer	Winter	Annual
	721	767	744

FACTORS	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
Coincident Factor (CF)	0.645	0.684	0.619	0.724	0.655	0.552	0.674	0.646	0.671	0.737	0.651	0.556
Load Factor (Max) %	50.2%	50.4%	50.4%	52.9%	59.7%	59.7%	53.3%	54.8%	47.3%	54.5%	56.1%	55.2%
Load Factor (NCP) %	62.8%	63.6%	68.2%	64.0%	72.1%	65.5%	65.3%	66.6%	56.1%	65.0%	69.0%	70.5%
Load Factor (CP) %	77.9%	73.7%	86.5%	73.0%	91.2%	96.8%	79.2%	84.8%	70.5%	73.9%	86.1%	99.3%

Seasonal Factors	Summer	Winter	Annual
	0.671	0.659	0.671
	48.7%	47.7%	47.5%
	69.0%	69.5%	66.3%
	81.2%	104.9%	77.5%

CUSTOMER AVERAGES	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
Energy Use (kWh)	198,845	190,760	211,060	220,032	257,255	244,894	253,144	262,827	221,959	216,202	216,046	208,797
Ind. Max Demand (kW)	542.46	518.19	539.97	569.74	590.08	628.11	650.07	657.10	642.76	543.72	527.66	517.73
Coincident Demand (kW)	349.86	354.49	334.43	412.77	386.22	346.82	437.95	424.38	431.15	400.90	343.69	288.08

Seasonal Averages	Summer	Winter	Annual
	242,713	207,590	225,162
	618.64	535.98	577.30
	404.54	347.22	375.88

TOU Periods - All Months: On-Peak 11 am - 8 pm, M-F Off-Peak 9 pm - 11 am, M-F & All Weekends



Load Research Cost of Service Data  
Year Ended December 31, 2013

\*\*\* General Service E-32 \*\*\*  
1001+ kW

	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
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SUMMATION IND MAX (MW)												
Non-Timed	146.9	131.2	135.8	157.5	182.7	258.9	241.0	282.0	223.2	170.3	137.2	134.2
On-Peak	139.3	124.8	132.8	156.1	180.5	253.4	237.8	254.8	219.9	168.1	134.1	129.7
Off-Peak	143.9	129.2	131.6	151.5	156.1	251.9	233.8	255.2	216.5	163.4	131.7	131.0

CLASS PEAK (MW)												
On-Peak	113.0	105.0	110.7	132.1	138.2	216.1	203.9	218.3	186.9	144.6	114.8	105.8
Off-Peak	117.8	104.4	107.5	125.8	133.5	205.4	186.3	211.8	183.1	138.0	107.4	109.1

COINCIDENT (MW)												
System	116.9	103.9	103.9	129.0	123.8	179.2	186.3	205.8	176.0	140.5	101.9	107.1
Time	14th@0800	12th@0800	14th@2000	29th@1700	31st@1800	29th@1700	8th@1700	16th@1700	5th@1700	2nd@1700	12th@1900	9th@0800

ENERGY (MWh)												
On-Peak	27,495	25,821	32,347	32,789	39,832	56,615	51,959	49,933	41,749	31,922	32,440	32,430
%	33.9%	32.7%	35.7%	32.3%	34.9%	33.7%	33.3%	35.5%	33.0%	32.3%	35.5%	33.0%
Off-Peak	53,611	53,143	58,261	68,725	74,301	111,382	104,074	90,724	84,763	66,907	58,941	65,843
%	66.1%	67.3%	64.3%	67.7%	65.1%	66.3%	66.7%	64.5%	67.0%	67.7%	64.5%	67.0%
Total	81,106	78,964	90,608	101,514	114,133	167,997	156,033	140,657	126,512	98,829	91,381	98,273

CUSTOMERS												
Monthly Count	124	118	119	130	129	191	167	182	155	141	116	123

FACTORS												
All load factors are calculated based on 730 hours per month.												
Coincident Factor (CF)	0.796	0.792	0.723	0.819	0.761	0.692	0.823	0.785	0.788	0.825	0.743	0.788
Load Factor (Max) %	75.8%	82.5%	91.4%	88.3%	96.1%	88.9%	88.7%	73.9%	77.7%	79.5%	91.3%	100.3%
Load Factor (NCF) %	94.3%	103.0%	112.2%	105.2%	113.2%	106.5%	104.8%	88.3%	92.7%	93.6%	109.3%	123.4%
Load Factor (CF) %	95.0%	104.1%	126.4%	107.8%	126.3%	128.4%	107.8%	93.8%	98.5%	96.4%	122.9%	125.7%

CUSTOMER AVERAGES												
Energy Use (kWh)	654,081	669,186	761,412	780,877	884,752	879,565	934,329	772,841	816,206	700,915	774,415	798,967
Inc. Max Demand (kW)	1,184.60	1,111.55	1,140.86	1,211.71	1,261.37	1,355.27	1,442.91	1,439.63	1,439.85	1,208.08	1,162.45	1,090.74
Coincident Demand (kW)	942.74	880.51	825.21	992.31	959.69	938.22	1,187.43	1,130.77	1,135.48	896.45	863.56	870.73

TOU Periods	All Months:	On-Peak	Off-Peak
	11 am - 9 pm, M-F	9 pm - 11 am, M-F	9 pm - 11 am, M-F & All Weekends

SUMMER (May-Oct)	WINTER (Nov-Apr)	ANNUAL
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Summation Ind Max by Season		
262.0	157.5	262.0
264.8	166.1	264.8
265.2	151.5	265.2

Class Peak by Season		
218.3	132.1	218.3
211.8	125.8	211.8

Coincident Peak by Season		
205.8	128.0	205.8

Energy Summation by Season		
272,010	183,323	455,333
33.8%	33.8%	33.8%
632,151	358,523	890,674
66.2%	66.2%	66.2%
804,161	641,846	1,346,007

Customer Averages by Season		
161	122	141

Seasonal Factors		
0.785	0.819	0.785
70.1%	78.6%	68.6%
84.1%	83.6%	70.4%
92.6%	115.5%	77.5%

Seasonal Averages		
831,435	739,623	785,629
1,367.85	1,150.32	1,254.08
1,056.01	886.84	976.93



Load Research Cost of Service Data  
Year Ended December 31, 2013

\*\*\* General Service E-32 \*\*\*  
401+ kW

	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
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SUMMATION IND MAX (MW)												
Non-Timed	602.6	552.4	546.7	572.3	582.3	695.4	677.8	736.4	704.0	592.3	526.1	506.9
On-Peak	564.7	521.5	534.0	562.7	573.5	661.5	668.2	722.9	692.4	582.4	510.9	482.1
Off-Peak	590.7	541.3	526.8	549.6	566.6	676.0	657.8	715.6	681.7	565.2	505.7	494.7

CLASS PEAK (MW)												
On-Peak	447.7	419.9	433.2	474.0	483.6	570.3	560.2	607.8	592.1	495.2	429.0	394.9
Off-Peak	483.1	438.3	411.2	451.4	467.4	541.9	545.4	601.7	574.9	468.2	412.0	401.1

COINCIDENT (MW)												
System	410.8	392.1	352.7	429.5	398.4	420.1	492.6	512.2	498.5	451.6	355.2	314.5
Time	14h@0800	12h@0800	14h@2000	28h@1700	31st@1800	29h@1700	8th@1700	16h@1700	5th@1700	2nd@1700	12th@1900	9th@0800

ENERGY (MWH)												
On-Peak	83,951	77,310	85,351	89,494	105,862	112,271	112,009	115,211	98,383	92,488	85,622	81,439
%	33.9%	33.0%	34.0%	34.2%	35.6%	33.2%	34.3%	34.9%	33.6%	34.7%	34.2%	32.8%
Off-Peak	164,186	156,742	165,874	172,203	191,179	225,927	214,137	215,207	194,174	174,114	164,985	167,168
%	66.2%	67.0%	66.0%	65.8%	64.4%	66.8%	65.7%	65.1%	66.4%	65.3%	65.8%	67.2%
Total	248,136	234,052	251,225	261,697	297,041	338,198	326,146	330,418	292,537	266,602	250,607	248,607

CUSTOMERS												
Monthly Count	964	931	880	858	840	886	839	904	903	917	855	843

FACTORS												
Coincident Factor (CP)	0.682	0.710	0.645	0.760	0.684	0.604	0.727	0.696	0.709	0.762	0.675	0.620
Load Factor (Max) %	56.4%	58.0%	63.0%	62.6%	69.9%	66.6%	65.9%	61.5%	56.9%	61.7%	65.3%	67.2%
Load Factor (NCP) %	70.4%	73.2%	79.4%	75.6%	84.1%	81.2%	79.8%	74.5%	67.7%	73.7%	80.0%	84.9%
Load Factor (CP) %	82.7%	81.8%	97.6%	83.5%	102.1%	110.3%	90.7%	88.4%	80.4%	80.9%	96.6%	108.3%

CUSTOMER AVERAGES												
Energy Use (kWh)	257,402	251,398	265,483	305,008	353,620	381,713	388,732	365,507	323,961	290,733	288,108	294,907
Ind. Max Demand (kW)	625.06	593.39	621.22	667.01	693.17	784.87	807.88	814.64	779.58	645.87	615.27	601.33
Coincident Demand (kW)	426.12	421.16	400.80	500.58	474.29	474.15	587.13	566.59	552.05	492.48	415.44	373.07

TOU Periods - All Months: On-Peak 11 am - 9 pm, M-F Off-Peak 9 pm - 11 am, M-F & All Weekends

SUMMER (May-Oct)	WINTER (Nov-Apr)	ANNUAL
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Summation Ind Max by Season		
736.4	602.6	736.4
722.9	564.7	722.9
715.6	590.7	715.6

Class Peak by Season		
607.8	474.0	607.8
601.7	483.1	601.7

Coincident Peak by Season		
512.2	426.5	512.2

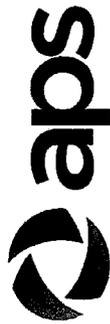
Energy Summation by Season		
636,204	503,167	1,139,371
34.4%	33.7%	34.1%

1,214,738	991,157	2,205,895
65.6%	66.3%	65.9%
1,850,942	1,484,324	3,335,266

Customer Averages by Season		
882	869	885

Seasonal Factors		
0.696	0.713	0.696
57.4%	56.6%	57.9%
69.5%	70.5%	62.8%
85.8%	108.5%	77.5%

Seasonal Averages		
350,711	281,218	315,964
764.34	620.65	687.44
524.45	422.86	473.65



Load Research Cost of Service Data  
Year Ended December 31, 2013

\*\*\* Total General Service E-30 & E-32 \*\*\*

	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
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<b>SUMMATION IND MAX (MW)</b>												
Non-Timed	2,674.0	2,452.2	2,447.9	2,554.9	2,731.3	3,112.8	3,187.6	3,241.9	3,133.7	2,576.1	2,354.2	2,382.7
On-Peak	2,436.6	2,203.0	2,333.8	2,468.8	2,630.6	3,012.1	3,088.2	3,149.2	3,048.0	2,476.2	2,210.9	2,151.0
Off-Peak	2,591.0	2,379.5	2,286.8	2,369.3	2,525.2	2,967.0	3,004.6	3,071.7	2,917.9	2,371.0	2,209.8	2,311.1

<b>CLASS PEAK (MW)</b>												
On-Peak	1,805.2	1,597.0	1,577.9	1,810.7	1,904.0	2,249.6	2,337.3	2,380.8	2,340.6	1,804.9	1,199.3	1,587.4
Off-Peak	1,556.0	1,380.8	1,593.3	1,820.1	1,912.1	2,267.9	2,337.4	2,383.0	2,334.3	1,804.7	1,205.8	1,434.8

<b>COINCIDENT (MW)</b>												
System	1,329.0	1,259.8	1,128.1	1,442.2	1,366.9	1,438.0	1,725.3	1,718.1	1,668.1	1,522.0	1,133.1	1,139.1
Time	14th@0800	12th@0800	14th@2000	29th@1700	31st@1800	29th@1700	8th@1700	16th@1700	5th@1700	2nd@1700	12th@1900	9th@0800

<b>ENERGY (MWH)</b>												
On-Peak	271,526	246,932	282,812	311,328	377,659	365,438	400,602	409,557	345,555	310,141	277,295	262,206
%	34.1%	33.5%	34.9%	37.1%	36.5%	35.2%	37.3%	36.9%	36.5%	37.6%	34.9%	32.9%
Off-Peak	524,607	490,584	526,945	527,106	602,471	673,294	672,995	699,515	602,142	514,962	516,998	535,153
%	65.9%	66.5%	65.1%	62.9%	61.5%	64.8%	62.7%	63.1%	63.5%	62.4%	65.1%	67.1%
Total	796,133	737,516	809,757	838,434	980,130	1,038,732	1,073,597	1,109,072	947,697	825,103	794,293	797,359

<b>CUSTOMERS</b>												
Monthly Count	124,246	124,257	124,462	124,330	124,486	124,491	124,644	124,498	124,684	124,791	124,690	125,143

<b>FACTORS</b>												
All load factors are calculated based on 730 hours per month.												
Coincident Factor (CP)	0.497	0.514	0.460	0.564	0.500	0.462	0.541	0.530	0.532	0.591	0.481	0.478
Load Factor (Max) %	40.8%	41.2%	45.3%	45.0%	49.2%	45.7%	46.1%	46.9%	41.4%	43.9%	46.2%	45.6%
Load Factor (NCP) %	60.4%	63.3%	69.6%	63.1%	70.2%	62.7%	62.9%	63.8%	55.5%	62.6%	90.2%	66.8%
Load Factor (CP) %	82.1%	80.2%	98.5%	79.6%	98.2%	99.0%	85.2%	88.4%	77.8%	74.3%	96.0%	95.9%

