



Mayor  
John Bramall

City Manager  
Clark R. Fawcett

# City of Hurricane

*Power Board*  
*Mac J. Hall, Chair*  
*Jerry Brisk*  
*Dean McNeil*  
*Charles Reeve*  
*Kelly Carlson*  
*Pam Humphries*

## Power Board Meeting Agenda

06/25/2019

3:00 PM

Power Department Meeting Room – 526 W 600 N

Notice is hereby given that the Power Board will hold a Regular Meeting in the Power Department Meeting room located at 526 W 600 N, Hurricane, UT. A silent roll call will be taken, along with the Pledge of Allegiance and prayer by invitation.

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### AGENDA

1. Pledge of Allegiance
2. Prayer
3. Approval of Minutes from Previous Meeting

### SYSTEM UPDATES

Scott Hughes/Substation Supervisor

Brian Anderson/Power Superintendent

### OLD BUSINESS

1. CFPP
  - a. Discussion and Possible approval to increase Hurricane's capacity entitlement in CFPP.
  - b. Discussion and Possible Approval to Approving the JUMP Resolution

### NEW BUSINESS

1. AMI (Advanced Metering Infrastructure) metering Discussion
2. Rate Study Discussion
3. UAMPS
4. Budget
5. Other



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The Hurricane City Power Board met on May 28, 2019 at 3:00 p.m. at the Clifton Wilson Substation on 526 W 600 N. In attendance were; Chairman Mac Hall, Pam Humphries, Dean McNeil, Jerry Brisk, Charles Reeve, Kelly Carlson, Dave Imlay, Brian Anderson, and Trace Torgersen.

Mac Hall welcomed everyone to the meeting; Kelly Carlson led the Pledge of Allegiance, and Charles Reeve offered the prayer. Pam Humphries made the motion to approve the minutes from the previous meeting and Dean McNeil second the motion. All in favor, the motion passed.

**Substation Report: Dave Imlay reported on behalf of Scott Hughes.** Don Behunin retired in the first week of May, leaving an open position for a Substation Manger. Scott Hughes accepted the Substation Manager position. Michael Ramirez moved from the Line Crew to take a position in the substation as a Substation Apprentice. The swamp cooler maintenance is finished and they are ready for the summer generation schedule.

**Brian Anderson:** Reported that the line crew finished installing anchors at the Hurricane Airport. With the St. George airport closing there will be more traffic at the Hurricane airport so there was a need for extra tie down anchors. The plan to pull wire across SR9 was halted due to weather. Brian reported on the outage caused by a contractor that hit a transformer and then dug up wire in the same day. The outage left one customer out of power over night and the power department provided with a generator to provide power during that time.

**Continuation of 600 North Power Line (Clifton Wilson-Brentwood) Discussion:** Dave reported that he discussed purchasing the section of line on 600 N with UAMPS. UAMPS engineers estimated the cost at \$165,000. Dave reported that at the end of the calendar year the bonds tied to that section of line will be paid off. Dave will update the Power Board of the updated cost estimate at the end of the year.

**OP #1 Final Allocation Scenario Update:** Operation Scenario #1 is now finalized. Dave Imlay discussed the percentages and cost allocations for Santa Clara, St. George, Washington, and Hurricane Power.

**Avian Retrofit Update:** Dave Imlay reported that Chris Shamo is continuing to gather a material list for each pole listed on the Avian Retrofit report. Upon completion of the material list the information will be forwarded to UAMPS for approval and reimbursement.

**Geothermal Development Discussion:** Dave reported that GFE Sustainable, Inc. has presented a Geothermal development project which is expected to be located in Preston Idaho. UAMPS is researching the project. Dave will update the Power Board on the progress of project and the possibility of UAMPS participation.

**Carbon Free Power Project Jump Module Discussion/Discussion to Participate:** Dave explained that the JUMP Module is the first 60 MW module to go in and will be paid for and DOE with the produced energy going to the DOE. After 15 years, the DOE will turn it over to the CFPP. UAMPS solicited the participants for interest in these MWs when they become available. Hurricane's estimated entitlement share of these MWs is 5,000 KW. Hurricane can so yes or no to the KWs or put in a maximum KW

amount Hurricane would be interested in. The Board discussed and settled on 10,000 KW as a maximum amount Hurricane would be interested in.

**Solar Reimbursement Rate Discussion:** Dave Imlay provided the Power Board with a graph showing the cost of solar during productive solar hours compared to the cost of power during the same hours. During solar peak hours the cost of power per KWH is lower than the current solar reimbursement rate. The Power Board agreed that this comparison needs to be reviewed on an annual basis.

**Electric Vehicle Presentation:** Dave reviewed the Electric Vehicle Presentation, presented at the UAMPS Tool-Kit meeting. Electric Vehicles are a positive load and revenue growth opportunity. Dave reported that he is currently discussing the possibility of providing the labor and material to provide power for Electric Vehicle Charging stations at My Place Hotel.