<b>CUSTOMER AVERAGES</b>												
Energy Use (kWh)	6,408	5,935	6,506	6,744	7,873	8,344	8,613	8,908	7,600	6,612	6,360	6,372
Ind. Max Demand (kW)	21.52	19.73	19.67	20.55	21.94	25.00	25.57	26.04	25.13	20.64	18.86	19.04
Coincident Demand (kW)	10.70	10.14	9.05	11.60	10.98	11.55	13.84	13.80	13.38	12.20	9.07	9.10

TOU Periods - All Months: On-Peak 11 am - 9 pm, M-F Off-Peak 9 pm - 11 am, M-F & All Weekends

SUMMER (May-Oct)	WINTER (Nov-Apr)	ANNUAL
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Summation Ind Max by Season		
3,241.9	2,674.0	3,241.9
3,149.2	2,468.8	3,149.2
3,071.7	2,591.0	3,071.7

Class Peak by Season		
2,380.8	1,810.7	2,380.8
2,383.0	1,820.1	2,383.0

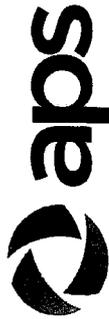
Coincident Peak by Season		
1,725.3	1,442.2	1,725.3

Energy Summation by Season		
2,208,952	1,652,099	3,861,051
37.0%	34.6%	35.9%
3,785,379	3,121,393	6,886,772
63.0%	65.4%	64.1%
5,974,331	4,773,492	10,747,823

Customer Averages by Season		
124,600	124,555	124,578

Seasonal Factors		
0.532	0.539	0.532
42.1%	40.8%	37.8%
57.2%	59.9%	51.5%
79.1%	95.7%	71.1%

Seasonal Averages		
7,952	6,387	7,190
24.06	19.89	21.97
12.62	9.94	11.28



Load Research Cost of Service Data  
Year Ended December 31, 2013

\*\*\* General Service E-32TOU \*\*\*  
0-20 kW

	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
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**SUMMATION IND MAX (MW)**

Non-lined	1.1	1.2	1.2	1.2	1.2	1.6	1.4	1.4	1.5	1.4	1.4	1.3
On-Peak	1.0	1.1	1.1	1.1	1.2	1.5	1.4	1.4	1.4	1.3	1.3	1.2
Off-Peak	1.1	1.2	1.2	1.2	1.2	1.5	1.4	1.4	1.4	1.3	1.3	1.3

**CLASS PEAK (MW)**

On-Peak	0.8	0.9	1.0	1.0	0.9	1.2	1.2	1.2	1.2	1.1	1.1	1.0
Off-Peak	0.8	0.9	0.9	0.9	0.9	1.2	1.1	1.2	1.2	1.1	1.0	1.0

**COINCIDENT (MW)**

System	0.4	0.5	0.8	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.6	0.6
Time	14th@0800	12th@0800	14th@2000	29th@1700	31st@1800	29th@1700	8th@1700	16th@1700	5th@1700	2nd@1700	12th@1900	9th@0800

**ENERGY (MWH)**

On-Peak	91	92	96	94	110	115	124	124	99	108	104	108
%	24.9%	25.2%	25.9%	28.3%	29.9%	27.2%	29.8%	28.2%	28.0%	29.0%	26.9%	26.4%
Off-Peak	274	274	273	238	257	307	291	314	254	264	283	303
%	75.2%	74.8%	74.1%	71.7%	70.1%	72.8%	70.2%	71.8%	72.0%	71.0%	73.1%	73.6%
Total	365	366	369	332	367	422	415	438	353	372	387	412

**CUSTOMERS**

Monthly Count	199	204	204	195	174	196	190	186	190	198	201	205
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**FACTORS**

All load factors are calculated based on 730 hours per month.

Coincident Factor (CP)	0.388	0.411	0.646	0.415	0.402	0.385	0.351	0.348	0.340	0.430	0.659	0.448
Load Factor (Max) %	46.5%	41.2%	40.8%	37.7%	40.4%	37.1%	39.9%	41.7%	32.8%	36.5%	36.8%	42.2%
Load Factor (NCP) %	62.3%	53.4%	51.6%	49.1%	51.4%	48.8%	48.5%	50.1%	40.2%	45.9%	50.3%	56.6%
Load Factor (CP) %	119.8%	100.3%	83.2%	91.0%	100.5%	96.3%	113.7%	120.0%	96.7%	84.9%	58.9%	94.1%

**CUSTOMER AVERAGES**

Energy Use (kWh)	1,834	1,794	1,892	1,908	2,134	2,153	2,184	2,355	1,868	1,879	1,925	2,010
Ind. Max Demand (kW)	5.41	5.98	6.35	6.92	7.24	7.95	7.50	7.73	7.75	7.05	6.79	6.53
Coincident Demand (kW)	2.10	2.45	4.10	2.87	2.91	3.06	2.63	2.69	2.63	3.03	4.48	2.93

TOU Periods - All Months: On-Peak 11 am - 9 pm, M-F Off-Peak 9 pm - 11 am, M-F & All Weekends

SUMMER (May-Oct)	WINTER (Nov-Apr)	ANNUAL
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Summation Ind Max by Season	1.8	1.4	1.6
	1.5	1.3	1.5
	1.5	1.3	1.5

Class Peak by Season	1.2	1.1	1.2
	1.2	1.0	1.2

Coincident Peak by Season	0.6	0.9	0.9
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Energy Summation by Season	678	585	1,264
	28.7%	26.2%	27.5%

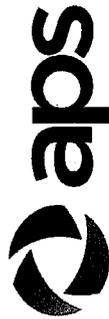
	1,889	1,648	3,334
	71.3%	73.8%	72.5%
Total	2,567	2,231	4,598

Customer Averages by Season	189	196	193
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Seasonal Factors	0.385	0.659	0.385
	34.7%	37.3%	33.7%

	45.0%	48.3%	43.7%
	108.1%	84.9%	105.0%

Seasonal Averages	2,094	1,894	1,994
	7.54	6.33	6.93
	2.82	3.15	2.93



Load Research Cost of Service Data  
Year Ended December 31, 2013

\*\*\* General Service E-32TOU \*\*\*  
21-100 KW

	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
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**SUMMATION IND MAX (MW)**

Non-Timed	4.6	5.3	4.9	5.5	5.3	7.2	6.3	7.5	7.6	5.1	4.8	5.5
On-Peak	4.1	4.6	4.5	5.2	5.1	6.6	6.0	7.0	7.1	4.8	4.3	4.8
Off-Peak	4.6	5.2	4.8	5.3	5.1	7.0	6.1	7.2	7.3	4.9	4.6	5.4

**CLASS PEAK (MW)**

On-Peak	2.9	3.3	3.1	3.6	3.8	5.1	4.4	5.2	5.2	3.5	3.1	3.4
Off-Peak	3.2	3.5	3.0	3.5	3.5	5.0	4.2	5.0	4.8	3.2	2.8	3.7

**COINCIDENT (MW)**

System	2.1	2.5	2.7	2.7	2.9	3.0	2.8	3.0	3.0	2.6	2.7	2.4
Time	14th@0800	12th@0800	14th@2000	29th@1700	31st@1800	29th@1700	8th@1700	16th@1700	5th@1700	2nd@1700	12th@1900	9th@0800

**ENERGY (MWH)**

On-Peak	633	783	668	863	977	995	1,052	1,226	1,037	811	705	761
%	29.6%	28.5%	29.1%	32.3%	33.9%	30.7%	33.5%	32.3%	32.0%	33.2%	30.1%	28.5%
Off-Peak	1,506	1,966	1,628	1,808	1,905	2,247	2,088	2,569	2,205	1,632	1,638	1,909
%	70.4%	71.5%	70.9%	67.7%	66.1%	69.3%	66.5%	67.7%	68.0%	66.8%	69.9%	71.5%
Total	2,139	2,749	2,296	2,671	2,882	3,242	3,140	3,795	3,242	2,443	2,343	2,670

**CUSTOMERS**

Monthly Count	126	144	132	145	136	160	141	168	169	140	129	146
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All load factors are calculated based on 730 hours per month.

**FACTORS**

Coincident Factor (CF)	0.462	0.469	0.547	0.495	0.545	0.419	0.447	0.400	0.393	0.510	0.567	0.436
Load Factor (Max) %	63.3%	70.6%	63.7%	67.1%	74.3%	62.0%	68.7%	69.3%	56.2%	65.6%	67.4%	66.5%
Load Factor (NCP) %	91.7%	106.7%	100.3%	100.3%	103.6%	87.2%	98.9%	99.4%	85.5%	95.2%	102.6%	98.3%
Load Factor (CP) %	137.0%	150.6%	116.5%	135.5%	136.1%	148.0%	153.6%	173.3%	148.0%	128.7%	118.9%	152.4%

**CUSTOMER AVERAGES**

Energy Use (kWh)	16,976	19,090	17,394	18,421	21,191	20,263	25,270	22,589	19,183	17,450	18,163	18,288
Ind. Max Demand (kW)	36.73	37.02	37.41	37.63	39.10	44.75	44.41	44.62	45.16	36.45	36.90	37.68
Coincident Demand (kW)	16.97	17.36	20.45	18.62	21.32	18.75	19.86	17.86	17.75	18.57	20.93	16.44

TOU Periods - All Months: On-Peak 11 am - 9 pm, M-F Off-Peak 9 pm - 11 am, M-F & All Weekends

SUMMER (May-Oct)	WINTER (Nov-Apr)	ANNUAL
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Summation Ind Max by Season	7.6	5.5	7.6
	7.1	5.2	7.1
	7.3	5.4	7.3

Class Peak by Season	5.2	3.8	5.2
	5.0	3.7	5.0

Coincident Peak by Season	3.0	2.7	3.0
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Energy Summation by Season	6,098	4,414	10,512
%	32.5%	23.7%	31.3%
	12,646	10,464	23,100
%	67.5%	70.3%	68.7%
Total	18,744	14,868	33,612

Customer Averages by Season	152	137	146
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Seasonal Factors	0.393	0.491	0.393
	56.0%	61.7%	50.3%
	81.8%	91.2%	73.4%
	152.8%	141.4%	137.0%

Seasonal Averages	20,491	18,055	19,273
	42.42	37.23	39.82
	18.02	18.46	18.74



Load Research Cost of Service Data  
Year Ended December 31, 2013

\*\*\* General Service E-32TOU \*\*\*  
0-100 kW

	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
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<b>SUMMATION IND MAX (MW)</b>													
Non-Loaded	5.7	6.5	6.2	6.7	6.7	6.6	8.7	7.7	8.9	9.1	6.5	6.1	6.8
On-Peak	5.1	5.8	5.7	6.3	6.3	6.3	8.1	7.3	8.4	8.5	6.1	5.5	6.1
Off-Peak	5.6	6.4	6.0	6.4	6.4	6.3	8.6	7.5	8.7	8.8	6.3	5.9	6.7

<b>CLASS PEAK (MW)</b>													
On-Peak	3.9	4.4	3.6	3.9	3.9	3.9	5.4	4.8	5.6	5.7	3.8	3.8	4.7
Off-Peak	3.7	4.2	4.1	4.5	4.5	4.5	6.2	5.5	6.4	6.3	4.4	4.1	4.5

<b>COINCIDENT (MW)</b>													
System	2.6	3.0	3.5	3.2	3.2	3.4	3.6	3.3	3.5	3.5	3.2	3.6	3.0
Time	14th@0800	12th@0800	14th@2000	29th@1700	31st@1800	29th@1700	29th@1700	8th@1700	16th@1700	5th@1700	2nd@1700	12th@1900	9th@0800

<b>ENERGY (MWH)</b>													
On-Peak	724	876	764	957	1,087	1,087	1,110	1,176	1,349	1,136	919	809	870
%	26.9%	28.1%	26.7%	31.9%	33.4%	33.1%	30.3%	33.1%	31.9%	31.6%	32.6%	29.6%	28.2%
Off-Peak	1,780	2,239	1,901	2,046	2,162	2,554	2,379	2,884	2,459	1,896	1,921	2,212	2,212
%	71.1%	71.9%	71.3%	68.1%	66.6%	69.7%	66.9%	66.1%	68.4%	67.4%	70.4%	71.6%	71.8%
Total	2,504	3,115	2,665	3,003	3,249	3,664	3,555	4,233	3,595	2,815	2,730	3,082	3,082

<b>CUSTOMERS</b>													
Monthly Count	325	348	327	319	308	308	356	331	354	359	338	330	351

<b>FACTORS</b>													
Coincident Factor (CF)	0.448	0.458	0.557	0.480	0.518	0.413	0.429	0.392	0.384	0.492	0.588	0.439	0.439
Load Factor (Max) %	60.1%	65.2%	59.1%	61.8%	67.8%	67.8%	57.8%	63.4%	64.9%	54.1%	59.3%	61.1%	61.7%
Load Factor (NCP) %	88.0%	97.0%	89.0%	91.4%	98.9%	81.0%	88.5%	90.6%	78.2%	87.6%	91.2%	89.8%	89.8%
Load Factor (CP) %	134.2%	142.2%	104.3%	128.6%	130.9%	139.4%	147.6%	165.7%	140.7%	120.5%	103.9%	140.7%	140.7%

<b>CUSTOMER AVERAGES</b>													
Energy Use (kWh)	7,705	8,951	8,150	9,414	10,549	10,292	10,740	11,958	10,014	8,328	8,273	8,761	8,761
Ind. Max Demand (kW)	17.55	18.81	18.89	20.88	21.31	24.48	23.22	25.24	25.37	19.22	18.56	19.49	19.49
Coincident Demand (kW)	7.86	8.62	10.70	10.03	11.04	10.11	9.97	9.89	9.75	9.47	10.91	8.55	8.55

TOU Periods - All Months: On-Peak 11 am - 9 pm, M-F Off-Peak 9 pm - 11 am, M-F & All Weekends

SUMMER (May-Oct)	WINTER (Nov-Apr)	ANNUAL
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Summation Ind Max by Season		
9.1	6.8	9.1
8.5	6.3	8.5
8.8	6.7	8.8

Class Peak by Season		
6.7	4.7	6.7
6.4	4.5	6.4

Coincident Peak by Season		
3.6	3.6	3.6

Energy Summation by Season		
6,777	4,959	11,776
32.1%	29.2%	30.8%
14,334	12,100	26,434
67.9%	70.8%	69.2%
21,111	17,099	38,210

Customer Averages by Season		
341	333	337

Seasonal Factors		
0.395	0.526	0.395
52.9%	57.1%	47.9%
75.3%	83.1%	68.2%
146.1%	130.1%	132.2%

Seasonal Averages		
10.313	8.545	9.428
23.14	19.03	21.09
10.04	9.45	9.74



**Load Research Cost of Service Data**  
Year Ended December 31, 2013

\*\*\* General Service E-32TOU \*\*\*  
101-400 KW

	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
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<b>SUMMATION IND MAX (MW)</b>	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
Non-Timed	13.2	14.8	12.7	14.4	14.3	17.3	16.5	16.2	15.5	13.1	13.1	12.7
On-Peak	10.7	11.9	10.1	12.0	12.0	14.5	14.4	13.6	13.3	10.6	10.5	10.5
Off-Peak	13.1	14.6	12.4	14.0	13.8	17.0	16.2	16.0	15.0	12.7	12.8	12.5

<b>CLASS PEAK (MW)</b>	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
On-Peak	8.3	9.6	7.9	9.4	9.5	11.8	11.4	11.1	10.6	8.6	8.2	7.8
Off-Peak	10.1	12.0	8.7	10.1	10.2	11.9	12.0	11.5	10.7	8.7	9.1	8.8

<b>COINCIDENT (MW)</b>	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
System	6.6	8.9	6.0	7.3	6.6	7.3	7.4	7.2	7.1	7.1	6.4	5.7
Time	14th@0800	12th@0800	14th@2000	29th@1700	31st@1800	29th@1700	8th@1700	16th@1700	5th@1700	2nd@1700	12th@1900	9th@0800

<b>ENERGY (MWH)</b>	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
On-Peak	1,626	1,728	1,569	1,767	2,128	2,128	2,352	2,333	1,860	1,768	1,762	1,455
%	30.4%	29.5%	29.4%	32.0%	32.8%	29.6%	32.6%	31.6%	31.3%	32.4%	30.1%	29.2%
Off-Peak	3,724	4,128	3,768	3,754	4,359	5,060	4,862	5,049	4,082	3,668	4,092	3,527
%	69.6%	70.5%	70.6%	68.0%	67.2%	70.4%	67.4%	68.4%	68.7%	67.6%	69.9%	70.8%
Total	5,350	5,856	5,337	5,521	6,487	7,188	7,214	7,382	5,942	5,426	5,854	4,982

<b>CUSTOMERS</b>	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
Monthly Count	73	85	71	76	73	80	76	77	74	72	76	71

<b>FACTORS</b>	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
Coincident Factor (C/P)	0.500	0.603	0.471	0.507	0.463	0.423	0.448	0.443	0.458	0.542	0.490	0.449
Load Factor (Max) %	55.4%	54.3%	57.4%	52.5%	62.4%	57.0%	59.8%	62.2%	52.5%	56.8%	61.4%	53.8%
Load Factor (NCP) %	72.4%	66.8%	83.9%	74.7%	86.9%	82.9%	82.3%	88.2%	75.7%	85.7%	88.0%	77.5%
Load Factor (CP) %	110.9%	90.1%	121.8%	103.8%	134.9%	134.9%	133.5%	140.4%	114.6%	104.7%	125.3%	119.7%

<b>CUSTOMER AVERAGES</b>	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
Energy Use (kWh)	73,288	68,884	75,169	72,645	88,863	89,850	94,921	95,870	80,297	75,361	77,026	70,169
Ind. Max Demand (kW)	181.15	173.78	179.36	189.60	195.22	215.78	217.63	211.00	209.65	181.81	171.95	178.68
Coincident Demand (kW)	90.51	104.71	84.51	96.05	90.41	91.25	97.37	93.51	95.95	98.61	84.21	80.23

TOU Periods - All Months: On-Peak 11 am - 9 pm, M-F Off-Peak 9 pm - 11 am, M-F & All Weekends

SUMMER (May-Oct)	WINTER (Nov-Apr)	ANNUAL
17.3	14.8	17.3

Summation Ind Max by Season
14.5
12.0
14.5

Class Peak by Season
11.8
9.6
11.8

Coincident Peak by Season
7.4
8.9
7.4

Energy Summation by Season
12,558
9,907
22,464
31.7%
30.1%
31.0%
27,081
22,983
68.3%
69.9%
69.0%
39,639
32,900
72,539

Customer Averages by Season
76
76
76

Seasonal Factors
0.429
0.603
0.429
52.4%
60.9%
48.0%
75.3%
62.5%
68.9%
122.3%
131.8%
111.9%

Seasonal Averages
87,527
72,865
80,196
205.17
179.09
192.13
94.52
90.05
92.23



Load Research Cost of Service Data  
Year Ended December 31, 2013

\*\*\* General Service E-32TOU \*\*\*  
401-998 kW

	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
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<b>SUMMATION IND MAX (MW)</b>												
Non-Timed	20.5	22.2	24.5	24.6	23.9	26.4	27.7	23.8	30.4	24.4	24.4	24.0
On-Peak	19.0	21.0	23.2	23.0	21.0	25.6	25.7	22.6	28.2	22.7	22.7	22.5
Off-Peak	20.2	21.9	23.9	24.0	23.9	25.6	27.2	23.3	29.7	23.8	24.0	23.8

<b>CLASS PEAK (MW)</b>												
On-Peak	16.5	18.3	20.7	20.4	18.5	21.8	22.9	20.8	24.4	20.0	20.5	19.3
Off-Peak	17.5	18.6	20.2	20.1	18.4	21.5	22.3	20.8	24.6	20.2	20.6	19.5

<b>COINCIDENT (MW)</b>												
System	10.7	13.3	11.7	13.4	11.1	9.0	11.9	11.0	14.4	14.3	15.4	13.5
Time	14th@0800	12th@0800	14th@2000	29th@1700	31st@1800	29th@1700	8th@1700	18th@1700	5th@1700	2nd@1700	12th@1900	9th@0800

<b>ENERGY (MWH)</b>												
On-Peak	2,945	2,579	2,762	3,900	3,601	3,404	3,915	3,823	3,321	3,126	3,449	3,262
%	32.8%	31.0%	30.5%	33.1%	33.3%	30.4%	33.2%	31.5%	32.0%	33.4%	31.3%	31.5%
Off-Peak	6,034	5,741	6,293	7,883	7,214	7,793	7,876	8,312	7,058	6,234	7,570	7,094
%	67.2%	69.0%	69.5%	66.9%	66.7%	69.6%	66.8%	68.5%	68.0%	66.6%	68.7%	68.5%
Total	8,979	8,320	9,055	11,783	10,815	11,197	11,791	12,135	10,379	9,360	11,019	10,356

<b>CUSTOMERS</b>												
Monthly Count	36	36	37	37	33	37	39	35	44	39	41	40

<b>FACTORS</b>												
All load factors are calculated based on 730 hours per month.												
Coincident Factor (CF)	0.523	0.599	0.478	0.546	0.485	0.341	0.430	0.461	0.474	0.585	0.632	0.563
Load Factor (Max) %	60.0%	51.3%	50.7%	65.7%	62.1%	58.1%	58.4%	69.7%	46.8%	52.5%	61.9%	59.1%
Load Factor (NCP) %	70.4%	61.4%	59.9%	76.3%	80.2%	70.5%	70.6%	79.8%	57.7%	63.5%	73.4%	72.7%
Load Factor (CP) %	114.8%	85.7%	106.0%	120.5%	133.5%	170.4%	135.7%	151.1%	98.7%	89.7%	96.0%	105.1%

<b>CUSTOMER AVERAGES</b>												
Energy Use (kWh)	249,417	231,111	244,730	318,459	327,727	302,333	346,714	235,886	240,000	268,756	258,900	258,900
Ind. Max Demand (kW)	589.15	616.73	661.41	663.54	723.17	713.29	709.08	681.40	690.06	626.63	594.53	599.73
Coincident Demand (kW)	297.61	389.44	316.22	362.16	336.36	243.24	305.13	314.29	327.27	366.67	375.61	337.50

TOU Periods - All Months: On-Peak 11 am - 9 pm, M-F Off-Peak 9 pm - 11 am, M-F & All Weekends

SUMMER (May-Oct)	WINTER (Nov-Apr)	ANNUAL
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Summation Ind Max by Season		
30.4	24.6	30.4
28.2	23.2	28.2
29.7	24.0	29.7

Class Peak by Season		
24.4	20.7	24.4
24.6	20.6	24.6

Coincident Peak by Season		
14.4	15.4	15.4

Energy Summation by Season		
21,190	19,897	40,087
32.3%	31.8%	32.0%
44,487	40,615	85,102
67.7%	68.2%	68.0%
65,677	60,512	125,189

Customer Averages by Season		
38	38	38

Seasonal Factors		
0.474	0.627	0.474
49.4%	55.3%	47.1%
60.9%	65.7%	58.0%
126.0%	100.6%	120.1%

Seasonal Averages		
292,547	261,898	277,221
690.60	617.51	654.06
316.49	343.09	329.29



Load Research Cost of Service Data  
Year Ended December 31, 2013

\*\*\* General Service E-32TOU \*\*\*  
1001+ kW

	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
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**SUMMATION IND MAX (MW)**

Non-Timed	16.7	27.0	25.4	32.7	19.8	31.4	21.6	29.9	24.1	20.4	19.8	22.7
On-Peak	15.6	25.3	22.3	29.9	18.0	28.8	19.5	26.9	21.8	19.5	18.3	21.6
Off-Peak	18.6	26.8	23.5	32.3	19.8	31.2	21.4	29.7	23.7	20.0	19.6	21.8

**CLASS PEAK (MW)**

On-Peak	13.3	22.2	17.7	27.2	15.5	25.2	16.9	23.7	18.9	17.2	14.9	17.0
Off-Peak	13.6	21.7	18.5	27.4	16.4	25.5	17.8	24.2	19.7	16.5	14.6	16.7

**CONCIDENT (MW)**

System	12.0	20.7	16.5	26.5	14.2	23.1	15.6	21.1	17.5	16.1	14.3	15.5
Time	14th@0800	12th@0800	14th@2000	29th@1700	31st@1800	29th@1700	8th@1700	16th@1700	5th@1700	2nd@1700	12th@1900	8th@0800

**ENERGY (MWH)**

On-Peak	3,340	4,121	3,816	6,020	3,944	3,985	3,442	4,416	2,792	3,712	3,348	4,175
%	32.0%	30.8%	29.6%	32.3%	31.9%	28.8%	30.9%	29.6%	29.6%	33.0%	30.7%	31.0%
Off-Peak	7,088	9,259	9,076	12,817	8,421	9,947	7,697	10,504	6,642	7,537	7,656	9,292
%	68.0%	69.2%	70.4%	67.7%	68.1%	71.4%	69.1%	70.4%	70.4%	67.0%	69.3%	69.0%
Total	10,428	13,380	12,892	18,837	12,365	13,932	11,139	14,920	9,434	11,249	10,904	13,467

**CUSTOMERS**

Monthly Count	13	22	17	21	12	18	12	17	14	14	13	15
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All load factors are calculated based on 730 hours per month.

**FACTORS**

Coincident Factor (CF)	0.717	0.788	0.649	0.810	0.716	0.735	0.723	0.705	0.725	0.790	0.721	0.681
Load Factor (Max) %	85.4%	68.0%	69.4%	78.0%	85.4%	60.7%	70.8%	68.3%	53.5%	75.6%	75.3%	81.1%
Load Factor (NCP) %	105.2%	82.4%	95.7%	93.3%	103.4%	74.9%	85.5%	84.5%	65.6%	89.8%	100.4%	108.8%
Load Factor (CP) %	119.2%	88.5%	107.0%	96.3%	119.3%	82.6%	97.8%	96.9%	73.8%	95.7%	104.5%	119.0%

**CUSTOMER AVERAGES**

Energy Use (kWh)	802,923	608,182	758,353	687,476	1,030,417	774,000	828,250	877,647	673,857	803,500	838,769	897,800
Incl. Max Demand (kW)	1,287.59	1,225.41	1,486.36	1,556.70	1,653.41	1,746.61	1,797.00	1,759.82	1,723.96	1,456.04	1,525.75	1,516.35
Coincident Demand (kW)	923.08	940.91	970.59	1,261.90	1,183.39	1,283.33	1,300.00	1,241.18	1,250.00	1,150.00	1,100.00	1,033.33

TOU Periods - All Months: On-Peak 11 am - 9 pm, M-F Off-Peak 9 pm - 11 am, M-F & All Weekends

SUMMER (May-Oct)	WINTER (Nov-Apr)	ANNUAL
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Summation Ind Max by Season	31.4	32.7	32.7
	28.8	28.9	29.9
	31.2	32.3	32.3

Class Peak by Season	26.2	27.2	27.2
	25.5	27.4	27.4

Coincident Peak by Season	23.1	26.5	26.5
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Energy Summation by Season	22,292	24,819	47,111
	30.5%	31.1%	30.8%
	50,747	64,899	105,646
	69.5%	68.9%	69.2%
	73,039	79,718	152,757

Customer Averages by Season	15	17	16
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Seasonal Factors	0.735	0.810	0.735
	53.0%	55.6%	53.3%
	65.5%	66.5%	63.7%
	105.9%	117.4%	111.8%

Seasonal Averages	847,945	798,917	823,431
	1,889.47	1,435.03	1,562.25
	1,234.64	1,038.30	1,136.47