**Capital Expenditure Update:** Dave reported that all of budgeted capital expenditures for budget year 2018-2019 are either completed or underway.

**Budget:** The cost of power in April was \$55.44 per megawatt. Dave discussed in detail how the cost natural gas effects the cost of the pool power. Dave provided the Power Board with a chart showing percentage used of all Hurricane Power's resources. In 2018, the percentage of power from pool/market was 48%.

**UAMPS:** Dave reported that the UAMPS Member Conference meeting will be held in Jackson Hole Wyoming this year.

**Other:** Dave Imlay introduced the new linemen apprentice Trace Torgersen.

The Power Board adjourned at 4:40 p.m. The next Power Board Meeting is scheduled for June 25, 2019, at 3:00 PM.

**RESOLUTION NO. \_\_\_\_\_**

A RESOLUTION AUTHORIZING AND APPROVING AN INCREASE IN THE PARTICIPANT'S ENTITLEMENT SHARE UNDER THE CARBON FREE POWER PROJECT POWER SALES CONTRACT FOR THE LAY-OFF POWER SALES AGREEMENT ASSOCIATED WITH JOINT USE MODULE PLANT OPERATIONS AT THE CARBON FREE POWER PROJECT; AND RELATED MATTERS.

\*\*\*\*\*       \*\*\*\*\*       \*\*\*\*\*

WHEREAS, Hurricane City, Utah (the "*Participant*") is a member of Utah Associated Municipal Power Systems ("*UAMPS*") pursuant to the provisions of the Utah Associated Municipal Power Systems Amended and Restated Agreement for Joint and Cooperative Action, as amended (the "*Joint Action Agreement*");

WHEREAS, the Participant has previously approved, executed and delivered the Carbon Free Power Sales Contract dated as of April 1, 2018 (the "*Power Sales Contract*") with UAMPS, including an Entitlement Share of 7,000 kW of the capacity of the Project (initially capitalized terms used and not defined herein have the meanings assigned to them in the Power Sales Contract);

WHEREAS, UAMPS, the U.S. Department of Energy and Batelle Energy Alliance, as DOE's prime contractor at the Idaho National Laboratory (together, "*DOE*") entered into a Memorandum of Understanding in December 2018 (the "*MOU*"), under which one of the small modular reactors at the Project ("*JUMP SMR*") will be utilized by DOE for research and development purposes under its "JUMP" program;

WHEREAS, the MOU calls for definitive agreements for the JUMP SMR be negotiated by October 2019 (collectively, these agreements are referred to herein as the "*JUMP Lay-Off Power Sales Agreement*");

WHEREAS, UAMPS and the Project Management Committee believe that the JUMP Lay-Off Power Sales Agreement will provide substantial benefits to the Participants and the Project as a whole, including accelerating the development of the Project, achieving cost savings and other benefits;

WHEREAS, certain Participants in the CFPP desire to facilitate this transaction by electing to increase their Entitlement Shares in a total amount sufficient to enable UAMPS to make the JUMP SMR available to DOE and thus enabling UAMPS to enter into JUMP Lay-Off Power Sales Agreement with DOE; and

WHEREAS, the Participant now desires to increase its Entitlement Share in the amount set forth below to facilitate the JUMP Lay-Off Power Sales Agreement;

NOW, THEREFORE, BE IT RESOLVED by the Governing Body of Hurricane City, Utah, as follows:

*Section 1. Increase of Participant Entitlement Share for JUMP Lay-Off Power Sales Agreement.* (a) The Participant hereby authorizes and approves increasing its Entitlement Share in the CFPP by and up to 10,000 kW of capacity.

(b) Upon the completion of negotiations with DOE, UAMPS shall submit the JUMP Lay-Off Power Sales Agreement to the Project Management Committee for approval as provided in the Power Sales Contracts. Upon the approval or disapproval of the JUMP Lay-Off Power Sales Agreement by the Project Management Committee, UAMPS shall send written notice to each of the Participants that has elected to increase its Entitlement Share of the action taken by the Project Management Committee and, if the Project Management Committee has approved the JUMP Lay-Off Power Sales Agreement, a copy of the JUMP Lay-Off Power Sales Agreement.

(c) If the JUMP Lay-Off Power Sales Agreement is approved by the Project Management Committee but is not executed by UAMPS for any reason, UAMPS shall give additional written notice of such fact to such Participants.