Load Research Cost of Service Data  
Year Ended December 31, 2013

\*\*\* General Service E-32TOU \*\*\*  
401+ kW

	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
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SUMMATION IND MAX (MW)												
	Non-Timed	37.2	49.2	49.9	57.3	43.7	57.8	49.2	53.8	54.5	44.8	44.2
On-Peak	34.6	46.2	45.6	52.9	39.0	54.3	45.2	49.5	50.1	42.1	40.9	44.1
Off-Peak	36.8	48.7	47.4	56.3	43.0	56.8	48.6	53.0	53.4	43.8	43.6	45.6

CLASS PEAK (MW)												
	On-Peak Weighted	30.2	39.2	37.7	46.4	34.0	45.4	38.7	43.8	44.3	36.7	35.0
Off-Peak Weighted	29.0	38.2 <td>37.3 <td>45.3 <td>34.7 <td>45.3 <td>40.1 <td>42.9 <td>42.0 <td>36.9 <td>34.8 <td>35.5</td> </td></td></td></td></td></td></td></td></td>	37.3 <td>45.3 <td>34.7 <td>45.3 <td>40.1 <td>42.9 <td>42.0 <td>36.9 <td>34.8 <td>35.5</td> </td></td></td></td></td></td></td></td>	45.3 <td>34.7 <td>45.3 <td>40.1 <td>42.9 <td>42.0 <td>36.9 <td>34.8 <td>35.5</td> </td></td></td></td></td></td></td>	34.7 <td>45.3 <td>40.1 <td>42.9 <td>42.0 <td>36.9 <td>34.8 <td>35.5</td> </td></td></td></td></td></td>	45.3 <td>40.1 <td>42.9 <td>42.0 <td>36.9 <td>34.8 <td>35.5</td> </td></td></td></td></td>	40.1 <td>42.9 <td>42.0 <td>36.9 <td>34.8 <td>35.5</td> </td></td></td></td>	42.9 <td>42.0 <td>36.9 <td>34.8 <td>35.5</td> </td></td></td>	42.0 <td>36.9 <td>34.8 <td>35.5</td> </td></td>	36.9 <td>34.8 <td>35.5</td> </td>	34.8 <td>35.5</td>	35.5

COINCIDENT (MW)												
	System	22.7	34.0	28.2	39.9	25.3	32.1	27.5	32.1	31.9	30.4	29.7
Time	14th@0800	12th@0800	14th@2000	23th@1700	31st@1800	29th@1700	8th@1700	16th@1700	5th@1700	2nd@1700	12th@1900	9th@0800

ENERGY (MWH)												
	On-Peak	6,285	6,700	6,578	9,920	7,546	7,388	7,357	8,239	6,114	6,838	6,796
%	32.4%	30.9%	30.0%	32.6%	32.6%	29.4%	32.1%	30.5%	30.9%	33.2%	31.0%	31.2%
Off-Peak	13,132	15,000	15,369	20,500	15,634	17,741	15,573	18,616	13,699	13,771	15,127	16,366
%	67.6%	69.1%	70.0%	67.4%	67.4%	70.6%	67.9%	69.5%	69.1%	66.8%	69.0%	68.8%
Total	19,417	21,700	21,947	30,420	23,180	25,129	22,930	27,055	19,813	20,609	21,923	23,823

CUSTOMERS												
	Monthly Count	49	58	54	56	45	55	51	52	58	53	54

FACTORS	All load factors are calculated based on 730 hours per month.											
	Coincident Factor (CF)	0.610	0.692	0.565	0.697	0.579	0.555	0.559	0.597	0.565	0.678	0.672
Load Factor (Max) %	71.4%	60.5%	60.2%	72.7%	72.7%	79.7%	63.8%	68.9%	49.8%	63.0%	67.9%	69.8%
Load Factor (NCP) %	88.1%	75.8%	79.7%	89.8%	91.5%	75.8%	78.3%	84.6%	61.3%	76.5%	85.8%	90.9%
Load Factor (CP) %	117.1%	87.4%	106.8%	104.4%	125.5%	107.2%	114.2%	115.5%	85.1%	92.9%	101.1%	112.5%

CUSTOMER AVERAGES	Seasonal Averages											
	Energy Use (kWh)	396,265	374,138	406,426	524,483	515,111	456,891	449,608	520,288	341,603	389,849	405,981
Ind. Max Demand (kW)	769.76	847.61	924.26	987.65	971.23	1,051.47	965.06	1,033.96	939.62	845.72	818.71	849.72
Coincident Demand (kW)	463.55	586.21	522.22	687.93	562.22	583.64	539.22	617.31	550.00	573.58	550.00	527.27

SUMMER (May-Oct)	WINTER (Nov-Apr)	ANNUAL
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Summation Ind Max by Season		
57.8	57.3	57.8
54.3	52.9	54.3
56.8	56.3	56.8

Class Peak by Season		
46.4	46.4	46.4
45.3	45.3	45.3

Coincident Peak by Season		
32.1	39.9	39.9

Energy Summation by Season		
43,482	43,717	87,199
31.3%	31.4%	31.4%

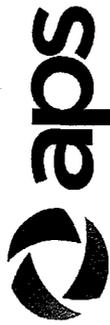
95,234	95,513	190,748
68.7%	68.8%	68.8%
138,716	139,230	277,946

Customer Averages by Season		
52	55	54

Seasonal Factors		
0.555	0.597	0.555
54.8%	55.5%	54.9%
69.8%	68.5%	68.4%
115.2%	109.6%	115.4%

Seasonal Averages		
445,392	423,406	434,399
967.94	864.62	916.23
570.99	566.20	563.60

TOU Periods - All Months: On-Peak 11 am - 9 pm, M-F Off-Peak 9 pm - 11 am, M-F & All Weekends



Load Research Cost of Service Data  
Year Ended December 31, 2013

\*\*\* Total General Service E-32TOU \*\*\*

	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
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SUMMATION IND MAX (MW)												
Non-Limited	56.2	70.5	68.8	78.4	64.5	83.8	73.4	78.9	79.1	64.4	63.4	66.3
On-Peak	50.3	63.9	61.3	71.2	57.3	76.9	66.9	71.6	71.8	58.9	57.0	60.7
Off-Peak	55.5	69.8	65.9	76.7	63.1	82.4	72.3	77.1	77.1	62.8	62.4	64.8

CLASS PEAK (MW)												
On-Peak	44.0	55.1	48.2	58.8	46.5	61.3	54.7	59.8	59.7	48.6	46.1	47.9
Off-Peak	39.8	50.3	48.4	58.3	49.4	61.3	56.6	59.3	56.5	48.6	46.0	46.4

COINCIDENT (MW)												
System	31.9	45.9	37.7	50.4	35.3	43.0	38.2	42.8	42.5	40.7	39.7	37.7
Time	14th@0800	12th@0800	14th@2000	29th@1700	31st@1800	29th@1700	8th@1700	16th@1700	5th@1700	2nd@1700	12th@1900	9th@0800

ENERGY (MWH)												
On-Peak	8,635	9,303	8,911	12,643	10,760	10,826	10,884	11,921	9,110	9,515	9,368	9,761
%	31.7%	30.3%	29.8%	32.5%	32.7%	29.5%	32.3%	30.8%	31.0%	33.0%	30.7%	30.8%
Off-Peak	18,636	21,968	21,038	26,301	25,156	25,355	22,815	26,749	20,240	19,335	21,139	22,126
%	68.3%	69.7%	70.2%	67.5%	67.3%	70.5%	67.7%	69.2%	69.0%	67.0%	69.3%	69.4%
Total	27,271	30,671	29,949	38,944	35,916	35,981	33,699	38,670	29,350	28,850	30,507	31,887

CUSTOMERS												
Monthly Count	447	491	452	453	426	491	458	483	491	463	460	477

FACTORS												
Coincident Factor (CP)	0.568	0.651	0.548	0.643	0.547	0.513	0.520	0.542	0.537	0.632	0.626	0.569
Load Factor (Max) %	66.5%	59.6%	59.6%	68.1%	69.9%	66.8%	62.9%	67.1%	50.8%	61.4%	65.9%	65.9%
Load Factor (NGP) %	84.9%	76.3%	84.8%	90.7%	91.3%	80.4%	81.6%	88.9%	67.3%	81.3%	90.7%	91.2%
Load Factor (CP) %	117.2%	91.5%	108.6%	105.8%	127.7%	114.6%	120.8%	123.8%	94.6%	97.1%	105.3%	115.9%

CUSTOMER AVERAGES												
Energy Use (kWh)	61,009	62,466	66,259	85,969	77,268	73,281	73,579	80,062	59,776	62,311	66,320	66,849
Ind. Max Demand (kW)	125.63	143.54	152.26	172.97	151.45	170.89	160.34	163.45	161.14	139.12	137.83	138.91
Coincident Demand (kW)	71.31	93.48	83.41	111.26	82.86	87.58	83.41	86.56	87.90	87.90	86.30	79.04

TOU Periods - All Months: On-Peak 11 am - 9 pm, M-F Off-Peak 9 pm - 11 am, M-F & All Weekends

SUMMER (May-Oct)	WINTER (Nov-Apr)	ANNUAL
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Summation Ind Max by Season		
83.8	78.4	83.8
76.9	71.2	76.9
82.4	76.7	82.4

Class Peak by Season		
61.3	58.8	61.3
61.3	58.3	61.3

Coincident Peak by Season		
43.0	50.4	50.4

Energy Summation by Season		
62,816	58,622	121,438
31.5%	31.0%	31.2%

Customer Averages by Season		
469	463	466

Seasonal Factors		
0.513	0.643	0.513
54.3%	55.1%	52.9%
74.3%	73.5%	72.4%
119.2%	114.6%	116.2%

Seasonal Averages		
71,046	63,145	69,596
157.70	146.19	151.76
86.15	87.47	86.81



Load Research Cost of Service Data  
Year Ended December 31, 2013

\*\*\* General Service E-34 \*\*\*

	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
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<b>SUMMATION IND MAX (MW)</b>												
Non-Timed	124.5	121.6	130.5	140.7	143.0	151.0	156.8	155.6	155.4	132.6	124.2	118.0
On-Peak	121.8	119.3	130.1	140.4	142.0	149.6	155.9	155.0	155.0	131.8	123.9	115.7
Off-Peak	122.4	120.1	125.4	133.6	137.3	145.5	153.1	151.4	150.0	125.5	118.6	115.0

<b>CLASS PEAK (MW)</b>												
On-Peak	110.9	111.0	119.6	129.8	129.8	136.3	143.9	144.9	145.2	124.4	116.8	103.9
Off-Peak	110.5	107.7	115.0	121.0	124.3	129.6	139.7	141.7	139.6	117.5	113.3	105.2

<b>COINCIDENT (MW)</b>												
System	104.1	103.7	103.6	122.1	118.3	124.4	139.4	139.4	136.5	120.4	107.5	101.6
Time	14h@0800	12h@0800	14h@2000	29h@1700	31st@1800	29h@1700	8h@1700	16h@1700	5h@1700	2nd@1700	12h@1900	9h@0800

<b>ENERGY (MWH)</b>												
On-Peak	22,119	21,662	20,335	23,217	25,615	24,256	28,255	27,876	27,189	24,408	22,020	21,077
%	33.1%	32.1%	31.5%	33.9%	34.6%	31.3%	33.9%	32.7%	32.3%	34.3%	32.1%	31.5%
Off-Peak	44,706	45,821	44,221	45,271	48,418	53,238	55,093	57,372	56,986	48,762	46,579	45,854
%	66.9%	67.9%	68.5%	66.1%	65.4%	68.7%	66.1%	67.3%	67.7%	65.7%	67.9%	68.5%
Total	66,825	67,483	64,556	68,488	74,033	77,494	83,348	85,248	84,175	71,160	68,599	66,911

<b>CUSTOMERS</b>												
Monthly Count	32	32	32	32	32	32	32	32	32	31	31	31

<b>FACTORS</b>												
Colincident Factor (CF)	0.836	0.853	0.794	0.868	0.828	0.824	0.869	0.886	0.878	0.908	0.866	0.861
Load Factor (Max) %	73.5%	76.0%	67.8%	66.7%	70.9%	70.3%	72.8%	75.0%	74.2%	73.5%	75.7%	77.7%
Load Factor (NCP) %	82.8%	83.3%	73.9%	72.3%	78.1%	77.9%	79.4%	80.6%	79.4%	78.4%	80.5%	87.2%
Load Factor (CP) %	87.9%	89.1%	85.4%	76.8%	85.7%	85.3%	81.9%	83.8%	84.5%	81.0%	87.4%	90.2%

<b>CUSTOMER AVERAGES</b>												
Energy Use (kWh)	2,088,281	2,108,844	2,017,375	2,140,250	2,313,531	2,421,688	2,604,825	2,664,000	2,630,469	2,295,484	2,212,871	2,158,419
Ind. Max Demand (kW)	3,891.48	3,800.65	4,078.12	4,397.69	4,467.30	4,717.86	4,899.95	4,862.83	4,855.84	4,277.17	4,005.76	3,806.66
Colincident Demand (kW)	3,253.13	3,240.63	3,237.50	3,815.63	3,696.88	3,887.50	4,356.25	4,356.25	4,265.63	3,863.87	3,467.74	3,277.42

TOU Periods - All Months: On-Peak 11 am - 9 pm, M-F Off-Peak 9 pm - 11 am, M-F & All Weekends

SUMMER (May-Oct)	WINTER (Nov-Apr)	ANNUAL
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Summation Ind Max by Season		
155.8	140.7	155.8
155.9	140.4	155.9
153.1	133.6	153.1