(d) Upon its receipt of the written notice from UAMPS described in (b) above, the Participant shall, in its sole discretion, have the right to rescind its election to increase its Entitlement Share as provided in 1(a) above or to modify the increase in its Entitlement Share as provided in 1(a) above upon its determination that the final terms of the JUMP Lay-Off Power Sales Agreement are unacceptable. Upon its receipt of the written notice from UAMPS described in (c) above, the Participant shall, in its sole discretion, have an additional right to rescind its election to increase its Entitlement Share as provided in 1(a) above or to modify the increase in its Entitlement Share as provided in 1(a) above. The Participant shall exercise these rights upon the approval of its Governing Body and by written notice to UAMPS which shall be given not later than 30 days after UAMPS gives notice to the Participant under (b) or (c) above.

*Section 2. Miscellaneous; Effective Date.* (a) Notwithstanding the rights provided to the Participant Section 1(b) of this resolution, this resolution shall be and remain irrevocable until the expiration or termination of the Power Sales Contract in accordance with its terms.

(b) All previous acts and resolutions in conflict with this resolution or any part hereof are hereby repealed to the extent of such conflict.

(c) In case any provision in this resolution shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

(d) This resolution shall take effect immediately upon its adoption and approval.

ADOPTED AND APPROVED this \_\_\_\_ day of \_\_\_\_\_, 2019.

HURRICANE CITY, UTAH

By \_\_\_\_\_  
Mayor

ATTEST:

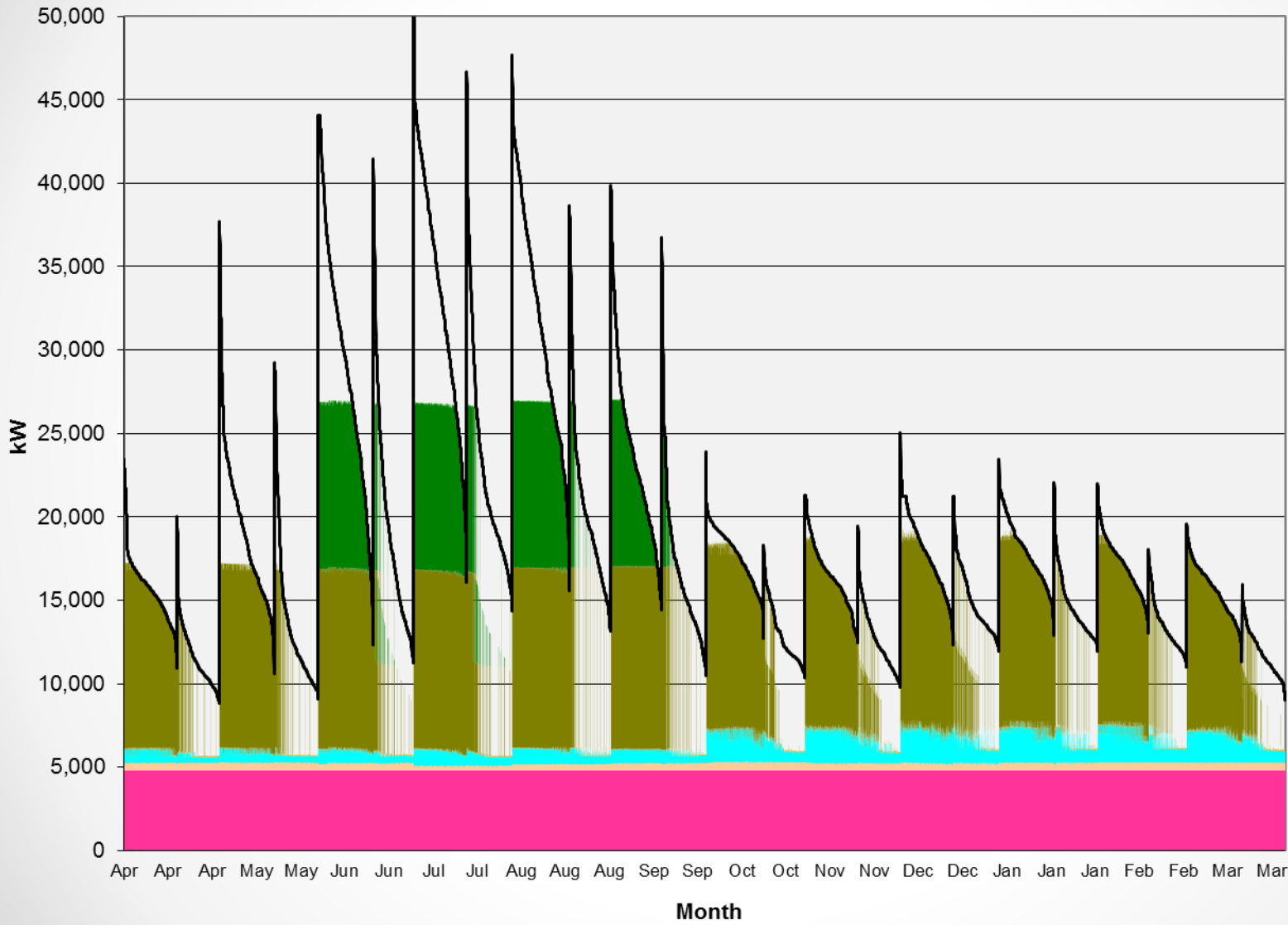
\_\_\_\_\_  
City Recorder

[SEAL]

**Forecast with 5,000 kW CFPP**

**Hurricane Forecasted Load and Resources, April - March**

2.5% per  
year = 28%  
load  
growth  
included



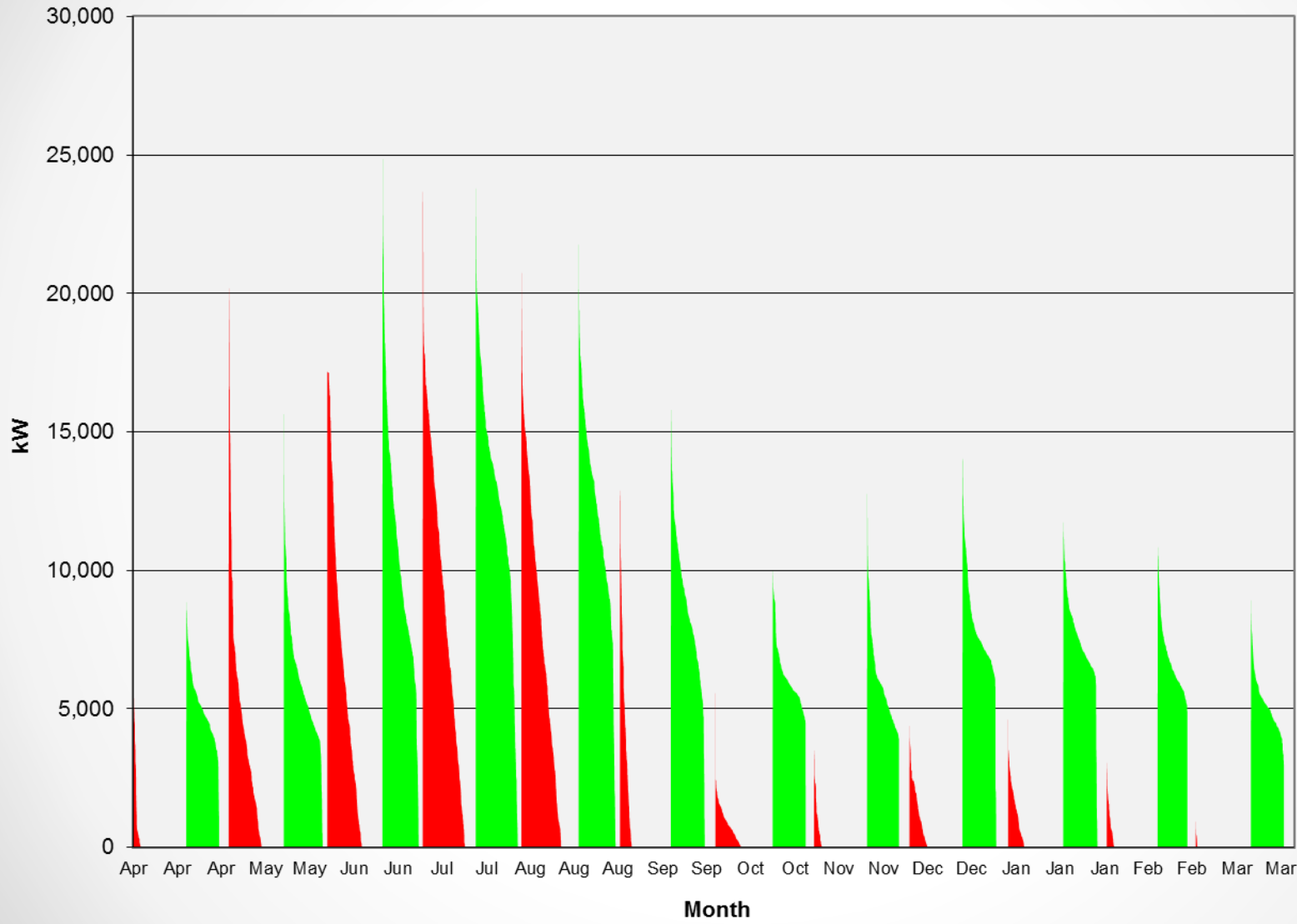
- Generation
- Nebo
- PV Wind
- Provo River
- 5-Year
- Horse Butte
- CRSP
- Hydro
- IPP
- Hunter
- San Juan
- DG&T
- CFPP
- Load