Class Peak by Season		
145.2	129.8	145.2
141.7	121.0	141.7

Colincident Peak by Season		
139.4	122.1	139.4

Energy Summation by Season		
157,959	130,431	288,029
33.1%	32.4%	32.8%

Customer Averages by Season		
32	32	32

Seasonal Factors		
0.869	0.869	0.869
69.2%	65.4%	63.9%
74.8%	70.8%	69.1%
77.9%	90.5%	71.9%

Seasonal Averages		
2,488,299	2,121,007	2,304,653
4,680.12	3,996.72	4,338.42
4,074.40	3,862.01	3,728.20



Load Research Cost of Service Data  
Year Ended December 31, 2013

\*\*\* General Service E-35 \*\*\*

	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
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<b>SUMMATION IND MAX (MW)</b>												
Non-Timed	284.7	303.8	302.6	301.8	305.4	311.1	312.1	310.4	312.0	280.8	270.9	268.0
On-Peak	263.4	264.6	276.3	273.4	274.3	277.4	283.1	288.0	281.7	269.1	249.8	249.2
Off-Peak	280.9	299.5	299.7	298.9	303.3	308.2	310.9	307.8	310.0	278.6	268.9	266.1

<b>CLASS PEAK (MW)</b>												
On-Peak	232.1	234.1	248.9	243.4	248.8	245.2	248.3	256.8	248.3	230.5	218.5	220.8
Off-Peak	245.1	240.2	260.6	255.4	261.9	257.9	268.0	263.0	254.0	237.1	229.4	228.3

<b>COINCIDENT (MW)</b>												
System	223.6	227.7	229.0	232.1	236.4	231.2	240.9	245.8	232.9	221.5	211.5	205.1
Time	14th@0800	12th@0800	14th@2000	29th@1700	31st@1800	29th@1700	8th@1700	16th@1700	5th@1700	2nd@1700	12th@1900	9th@0800

<b>ENERGY (MWH)</b>												
On-Peak	46,347	44,393	45,455	49,519	51,985	43,309	52,391	51,600	50,555	49,709	46,450	46,194
%	30.7%	29.9%	28.5%	30.5%	30.8%	27.5%	30.8%	29.6%	29.1%	30.9%	29.2%	29.4%
Off-Peak	104,621	103,938	114,035	112,827	116,799	114,177	117,711	122,725	123,174	111,162	110,928	110,928
%	69.3%	70.1%	71.5%	69.5%	69.2%	72.5%	69.2%	70.4%	70.9%	69.1%	70.8%	70.6%
Total	150,968	148,271	159,490	162,146	168,784	157,486	170,102	174,325	173,729	160,871	159,077	157,122

<b>CUSTOMERS</b>												
Monthly Count	39	39	39	39	38	38	37	37	37	35	35	35

<b>FACTORS</b>												
All load factors are calculated based on 730 hours per month.												
Coincident Factor (CF)	0.765	0.749	0.757	0.769	0.774	0.743	0.772	0.792	0.746	0.789	0.781	0.765
Load Factor (Max) %	72.6%	66.9%	72.2%	73.6%	75.7%	69.3%	74.7%	76.9%	76.3%	78.5%	80.4%	80.3%
Load Factor (NCP) %	84.4%	84.5%	87.2%	87.0%	88.3%	83.7%	86.9%	90.8%	93.7%	92.9%	95.0%	95.1%
Load Factor (CP) %	92.5%	89.2%	95.4%	95.7%	97.8%	93.3%	96.7%	97.2%	102.2%	99.5%	103.0%	104.9%

<b>CUSTOMER AVERAGES</b>												
Energy Use (KWh)	3,870,974	3,801,821	4,089,487	4,267,000	4,441,684	4,144,368	4,597,351	4,711,486	4,695,378	4,586,314	4,545,057	4,489,200
Ind. Max Demand (kW)	7,300.60	7,790.29	7,759.61	7,942.95	8,037.88	8,186.54	8,436.04	8,388.56	8,433.51	8,022.01	7,739.48	7,657.19
Coincident Demand (kW)	5,733.33	5,838.46	5,871.79	6,107.89	6,221.05	6,084.21	6,510.81	6,643.24	6,294.59	6,328.57	6,042.86	5,860.00

TOU Periods - All Months: On-Peak 11 am - 9 pm, M-F Off-Peak 9 pm - 11 am, M-F & All Weekends

SUMMER (May-Oct)	WINTER (Nov-Apr)	ANNUAL
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Summation Ind Max by Season		
312.1	303.8	312.1
288.0	276.3	288.0
310.9	299.7	310.9

Class Peak by Season		
256.8	248.9	256.8
268.0	265.4	268.0

Coincident Peak by Season		
245.8	232.1	245.8

Energy Summation by Season		
269,560	278,299	577,849
29.8%	29.7%	29.7%
705,747	658,775	1,364,522
70.2%	70.3%	70.3%
1,005,297	937,074	1,942,371

Customer Averages by Season		
37	38	37

Seasonal Factors		
0.787	0.764	0.787
73.5%	70.4%	71.0%
85.6%	83.8%	82.7%
95.3%	104.3%	92.0%

Seasonal Averages		
4,531,097	4,177,257	4,354,177
8,250,76	7,688,35	7,974,56
6,347,08	5,909,06	6,126,07



Load Research Cost of Service Data  
Year Ended December 31, 2013

\*\*\* STREETLIGHTS \*\*\*

	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
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SUMMATION IND MAX (MW)												
Non-Timed	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6
On-Peak	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6
Off-Peak	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6

CLASS PEAK (MW)												
On-Peak	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6
Off-Peak	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6

COINCIDENT (MW)												
System	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time	14th@0800	12th@0800	14th@2000	28th@1700	31st@1800	28th@1700	8th@1700	16th@1700	5th@1700	2nd@1700	12th@1900	9th@0800

ENERGY (MWH)												
On-Peak	2,214	1,973	1,587	1,573	1,328	1,079	1,189	1,410	1,680	2,127	2,183	2,196
%	17.6%	15.6%	13.5%	13.5%	12.0%	9.3%	10.4%	11.8%	14.2%	18.1%	18.4%	18.3%
Off-Peak	10,379	10,675	10,144	10,093	9,721	10,494	10,351	10,116	9,619	9,619	9,680	9,772
%	82.4%	84.4%	86.5%	86.5%	88.0%	90.7%	89.6%	88.2%	85.8%	81.9%	81.6%	81.7%
Total	12,593	12,648	11,731	11,666	11,047	11,573	11,560	11,526	11,746	11,746	11,863	11,968

CUSTOMERS												
Monthly Count	990	993	995	995	996	998	999	999	999	1,000	1,002	1,005

FACTORS												
All load factors are calculated based on 730 hours per month.												
Coincident Factor (CP)	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Load Factor (Max) %	48.5%	48.7%	45.1%	44.9%	42.5%	44.5%	44.4%	45.9%	45.4%	45.2%	45.6%	46.1%
Load Factor (NCIP) %	48.5%	48.7%	45.1%	44.9%	42.5%	44.5%	44.4%	45.9%	45.4%	45.2%	45.6%	46.1%
Load Factor (CP) %	0.0%	0.0%	45.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	45.6%	0.0%

CUSTOMER AVERAGES												
Energy Use (kWh)	12,720	12,737	11,790	11,725	11,091	11,596	11,562	11,953	11,796	11,723	11,839	11,908
Ind. Max Demand (kW)	35.98	35.85	35.78	35.78	35.74	35.67	35.64	35.64	35.60	35.53	35.53	35.42
Coincident Demand (kW)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TOU Periods - All Months: On-Peak 11 am - 9 pm, M-F Off-Peak 9 pm - 11 am, M-F & All Weekends

SUMMER (May-Oct)	WINTER (Nov-Apr)	ANNUAL
------------------	------------------	--------

Summation Ind Max by Season		
35.6	35.6	35.6
35.6	35.6	35.6
35.6	35.6	35.6

Class Peak by Season		
35.6	35.6	35.6
35.6	35.6	35.6

Coincident Peak by Season		
0.0	35.6	35.6

Energy Summation by Season		
8,821	11,726	20,547
12.7%	16.2%	14.5%

60,832	60,743	121,575
87.3%	83.8%	85.5%
69,653	72,469	142,122

Customer Averages by Season		
999	997	998

Seasonal Factors		
0.000	1.000	0.000
44.7%	45.5%	45.6%
44.7%	45.5%	45.6%
#DIV/0!	#DIV/0!	#DIV/0!

Seasonal Averages		
11,820	12,120	11,870
35.64	35.72	35.68
0.00	11.88	5.94



Load Research Cost of Service Data  
Year Ended December 31, 2013

\*\*\* DUSK TO DAWN \*\*\*

	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13
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SUMMATION IND MAX (MW)	Non-Timed											
	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
On-Peak	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
Off-Peak	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3

CLASS PEAK (MW)	On-Peak											
	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
Off-Peak	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3

COINCIDENT (MW)	System											
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time	14h@0800	12h@0800	14h@2000	28h@1700	31st@1800	29th@1700	8h@1700	16h@1700	5th@1700	2nd@1700	12th@1900	9h@0800

ENERGY (MWH)	On-Peak											
	400	303	269	236	200	144	170	207	263	378	399	426
%	17.6%	15.6%	13.5%	13.5%	12.0%	9.3%	10.4%	11.8%	14.2%	18.1%	18.4%	18.3%
Off-Peak	1,877	1,637	1,716	1,517	1,469	1,399	1,463	1,547	1,584	1,709	1,770	1,895
%	82.4%	84.4%	86.5%	86.5%	88.0%	90.7%	89.6%	88.2%	85.8%	81.9%	81.6%	81.7%
Total	2,277	1,940	1,985	1,753	1,669	1,543	1,633	1,754	1,847	2,087	2,169	2,321

CUSTOMERS	Monthly Count											
	8,310	8,324	8,322	8,354	8,337	8,366	8,324	8,308	8,331	8,321	8,315	8,315

FACTORS	Coincident Factor (CF)											
	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Load Factor (Max) %	58.9%	50.1%	51.3%	45.3%	43.1%	39.9%	42.2%	45.3%	47.7%	53.9%	56.1%	60.0%
Load Factor (NCF) %	58.9%	50.1%	51.3%	45.3%	43.1%	39.9%	42.2%	45.3%	47.7%	53.9%	56.1%	60.0%
Load Factor (CF) %	0.0%	0.0%	51.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	56.1%	0.0%

CUSTOMER AVERAGES	Energy Use (kWh)											
	274	233	239	210	200	184	196	211	222	251	261	279
Ind. Max Demand (kW)	0.64	0.64	0.64	0.63	0.64	0.63	0.64	0.64	0.64	0.64	0.64	0.64
Coincident Demand (kW)	0.00	0.00	0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64	0.00

TOU Periods - All Months: On-Peak 11 am - 9 pm, M-F Off-Peak 9 pm - 11 am, M-F & All Weekends

SUMMER (May-Oct)	WINTER (Nov-Apr)	ANNUAL
------------------	------------------	--------

Summation Ind Max by Season		
5.3	5.3	5.3
5.3	5.3	5.3
5.3	5.3	5.3

Class Peak by Season		
5.3	5.3	5.3
5.3	5.3	5.3
5.3	5.3	5.3

Coincident Peak by Season		
0.0	5.3	5.3

Energy Summation by Season		
1,362	2,033	3,395
12.9%	16.3%	14.8%

Customer Averages by Season		
9,171	10,412	19,583
87.1%	85.7%	85.2%
10,533	12,445	22,978

Seasonal Factors		
0.000	1.000	0.000
45.4%	53.6%	49.5%
45.4%	53.6%	49.5%
#DIV/0!	#DIV/0!	#DIV/0!

Customer Averages by Season		
6,331	6,323	8,327

Seasonal Averages		
211	248	230
0.64	0.64	0.64
0.00	0.21	0.11

**ARIZONA PUBLIC SERVICE COMPANY  
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**R14-2-703 Section A.3**

Attached is the number of customers by customer class for each of the previous ten years.

**ARIZONA PUBLIC SERVICE COMPANY**  
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**FOR HISTORICAL YEAR 2013**

R14-2-203 Section A.3 - Customers by Customer Class for Previous Ten Years

Customer Class	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Residential	859,069	896,472	936,464	966,013	977,944	983,539	989,877	994,244	1,005,074	1,019,292
Commercial	102,393	106,374	110,547	115,304	118,945	120,305	120,229	121,116	122,360	123,319
Industrial and Irrigation	3,730	3,794	3,871	3,927	3,933	3,857	3,777	3,744	3,721	3,701
Public Street Lighting	794	809	831	913	919	918	1,001	972	982	993
Other Public Authorities	199	191	182	170	164	162	163	160	159	157
Total Customers	966,185	1,007,640	1,051,895	1,086,327	1,101,905	1,108,781	1,115,047	1,120,236	1,132,296	1,147,462

**ARIZONA PUBLIC SERVICE COMPANY  
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**R14-2-703 Section: A.4**

Reduction in load (kilowatt and kilowatt-hours) in the previous calendar year due to existing demand management measures, by type of management measure.

**APS DSM Electric Savings  
January - December 2013**

<b>DSM Program</b>	<b>Savings MW</b>	<b>Annual MWh Savings</b>	<b>Lifetime MWh Savings</b>
<b>Residential Program</b>			
Consumer Products	16.2	154,233	986,215
Existing Homes	10.9	17,466	227,106
New Construction	9.7	19,427	388,546
Appliance Recycling	1.3	8,787	52,720
Conservation Behavior	4.3	24,944	24,944
Multi-Family	0.9	9,487	102,519
Shade Tree	0.1	351	10,516
Low Income <sup>3</sup>	0.2	1,491	26,084
<b>Total</b>	<b>43.6</b>	<b>236,186</b>	<b>1,818,650</b>
<b>Non-Residential Program</b>			
Large Existing Facilities	26.2	184,207	2,514,141
New Construction	5.8	15,513	217,903
Small Business	3.9	14,155	186,029
Energy Information Services	1.7	25	124
Schools	4.7	13,481	176,467
<b>Total</b>	<b>42.3</b>	<b>227,381</b>	<b>3,094,664</b>
Codes & Standards	4.8	22,224	0
DR Contribution	0	53,050	0
<b>Total DSM Savings</b>	<b>90.7</b>	<b>538,841</b>	<b>4,913,314</b>

<b>Program/Initiatives</b>	<b>Load Reduction (MW)</b>	<b>Energy Savings Year-to-Date</b>
APS Peak Solutions	28.0	122,640
Critical Peak Pricing	0.5	2,278
Peak Time Rebates	0.2	701
Time of Use Rates & Super Peak	117.2	516,840
<b>Total</b>	<b>145.9</b>	<b>642,459</b>

**ARIZONA PUBLIC SERVICE COMPANY  
2014 RESOURCE PLANNING ANNUAL FILING  
FOR HISTORICAL YEAR 2013**

**R14-2-703 Sections B.1.a,b,c,d,e,f,g,h,I,j,k,l,m,n,o,p,q,r**

Portions of this information are competitively confidential and have been redacted. An unredacted version is being provided to Staff pursuant to an an executed Protective Agreement.

ARIZONA PUBLIC SERVICE COMPANY  
2014 RESOURCE PLANNING ANNUAL FILING  
FOR HISTORICAL YEAR 2013

Tab V  
R14-2703 Section: B.1.a, b, c, d, e, f, g, h, i, l, m, n, o  
2013 GENERATING UNIT INFORMATION - REDACTED

B.1 PLANT	B.1.a		B.1.b TYPE OF UNIT OR CONTRACT	B.1.c (A/S SHARE) CAPACITY MW	B.1.d		B.1.e ANNUAL CAPACITY FACTOR	B.1.f		B.1.g FUEL COSTS \$/MBTU	B.1.h (h7) VARIABLE O&M \$/MWH Over Minimum	B.1.i FIXED \$/MWH-YR	B.1.j FUEL TYPE	B.1.k MINIMUM CAPACITY GASOIL NUCLEAR	B.1.l MINIMUM CAPACITY NUCLEAR	B.1.m UNIT MUST BE AVAILABLE	B.1.n BASE LOAD, INTERMEDIATE OR PEAKING UNIT
	IN SERVICE	BOOK LIFE			Summer	Winter		AVERAGE HEAT RATE BTU/KWH	HEAT RATE BTU/KWH Coal/Nuclear								
Palo Verde																	
Unit 1	1986	2044	Nuclear Steam	382	382	382	382										Base load
Unit 2	1986	2045	Nuclear Steam	382	382	382	382										Base load
Unit 3	1986	2047	Nuclear Steam	382	382	382	382										Base load
Four Corners																	
Unit 1	1963	2012	Steam	170	170	170	170										Base load
Unit 2	1963	2012	Steam	170	170	170	170										Base load
Unit 3	1964	2012	Steam	220	220	220	220										Base load
Unit 4	1969	2038	Steam	115.5	115.5	115.5	115.5										Base load
Unit 5	1970	2038	Steam	115.5	115.5	115.5	115.5										Base load
Cholla																	
Unit 1	1962	2028	Steam	116	116	116	116										Base load
Unit 2	1976	2033	Steam	260	260	260	260										Base load
Unit 3	1960	2035	Steam	271	271	271	271										Base load
Navajo																	
Unit 1	1974	2026	Steam	105	105	105	105										Base load
Unit 2	1975	2026	Steam	105	105	105	105										Base load
Unit 3	1976	2026	Steam	105	105	105	105										Base load
West Phoenix																	
CT 1	1972	2020	CT	55	50	50	62										Peaking
CT 2	1973	2020	CT	55	50	50	62										Peaking
CC 1	1976	2028	Combined Cycle	88	85	85	92										Intermediate
CC 2	1976	2028	Combined Cycle	88	85	85	92										Intermediate
CC 3	1976	2028	Combined Cycle	88	85	85	92										Intermediate
CC 4	2001	2038	Combined Cycle	107	107	107	129										Intermediate
CC 5	2003	2038	Combined Cycle	506(N1/2)	533	533	586										Intermediate
Ocotillo																	
Unit 1 ST	1960	2020	Steam	110	110	110	110										Peaking
Unit 2 ST	1960	2020	Steam	110	110	110	110										Peaking
Unit 1 CT	1972	2020	CT	95	90	90	92										Peaking
Unit 2 CT	1973	2020	CT	95	90	90	92										Peaking
Redhawk																	
CC 1	2002	2037	Combined Cycle	492 (N1/2)	500	500	532										Intermediate
CC 2	2002	2037	Combined Cycle	492 (N1/2)	500	500	532										Intermediate
Saguaro																	
Unit 1 ST (N9)	1954	2020	Steam	110/110	110	110	110										Peaking
Unit 2 ST (N9)	1955	2020	Steam	100/100	100	100	100										Peaking
Unit 1 CT	1972	2020	CT	55/54 (N9)	50	50	62										Peaking
Unit 2 CT	1973	2020	CT	55/54 (N9)	50	50	62										Peaking
Unit 3 CT	2002	2037	CT	79	76	76	79										Peaking
Sundance																	
Unit 1 CT	2002	2037	CT	42	41	41	44										Peaking
Unit 2 CT	2002	2037	CT	42	41	41	44										Peaking
Unit 3 CT	2002	2037	CT	42	41	41	44										Peaking
Unit 4 CT	2002	2037	CT	42	41	41	44										Peaking
Unit 5 CT	2002	2037	CT	42	41	41	44										Peaking
Unit 6 CT	2002	2037	CT	42	41	41	44										Peaking
Unit 7 CT	2002	2037	CT	42	41	41	44										Peaking
Unit 8 CT	2002	2037	CT	42	41	41	44										Peaking
Unit 9 CT	2002	2037	CT	42	41	41	44										Peaking
Unit 10 CT	2002	2037	CT	42	41	41	44										Peaking
Douglas																	
Unit 1 CT	1972	2020	CT	16	15	15	19										Peaking
Yucca																	
Unit 1 CT	1971	2043	CT	191/9 (N9)	18	18	22										Peaking
Unit 2 CT	1971	2043	CT	191/9 (N9)	18	18	22										Peaking
Unit 3 CT	1973	2043	CT	55/54 (N9)	52	52	62										Peaking
Unit 4 CT	1974	2043	CT	54	51	51	61										Peaking
Unit 5 CT	2008	2043	CT	48	47	47	49										Peaking
Unit 6 CT	2008	2043	CT	48	47	47	49										Peaking
Solar																	
Solar Center	2011	2041	Solar PV	17(N10)	16	16	13										Intermittent
Hyder 1	2011	2041	Solar PV	16(N10)	14	14	12										Intermittent
Paloma	2011	2041	Solar PV	17(N10)	17	17	16										Intermittent
China Valley	2012	2042	Solar PV	19(N10)	19	19	14										Intermittent
Hyder 2	2012	2042	Solar PV	14(N10)	14	14	14										Intermittent
Hyder 3	2012	2042	Solar PV	35(N10)	35	35	35										Intermittent

NOTES:  
 1) All data is based on historical information, unless otherwise indicated.  
 2) Avg. fuel cost (item d) is based on all fuel expenses reported in FERC Form 1.  
 3) First number indicates net maximum capacity on natural gas; second number indicates net maximum capacity on residual oil.  
 4) Summer and winter net maximum capacities are based on gas firing when applicable (i.e., Saguaro and Yucca).  
 5) Unit cost adjusted to allocate the oil over each generating unit and its respective oil burn.  
 6) Unit cost adjusted to allocate the oil over each generating unit and its respective oil burn.  
 7) Variable O&M \$/MWH to minimum (item h) for the CT's represents total start-up dollars, not \$/MWH.  
 8) Four Corners Units 1-3 retired 12/13  
 9) Saguaro ST1&2 retired 5/13  
 10) Hyder 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609,

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Environmental impacts, including air emission quantities (in metric tons or pounds) and rates (in quantities per megawatt-hour) for carbon dioxide, nitrogen oxides, sulfur dioxide, mercury, particulates, and other air emissions subject to current or expected future environmental regulation

Plant	Unit	2013 Unit Emissions Rate							MWH
		SO <sub>2</sub> (lb/MWH based on Ownership)	NO <sub>x</sub> (lb/MWH based on Ownership)	CO <sub>2</sub> (ton/MWH based on Ownership)	PM <sub>10</sub> (lb/MWH based on Ownership)	CO (lb/MWH based on Ownership)	VOC (lb/MWH based on Ownership)	Hg (lb/GWH based on Ownership)	
<b>Four Corners</b>	1	1.92	8.52	2304	0.191	0.321	0.00147	0.0955	701,149
	2	1.92	7.62	2305	0.225	0.325	0.00163	0.0959	1,209,592
	3	2.31	7.21	2575	0.276	0.329	0.00269	0.0926	1,424,959
	4	1.45	4.90	1960	0.038	0.281	0.00117	0.0058	716,369
	5	1.81	4.86	2023	0.039	0.284	0.00124	0.0060	671,597
	<b>Plant</b>	<b>1.95</b>	<b>6.83</b>	<b>2,294</b>	<b>0.18</b>	<b>0.31</b>	<b>0.0018</b>	<b>0.068</b>	<b>4,723,666</b>
<b>Navajo</b>	1	0.664	2.45	2543	0.295	0.229	0.0276	0.0288	669,020
	2	0.415	1.71	1770	0.295	0.229	0.0276	0.0288	611,119
	3	0.655	2.28	2303	0.348	0.271	0.0326	0.0340	689,575
	<b>Plant</b>	<b>0.58</b>	<b>2.16</b>	<b>2,219</b>	<b>0.31</b>	<b>0.24</b>	<b>0.0293</b>	<b>0.031</b>	<b>1,969,714</b>
<b>Cholla</b>	1	1.625	2.653	2510	0.049	0.144	0.00068	0.031	822,820
	2	1.433	3.377	2349	0.222	0.338	0.00067	0.151	1,615,114
	3	1.608	2.588	2531	0.152	0.351	0.00068	0.031	1,774,982
	<b>Plant</b>	<b>1.544</b>	<b>2.90</b>	<b>2,457</b>	<b>0.16</b>	<b>0.31</b>	<b>0.00064</b>	<b>0.077</b>	<b>4,212,916</b>
<b>Ocotillo</b>	1	0.0077	1.766	1,547	0.096	0.303	0.069	0.0032	50159.00
	2	0.0078	1.870	1,550	0.089	0.282	0.065	0.0030	64585.00
	CT1	0.0109	5.982	2,211	0.123	1.533	0.039	0.0047	1933.00
	CT2	0.0147	7.863	2,910	0.162	2.015	0.052	0.0062	1562.00
		<b>Plant</b>	<b>0.008</b>	<b>1.973</b>	<b>1,578</b>	<b>0.094</b>	<b>0.33</b>	<b>0.066</b>	<b>0.0032</b>
<b>West Phoenix</b>	CC1	0.0070	4.43	1,325	0.077	0.012	0.025	0.0029	100,546
	CC2	0.0070	3.73	1,319	0.077	0.023	0.024	0.0029	90,876
	CC3	0.0059	0.50	805	0.036	0.591	0.076	0.0025	102,358
	CC4	0.0054	0.30	1,067	0.018	0.005	0.026	0.0024	110,426
	CC5	0.0047	0.13	936	0.018	0.043	0.008	0.0019	1,305,173
	CT1	0.0215	11.59	2,361	0.231	2.973	0.076	0.0091	1,211
	CT2	0.0133	6.64	2,356	0.133	1.706	0.044	0.0052	1,055
		<b>Plant</b>	<b>0.005</b>	<b>0.62</b>	<b>981.7</b>	<b>0.026</b>	<b>0.073</b>	<b>0.015</b>	<b>0.0021</b>

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	Plant	Unit	2013 Unit Emissions Rate							
			SO2	NOx	CO2	PM10	CO	VOC	Hg	MWH
Redhawk	CC1		0.0044	0.071	877	0.009	0.056	0.0014	0.0018	2,236,663
	CC2		0.0045	0.077	898	0.009	0.073	0.0002	0.0019	1,536,733
	<b>Plant</b>		<b>0.0045</b>	<b>0.073</b>	<b>886</b>	<b>0.009</b>	<b>0.06</b>	<b>0.0009</b>	<b>0.0019</b>	<b>3,773,396.0</b>
Yucca	CT1		0.0110	5.998	1,807	0.123	1.54	0.040	0.0047	1361.00
	CT2		0.0115	6.111	1,841	0.126	1.57	0.040	0.0048	1126.00
	CT3		0.0109	5.450	1,793	0.123	1.53	0.039	0.0047	11877.00
	CT4		0.8810	16.45	3,611	3.214	0.05	0.012	0.0322	168.00
	CT5		0.0072	0.15	1,424	0.096	0.10	0.024	0.0028	49115.00
	CT6		0.0070	0.14	1,389	0.035	0.08	0.022	0.0026	44307.00
	<b>Plant</b>		<b>0.009</b>	<b>0.80</b>	<b>1463</b>	<b>0.079</b>	<b>0.28</b>	<b>0.025</b>	<b>0.0030</b>	<b>107,954.00</b>
Saguaro	CT1		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00
	CT2		0.011	6.63	2,406	0.136	1.70	0.044	0.0052	2096.00
	CT3		0.009	0.6	1,809	0.095	0.22	0.030	0.0036	15675.00
	<b>Plant</b>		<b>0.009</b>	<b>1.34</b>	<b>1879</b>	<b>0.0996</b>	<b>0.39</b>	<b>0.032</b>	<b>0.0038</b>	<b>17,771.00</b>
Douglas	CT1		1.53	28.4	6,224	5.51	0.180	0.0240	0.056	167.00
	<b>Plant</b>		<b>1.53</b>	<b>28.4</b>	<b>6,224</b>	<b>5.51</b>	<b>0.180</b>	<b>0.0240</b>	<b>0.056</b>	<b>167.00</b>
Sundance	All		0.0067	0.26	1,332	0.150	0.13	0.001	0.0026	131589.00
	<b>Plant</b>		<b>0.0067</b>	<b>0.26</b>	<b>1,332</b>	<b>0.150</b>	<b>0.13</b>	<b>0.001</b>	<b>0.0026</b>	<b>131,589.00</b>
Nuclear	All		0	0	0	0	0	0	0	9,146,445
Hydro	All		0	0	0	0	0	0	0	0
Biomass	All		0	0	0	0	0	0	0	0
Solar	All		0	0	0	0	0	0	0	102,358
<b>TOTAL COAL*</b>			<b>1.546</b>	<b>4.5</b>	<b>2,343</b>	<b>0.196</b>	<b>0.30</b>	<b>0.0063</b>	<b>0.065</b>	<b>10,906,296</b>
<b>TOTAL GAS/OIL*</b>			<b>0.0049</b>	<b>0.30</b>	<b>954</b>	<b>0.021</b>	<b>0.08</b>	<b>0.0068</b>	<b>0.0020</b>	<b>5,860,761.0</b>
<b>TOTAL FOSSIL*</b>			<b>1.008</b>	<b>3.0</b>	<b>1,858</b>	<b>0.13</b>	<b>0.22</b>	<b>0.0065</b>	<b>0.043</b>	<b>16,767,057</b>
<b>TOTAL APS *lb/GWH</b>			<b>0.650</b>	<b>1.9</b>	<b>1,197</b>	<b>0.09</b>	<b>0.14</b>	<b>0.0042</b>	<b>0.028</b>	<b>26,015,860</b>