CFPP is 26%  
of energy  
Load

Forecast with 5,000 kW CFPP

2.5% per year = 28% load growth included

Hurricane Forecasted Load Compared to Resources, April - March



- HLH Shortage
- HLH Surplus
- LLH Shortage
- LLH Surplus

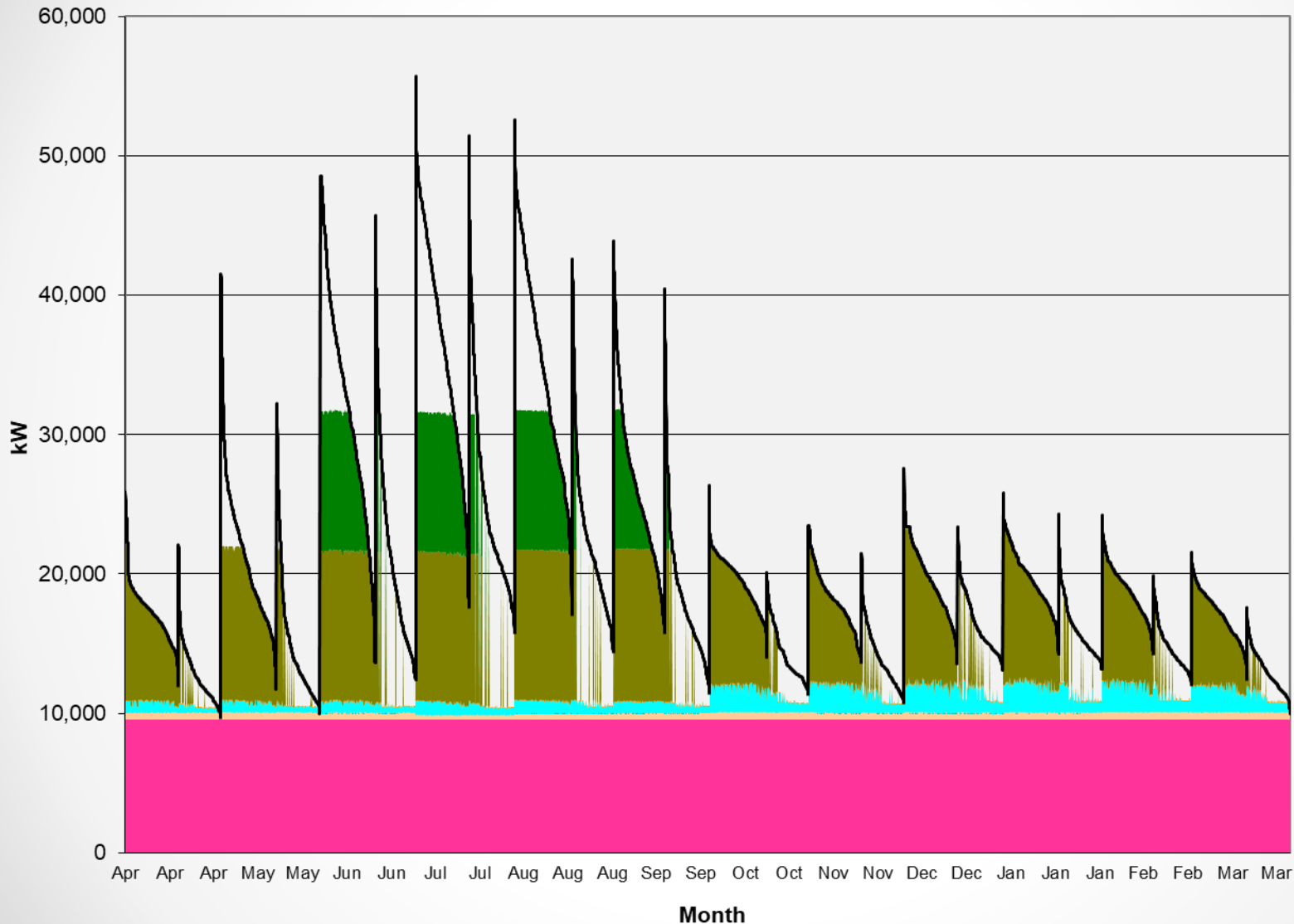
LLH showing as shortage since Nebo only included for HLH