\*Does not include biomass

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2013 Unit Emissions Rate (Tons per year based on Ownership)									
Plant	Unit	SO2	NOx	CO2	PM10	CO	VOC	Hg	MWH
<b>Four Corners</b>	1	673	2,986	807,744	66.9	112.7	0.5	0.033	701,149
	2	1,159	4,607	1,394,218	136.0	196.8	1.0	0.058	1,209,592
	3	1,646	5,139	1,834,843	196.7	234.6	1.92	0.066	1,424,959
	4	519	1,756	701,920	13.7	100.6	0.4	0.002	716,369
	5	607	1,634	679,407	13.3	95.4	0.4	0.002	671,597
	<b>Plant</b>	<b>4603</b>	<b>16,121</b>	<b>5,418,132</b>	<b>426.5</b>	<b>740.1</b>	<b>4.25</b>	<b>0.1616</b>	<b>4,723,666</b>
<b>Navajo</b>	1	222	821	850,670	98.7	76.6	9.2	0.0096	669,020
	2	127	522	540,785	90.1	70.0	8.4	0.0088	611,119
	3	226	787	794,023	120.1	93.3	11.2	0.0117	689,575
	<b>Plant</b>	<b>575</b>	<b>2129</b>	<b>2,185,478</b>	<b>308.9</b>	<b>240.2</b>	<b>28.9</b>	<b>0.03017</b>	<b>1,969,714</b>
<b>Cholla</b>	1	669	1,091	1,032,544	20.1	59.2	0.3	0.01	822,820
	2	1,157	2,727	1,896,881	179.3	273.3	0.5	0.12	1,615,114
	3	1,427	2,296	2,246,066	134.6	311.3	0.6	0.03	1,774,982
	<b>Plant</b>	<b>3252</b>	<b>6,115</b>	<b>5,175,491</b>	<b>334.1</b>	<b>643.8</b>	<b>1.4</b>	<b>0.1625</b>	<b>4,212,916</b>
<b>Ocotillo</b>	1	0.19	44.30	38793.55	2.41	7.61	1.74	0.00000001	50159.00
	2	0.23	60.40	50068.32	2.89	9.11	2.09	0.00000001	64585.00
	CT1	0.01	5.78	2136.93	0.12	1.48	0.04	0.00000000	1933.00
	CT2	0.01	6.14	2272.48	0.13	1.57	0.04	0.00000000	1562.00
		<b>Plant</b>	<b>0.45</b>	<b>116.61</b>	<b>93,271.28</b>	<b>5.54</b>	<b>19.78</b>	<b>3.91</b>	<b>0.00000002</b>
<b>West Phoenix</b>	CC1	0.354	222.9	66,604	3.890	0.6	1.238	0.00000000	100,546
	CC2	0.318	169.4	59,944	3.490	1.1	1.112	0.00000000	90,876
	CC3	0.303	25.4	41,188	1.844	30.2	3.888	0.00000006	102,358
	CC4	0.297	16.5	58,893	0.971	0.3	1.436	0.00000000	110,426
	CC5	3.083	86.1	610,833	11.56	28.0	4.923	0.00000007	1,305,173
	CT1	0.013	7.0	1,430	0.140	1.8	0.046	0.00000000	1,211
	CT2	0.0070	3.5	1,243	0.070	0.900	0.023	0.00000000	1,055
		<b>Plant</b>	<b>4.38</b>	<b>530.8</b>	<b>840,134</b>	<b>22.0</b>	<b>62.9</b>	<b>12.7</b>	<b>0.00000013</b>
<b>Redhawk</b>	CC1	4.954	79.5	981,208.9	10.05	62.51	1.56	0.000000049	2,236,663
	CC2	3.484	59.1	690,158.6	7.29	55.71	0.15	0.000000004	1,536,733
		<b>Plant</b>	<b>8.4</b>	<b>138.6</b>	<b>1,671,367.5</b>	<b>17.3</b>	<b>118.2</b>	<b>1.7</b>	<b>0.000000053</b>

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2013 Unit Emissions Rate (Tons per year based on Ownership)

Plant	Unit	SO2	NOx	CO2	PM10	CO	VOC	Hg	MWH
Yucca	CT1	0.01	4.08	1229.70	0.08	1.05	0.03	0.0000000000	1361.00
	CT2	0.01	3.44	1036.50	0.07	0.88	0.02	0.0000000000	1126.00
	CT3	0.07	32.36	10648.70	0.73	9.06	0.23	0.0000000010	11877.00
	CT4	0.07	1.38	303.30	0.27	0.00	0.00	0.0000000000	168.00
	CT5	0.19	3.46	34969.30	2.35	2.50	0.5785	0.0000000007	49115.00
	CT6	0.17	3.20	30767.10	0.78	1.77	0.49	0.0000000004	44307.00
	<b>Plant</b>		<b>0.52</b>	<b>47.92</b>	<b>78,954.60</b>	<b>4.28</b>	<b>15.26</b>	<b>1.35</b>	<b>0.0000000022</b>
Saguaro	CT1	0.00	0.00	0.00	0.00	0.00	0.00	0.0000000000	0.00
	CT2	0.01	6.95	2521.20	0.14	1.78	0.05	0.0000000000	2096.00
	CT3	0.072	4.959	14174.51	0.74	1.70	0.24	0.0000000002	15675.00
	<b>Plant</b>	<b>0.08</b>	<b>11.91</b>	<b>16,695.71</b>	<b>0.89</b>	<b>3.48</b>	<b>0.28</b>	<b>0.0000000002</b>	<b>17,771.00</b>
Douglas	CT1	0.13	2.37	519.70	0.46	0.02	0.00	0.00000000	167.00
	<b>Plant</b>	<b>0.13</b>	<b>2.37</b>	<b>519.70</b>	<b>0.46</b>	<b>0.02</b>	<b>0.00</b>	<b>0.00000000</b>	<b>167.00</b>
Sundance	All	0.46	16.97	87656.92	9.84	8.69	0.04	0.0000000015	131589.00
	<b>Plant</b>	<b>0.46</b>	<b>16.97</b>	<b>87,656.92</b>	<b>9.84</b>	<b>8.69</b>	<b>0.04</b>	<b>0.0000000002</b>	<b>131,589.00</b>
Nuclear	All	0	0	0	0	0	0	0	9,146,445
Hydro	All	0	0	0	0	0	0	0	0
Biomass	All	0	0	0	0	0	0	0	0
Solar	All	0	0	0	0	0	0	0	102,358
<b>TOTAL COAL**</b>		<b>8,430</b>	<b>24,365</b>	<b>12,779,100</b>	<b>1,070</b>	<b>1,624</b>	<b>35</b>	<b>0.35</b>	<b>10,906,296</b>
<b>TOTAL GAS/OIL**</b>		<b>14.5</b>	<b>865.2</b>	<b>2,788,600.1</b>	<b>60.3</b>	<b>228.3</b>	<b>20.0</b>	<b>0.00</b>	<b>5,860,761.0</b>
<b>TOTAL FOSSIL**</b>		<b>8,445</b>	<b>25,230</b>	<b>15,567,700</b>	<b>1,130</b>	<b>1,852</b>	<b>55</b>	<b>0.35</b>	<b>16,767,057</b>
<b>TOTAL</b>		<b>8,445</b>	<b>25,230</b>	<b>15,567,700</b>	<b>1,130</b>	<b>1,852</b>	<b>55</b>	<b>0.35</b>	<b>26,015,860</b>

\*Units are measured in lb/GWh

\*\*Does not include biomass

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Water consumption quantities and rates

2013 Generation Water Use		
	Acre Feet Consumed	Gallons/MWH
Cholla	13,628.068841	672.0
Four Corners	21,564.000000	455.0
Navajo	24,963.000000	455.0
Ocotillo	439.939979	1,214.0
Palo Verde Groundwater	2,160.791282	N/A
Palo Verde Effluent	71,760.228991	N/A
Palo Verde Total	73,921.020273	766.0
Redhawk Groundwater	299.238737	N/A
Redhawk Effluent	3,077.186874	N/A
Redhawk Total	3,376.425610	291.0
Saguaro	27.599424	68.0
Sundance	90.300000	218.0
West Phoenix	2,236.836158	320.0
Yucca	599.000000	617.0
<b>Total APS Generation</b>	<b>140846.1903</b>	<b>587.6</b>

\* Ocotillo is a peaking facility which produces energy typically only when energy demands are high. However, the plant requires use of water on a continual basis to maintain systems on-site. The requires use of water on a continual basis to maintain systems on-site. The Gallons/MWh rates for Ocotillo is misleading due to the relatively small quantities of energy generated.

<sup>1</sup> All numbers represent total plant use and not APS share of ownership.

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Tons of coal ash produced per generating unit - 2013

		<u>Tons Fly Ash</u>	<u>Tons Bottom Ash</u>
Cholla	Unit 1	52,253	13,063
	Unit 2	107,086	26,771
	Unit 3	113,225	28,306
	Unit 4 <sup>1</sup>	0	0
	Total Cholla	272,564	68,141
Navajo	Total <sup>2</sup>	93,869	23,845
Four Corners	Units 1,2,3	389,191	97,298
	Units 4,5 <sup>3</sup>	144,251	36,063
	Total Four Corners	533,442	133,360
Total Company		899,875	225,347

<sup>1</sup> Numbers are based on APS not owning Cholla Unit 4

<sup>2</sup> Numbers are based on APS's 14% share of ownership in the Navajo Generating Station

<sup>3</sup> Numbers are based on APS's 15% share of ownership in the Four Corners Coal Plant units 4 and 5.

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R14-2-703 Section: B.1.b.c, d, f, h, i, k, & m

2013 Purchased Power Information<sup>1</sup>

Company	(B.1.a) In-service date and back file or contract period	(B.1.b) Type of generating unit or contract	(B.1.m) Minimum Capacity (MW)	(B.1.c/B.1.d) Maximum Contract Capacity (MW)	(B.1.f) Average Heat Rate (Btu/kWh)	(B.1.j) Average Energy Cost 2013 (\$/MWh)	(B.1.k) Annual Demand Charge (\$)	(B.1.h) Var O&M (\$/MWh)
Salt River Project (Eastern Area)	6/15/2010 - 6/14/2020	WSPF Agreement	0	60				
City of Azusa Exchange	1/1/2013 - 12/31/2013	WSPF Agreement	29	29				
PAC Exchange	9/21/1990 - 10/31/2020	Grandfathered Agreement	n/a	480				
CE Turbo LLC <sup>2</sup>	1/27/2006 - 12/31/2009	Geothermal	0	12				
Atagome Wind LLC <sup>2</sup>	12/29/2006 - 12/28/2016	Wind	0	90				
Novo BioPower, LLC <sup>2a</sup>	8/2/2013 - 6/9/2023	Biomass	0	14.0				
High Lonesome Wind Ranch, LLC <sup>2</sup>	7/16/2009 - 7/15/2039	Wind	0	100				
Glendale Energy, LLC <sup>2</sup>	1/13/2010 - 1/12/2030	Landfill Gas	0	2.86				
RE Ajo 1, LLC <sup>2</sup>	9/76/2011 - 9/25/2036	Solar	0	4.5				
RE Bagdad Solar 1, LLC <sup>2</sup>	12/30/2011 - 12/29/2036	Solar	0	15				
Perrin Ranch Wind, LLC <sup>2</sup>	6/25/2012 - 6/24/2037	Wind	0	95.2				
SunE AZ1, LLC (Prescott) <sup>2</sup>	11/29/2011 - 11/28/2041	Solar	0	10.0				
SunE AZ2, LLC (Saddle Mountain) <sup>2</sup>	12/20/2012 - 12/19/2042	Solar	0	15.0				
PSEG Solar Source, LLC (Bldg) <sup>2</sup>	11/09/2013 - 11/7/2043	Solar	0	15.0				
RE Gillespie 1, LLC <sup>2</sup>	12/31/2013 - 12/30/2043	Solar	0	15.0				
Arizona Solar One, LLC (Solana) <sup>2</sup>	10/09/2013 - 10/7/2043	Solar	0	280.0				
Waste Management Renewable Energy, LLC <sup>2</sup>	8/28/2012 - 08/20/2032	Landfill Gas	0	3.2				

Notes:

- 1 Reflects contracts greater than or equal to 1 year in duration.
- 2 Renewable energy contracts.

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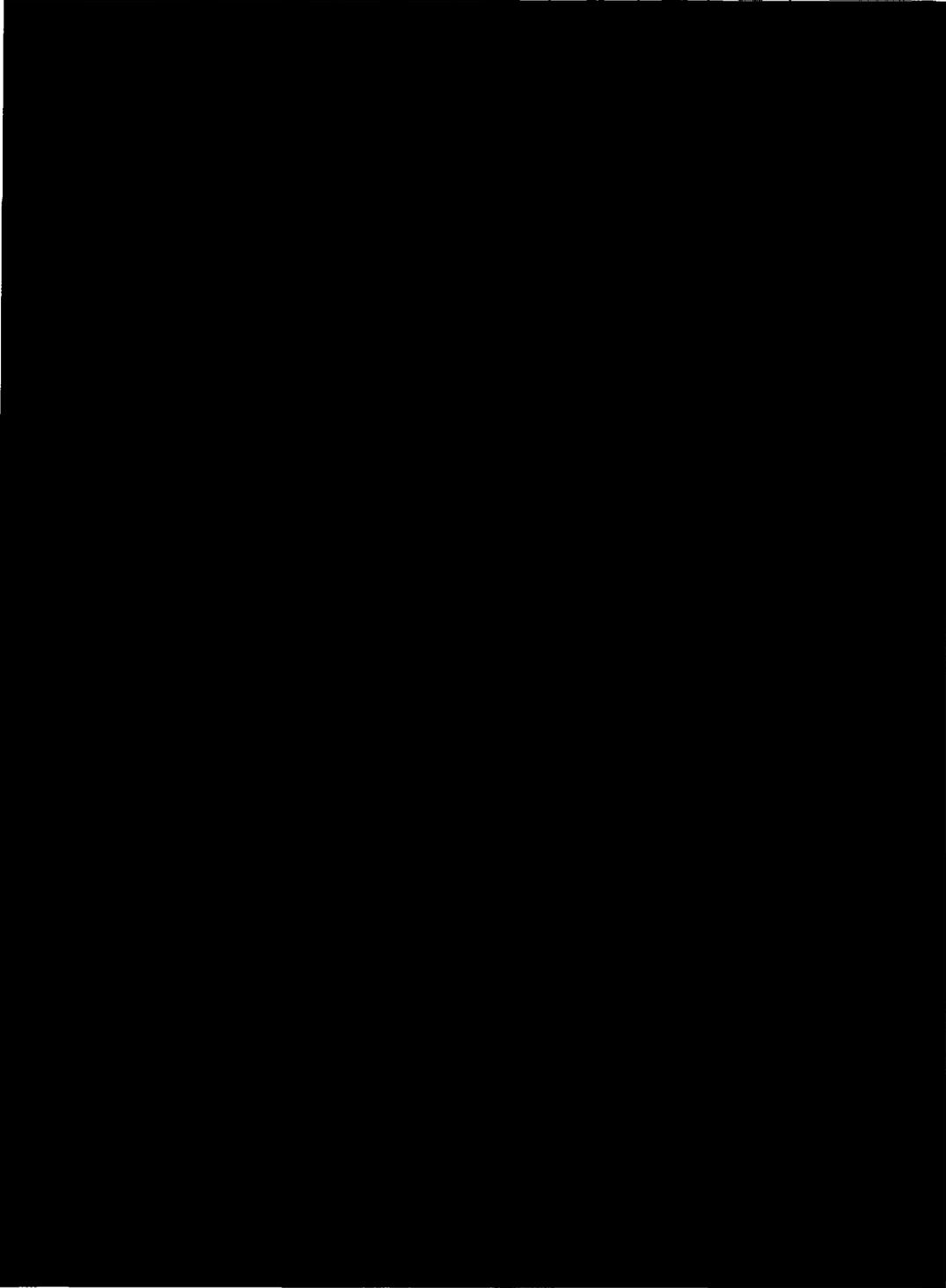
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2013 Emissions (Purchase Power Agreements)<sup>1</sup> REDACTED

Total Tons

(B.1.p)

lb/MWH							Annual MWH
SO <sub>2</sub>	NO <sub>x</sub>	CO <sub>2</sub>	PM <sub>10</sub>	CO	VOC	Hg*	

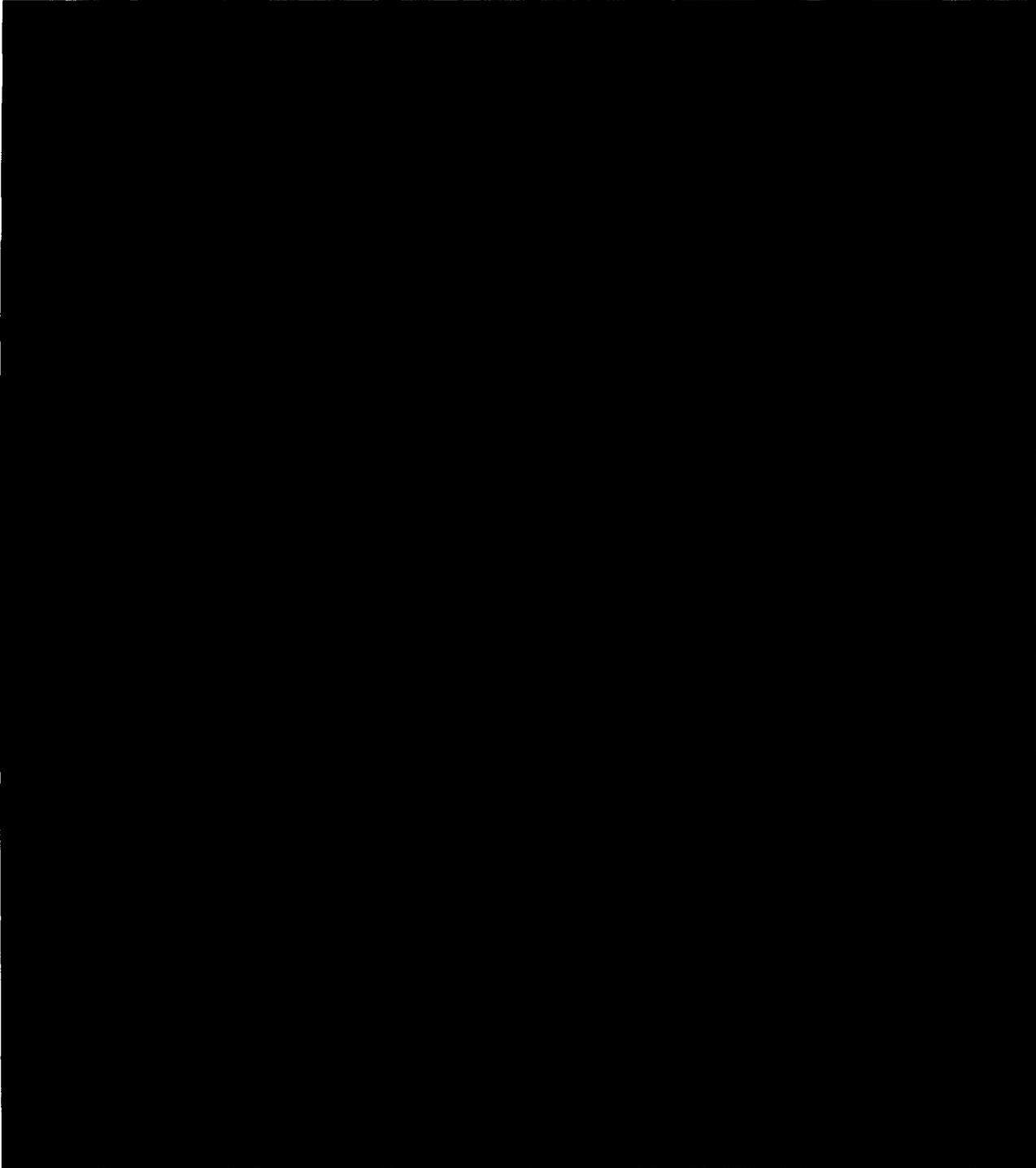


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R-14-2-703-Section: B.1.p,q,r

2013 Emissions/Water Use (Purchase Power Agreements)<sup>1</sup> REDACTED

lb/MWH									Generation Water Use		
(B.1.p)								(B.1.r)	(B.1.q)		
SO <sub>2</sub>	NO <sub>x</sub>	CO <sub>2</sub>	PM <sub>10</sub>	CO	VOC	Hg*	Annual MWH	Tons of Coal Ash <sup>2</sup>	Acre Feet Consumed	Gallons/MWh	



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**R14-2-703 Section B.2.a**

**A Description of Generating Unit Commitment Procedures**

APS optimizes the use of its resources to serve native load in the most economical manner possible, while maintaining grid reliability. The process begins by forecasting the load on a day ahead basis. The load forecast is entered into a unit commitment and dispatch model (PCI GenTrader™/GenPortal™) that determines the most economic unit commitment plan for serving load, taking into account generating unit capabilities, intermittent resource production forecasts (wind, solar), fuel prices and transmission constraints. This commitment plan shows the units to be committed each hour, their projected loading level and the quantity of natural gas to be scheduled.

As part of the process, the model calculates prices for blocks of energy to help determine if it would be cheaper to buy power from the market rather than running generating units. The Day Ahead Trader compares these calculated block energy prices with actual power prices being offered in the market, then purchases either on-peak or off-peak blocks of energy, if economical. The model also calculates the breakeven price for making sales out of our generating units, after taking into account native load and any other pre-existing power sales commitments. If economical, the Day Ahead Trader will make block power sales in the market.

The day ahead commitment plan is turned over to Real Time Operations to implement. The Real Time Traders update the load and available resource forecasts and re-run the unit commitment and dispatch model to fine tune the commitment plan. They also check the hourly market to make purchases and sales of power to further optimize the system. Any Demand Response products that can be utilized within the day are also considered.

The Real Time Traders commit (start) and de-commit (shutdown) generating units as needed to meet load and sales commitments. They also update the plan as needed for generating unit or transmission outages, optimizing utilization of available resources. Additional items which must be considered during the unit commitment process include: jointly owned units which may be requested on-line by their owners, fuel supply issues, the need to operate units for voltage or other problems due to temporary line outages, unit minimum on-line and off-line time requirements, and environmental constraints.

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**R14-2-703 Section: B.2.b**

**2013 Production Cost**

Total Power Production expenses for the Calendar Year 2013 including O&M, Fuel and Purchased Power were \$1,454,711,047 of which \$59,821,562 was related to Deferred Fuel.

Fuel and Purchased Power expenses including interchange for the Calendar Year 2013 were \$1,039,825,166 of which \$59,821,562 was related to Deferred Fuel.

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**R14-2-703 Section: B.2.c**

**2013 Reserve Requirement**

The actual Reserve Margin for 2013 was 1098.4 MW or 27.0% at the time of system peak. Total resources and Class A Interruptible exceeded our load and firm off system sales by this amount.

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**R14-2-703 Section: B.2.d**

**2013 Spinning Reserve**

The Company maintains spinning reserve in compliance with quotas assigned by the Southwest Reserve Sharing Group for the Calendar Year 2013, these quotas were:

<u>2013</u>	<u>Spinning Reserve Capacity (MW)</u>
January	201
February	200
March	186
April	186
May	232
June	260
July	208
August	276
September	260
October	208
November	182
December	186

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**R14-2-703 Section: B.2.e**

**2013**

**Reliability of Generating, Transmission and Distribution Systems**

APS follows the Institute of Electrical and Electronics Engineers (IEEE) 1366 – 2003, "Guide for Electric Power Distribution Reliability Indices" for measuring reliability. Three of the most common indicators used for measuring reliability are SAIFI (System Average Interruption Frequency Index), SAIDI (System Average Interruption Duration Index) and CAIDI (Customer Average Interruption Duration Index). These indicators are calculated with "Major Event Days" excluded, in accordance with Sections 3.13, 4.5 and Annex B.

The data provided below will be the portion of SAIFI, SAIDI, and CAIDI due to Transmission and Distribution causes, respectively. Regarding Generation Reliability no loss of load occurred in 2013 due to a generation outage.

**Transmission Reliability**

SAIFI	0.07
SAIDI (minutes)	4
CAIDI (minutes)	59

**Distribution Reliability**

SAIFI	0.73
SAIDI (minutes)	74
CAIDI (minutes)	101

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**R14-2-703 Section: B.2.f**

**2013 Power Purchase and Sales Prices**

Month	Average Purchase Price	Average Sale Price
Jan-13	\$19.24	\$36.73
Feb-13	\$13.17	\$35.25
Mar-13	\$15.93	\$34.33
Apr-13	\$17.54	\$39.77
May-13	\$26.47	\$41.86
Jun-13	\$30.33	\$46.65
Jul-13	\$33.14	\$49.22
Aug-13	\$31.81	\$43.30
Sep-13	\$22.73	\$40.35
Oct-13	\$15.92	\$37.28
Nov-13	\$17.85	\$37.89
Dec-13	\$21.65	\$40.19

**NOTES:**

Average purchase price represents all short-term power purchases (less than 3 years) divided by the associated megawatt hours.

Average sale price represents total short-term power sales (less than 3 years) divided by the associated megawatt hours.

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**R14-2-703 Section: B.2.g**

**2013 Energy Losses**

Own load energy losses for the Calendar Year 2013 were 5.87%.

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**R14-2-703 Section B.3**

**Total Interconnected Distributed  
Generation MW**

**A. Total reported for end of 2013: 323 AC**

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**R14-2-703 Section: B.4**

**An explanation of any resource procurement processes used by the load-serving entity during the previous calendar year that did not include the use of an RFP, including the exception under which the process was used.**

In 2013, APS had no resource procurement processes that did not include the use of an RFP.