# Forecast with 10,000 kW CFPP

## Hurricane Forecasted Load and Resources, April - March

3.5% per year = 41% load growth included



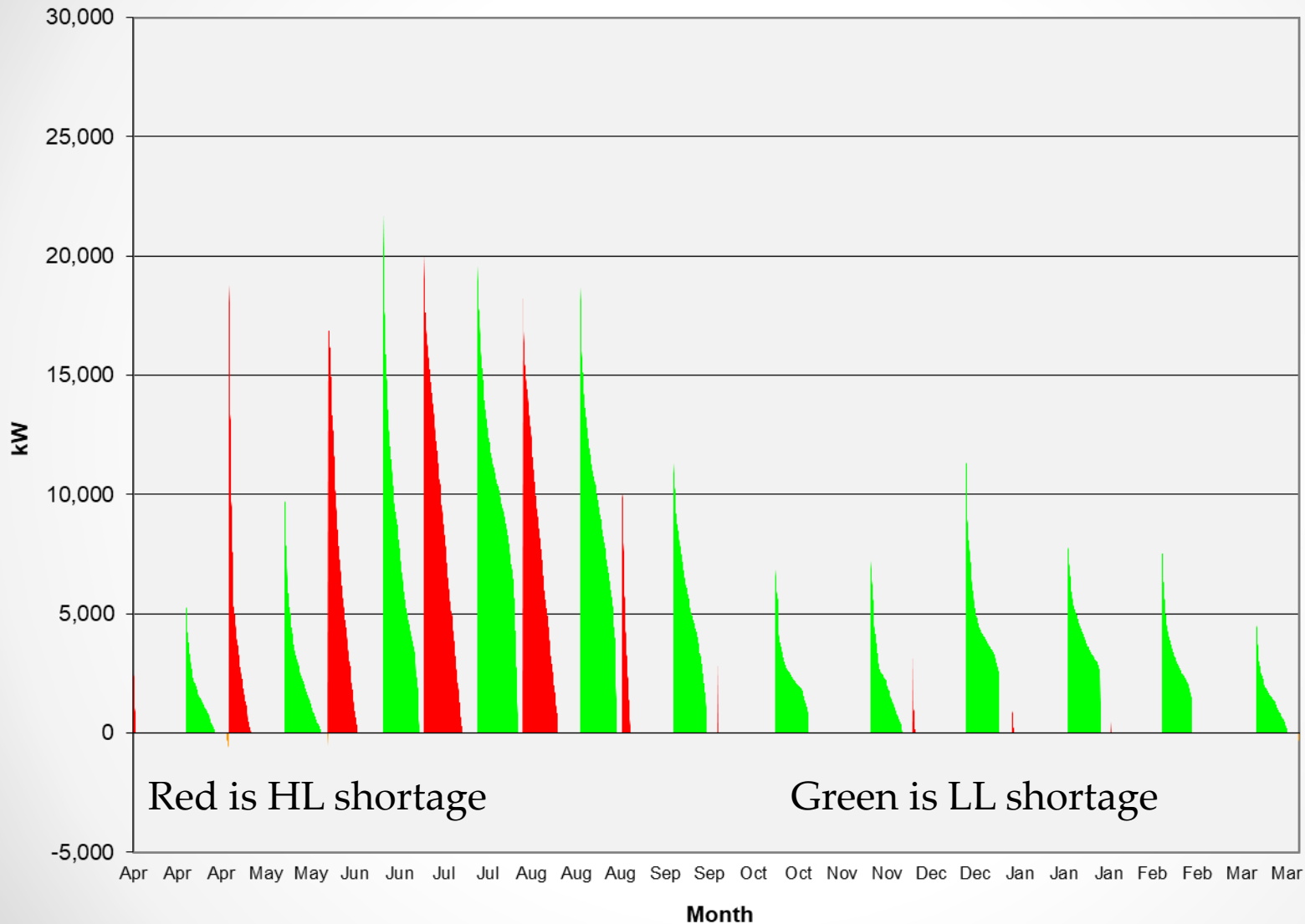
- Generation
- Nebo
- PV Wind
- Provo River
- 5-Year
- Horse Butte
- CRSP
- Hydro
- IPP
- Hunter
- San Juan
- DG&T
- CFPP
- Load

CFPP is 46% of energy Load

Forecast with 10,000 kW CFPP

3.5% per year = 41% load growth included

Hurricane Forecasted Load Compared to Resources, April - March



Red is HL shortage

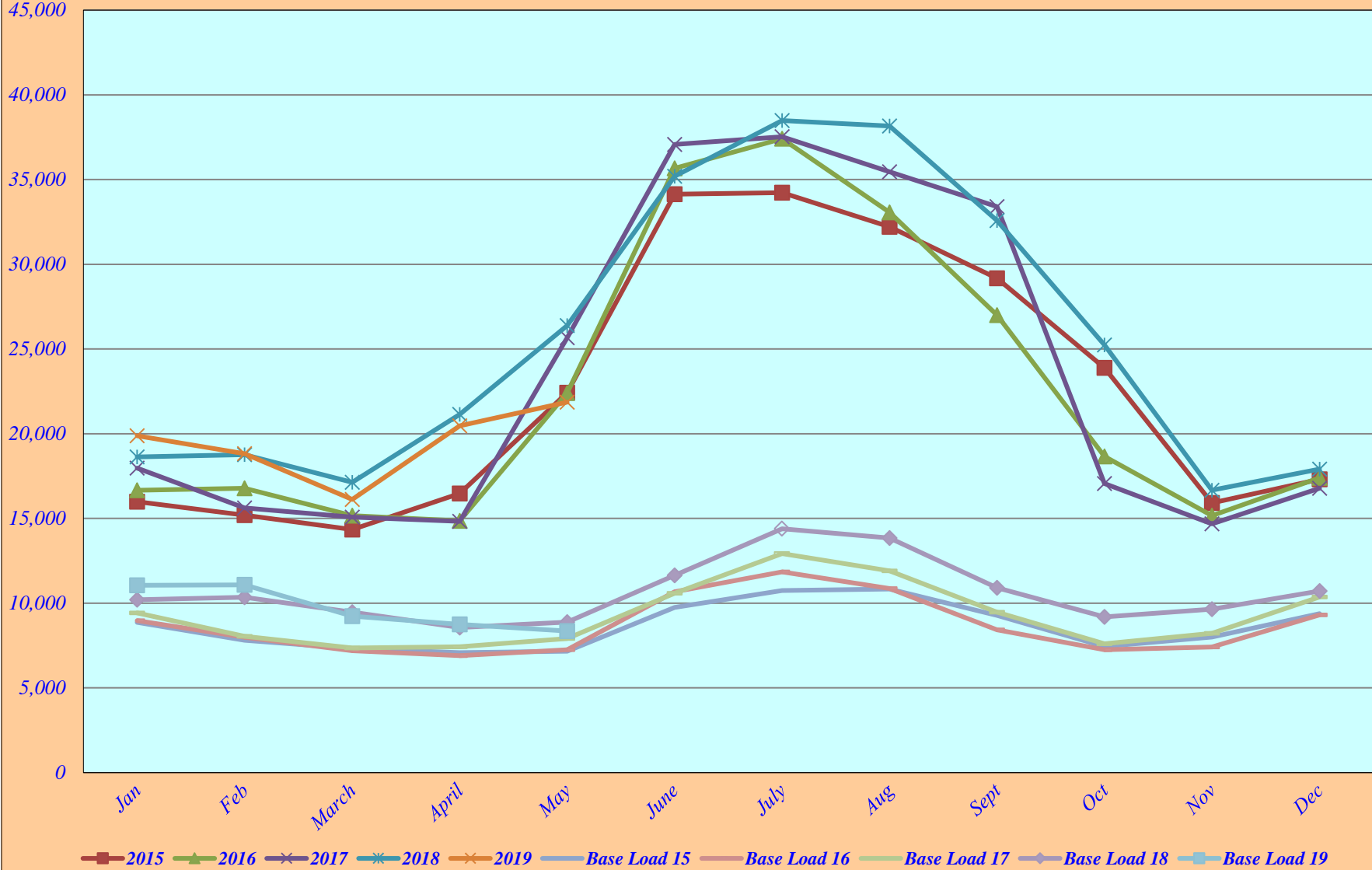
Green is LL shortage

- HLH Shortage
- HLH Surplus
- LLH Shortage
- LLH Surplus

LLH showing as shortage since Nebo only included for HLH



*2015 - 2019 KW LOAD*



**HURRICANE CITY LOAD 2015 to 2019** (All usage in Kilowatt Hours)

	<i>Washington County Conservancy District Hurricane Hydro Meter 4605</i>					<i>UAMPS Meter At Millcreek 4675 (Hurricane Substations)</i>					<i>Pacificore Gate Way Meter 4660</i>					<i>Roof Top Solar</i>				
<i>YEAR</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>	<i>2019</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>	<i>2019</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>	<i>2019</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>	<i>2019</i>
<i>JAN</i>	89,274	345,394	306,505	89,673	103,343	8,254,309	8,510,366	8,970,214	9,647,359	10,030,514	15,995	19,639	20,537	0	21,131	3,642	5,200	6,690	7,364	7,317
<i>FEB</i>	59,711	315,176	296,123	66,377	178,960	6,844,670	7,234,434	7,154,821	8,776,997	8,996,214	17,524	18,786	18,753	0	19,125	4,748	7,381	7,659	8,506	7,478
<i>MAR</i>	120,088	274,326	331,747	224,338	273,630	7,351,782	7,545,218	7,538,524	9,265,397	8,438,735	19,663	19,487	22,007	0	21,439	5,819	14,601	9,300	9,834	10,781
<i>APR</i>	154,376	257,110	117,788	310,394	270,380	7,185,998	7,433,468	7,502,044	8,483,725	8,463,676	19,149	17,724	20,229	15,657	20,565	8,637	16,263	14,017	14,323	15,715
<i>MAY</i>	185,782	332,625	210,438	345,380	283,276	7,872,571	8,661,881	9,322,946	10,537,898	8,678,354	19,186	19,956	21,709	20,284	22,174	8,974	15,789	17,843	17,226	16,191
<i>JUN</i>	295,333	281,332	377,958	244,665	0	11,339,478	12,968,260	13,090,695	12,911,456	0	20,967	21,767	23,557	24,149	0	8,957	17,040	16,352	18,862	0
<i>JUL</i>	361,883	332,623	390,340	280,295	0	12,207,261	14,499,290	15,200,585	15,238,949	0	21,560	23,320	24,854	25,161	0	7,009	11,819	12,941	12,780	0
<i>AUG</i>	369,461	319,927	393,821	259,900	0	13,079,157	13,330,138	14,252,412	15,178,640	0	21,860	20,097	24,501	24,626	0	7,320	9,409	9,232	8,730	0
<i>SEP</i>	337,450	330,246	386,624	234,479	0	11,470,071	10,464,853	10,926,507	13,203,594	0	16,194	21,731	24,501	23,003	0	7,093	11,255	8,601	11,886	0
<i>OCT</i>	326,631	344,940	199,457	299,120	0	8,413,561	8,603,484	8,083,288	8,943,987	0	18,750	21,933	22,944	11,209	0	7,494	9,400	8,164	11,090	0
<i>NOV</i>	293,411	324,761	96,117	178,581	0	7,552,351	7,740,508	7,799,619	8,690,609	0	18,750	20,375	21,958	17,755	0	8,074	10,521	8,866	12,751	0
<i>DEC</i>	315,336	317,960	92,224	120,137	0	8,735,132	9,195,771	9,124,728	9,890,025	0	18,670	20,438	2,675	21,287	0	8,579	9,273	7,013	11,130	0
<i>TOT</i>	2,908,736	3,776,420	3,199,142	2,653,339	1,109,589	110,306,341	116,187,671	118,966,383	130,768,636	44,607,493	228,268	245,253	248,225	183,131	104,434	86,346	137,951	126,678	144,482	57,482

	<i>Hurricane City Generators Meter 4608</i>					<i>UAMPS, Pacificore, Generators &amp; Hydro Meters 4646</i>					<i>PERCENTAGE OF GROWTH</i>					
<i>YEAR</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>	<i>2019</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>	<i>2019</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>	<i>2019</i>	<i>4or5yr Avg</i>
<i>JAN</i>	6,127	7,948	6,379	6,511	7,194	8,370,291	8,884,903	9,310,325	9,661,234	10,169,499	-2.39%	5.79%	4.57%	3.63%	5.00%	3.32%
<i>FEB</i>	5,525	7,224	6,286	6,124	6,848	6,933,265	7,581,715	7,483,642	8,791,627	9,208,625	-3.25%	8.55%	-1.31%	14.88%	4.53%	3.77%
<i>MAR</i>	5,246	13,319	6,403	5,102	6,436	7,503,771	7,578,024	7,898,681	9,270,499	8,740,240	-1.49%	2.24%	0.98%	14.80%	-6.07%	3.31%
<i>APR</i>	13,872	7,280	7,043	23,515	6,183	7,383,644	7,458,472	7,647,104	8,522,897	8,760,804	1.78%	1.00%	2.47%	10.28%	2.72%	3.11%
<i>MAY</i>	6,738	7,266	6,554	5,872	6,486	8,094,699	8,689,103	9,561,647	10,581,280	9,006,481	-6.84%	6.84%	9.13%	9.64%	-17.49%	3.75%
<i>JUN</i>	1,155,585	897,100	412,941	1,515,276	0	12,820,320	13,887,127	13,905,151	14,469,743	0	10.51%	7.68%	0.13%	3.90%	#DIV/0!	5.56%
<i>JUL</i>	897,323	1,081,715	737,165	2,095,313	0	13,495,036	15,604,325	16,352,944	17,372,203	0	-6.16%	13.52%	4.58%	5.87%	#DIV/0!	4.45%
<i>AUG</i>	683,312	784,737	772,879	1,446,526	0	14,161,110	14,134,972	15,443,613	16,658,522	0	15.10%	-0.18%	8.47%	7.29%	#DIV/0!	7.67%
<i>SEP</i>	13,487	2,009	124,404	5,883	0	11,844,295	10,488,593	11,462,036	13,244,366	0	9.23%	-12.93%	8.49%	13.46%	#DIV/0!	4.56%
<i>OCT</i>	6,696	0	32,947	7,072	0	8,773,132	8,625,417	8,338,636	8,973,358	0	7.75%	-1.71%	-3.44%	7.07%	#DIV/0!	2.42%
<i>NOV</i>	7,182	6,423	8,010	13,451	0	7,906,589	7,767,306	7,925,704	8,734,566	0	6.36%	-1.79%	2.00%	9.26%	#DIV/0!	3.96%
<i>DEC</i>	6,880	6,582	9,689	6,463	0	9,204,145	9,222,791	9,229,316	9,928,905	0	7.65%	0.20%	0.07%	7.05%	#DIV/0!	3.74%
<i>TOT</i>	2,807,973	2,821,603	2,130,700	5,137,108	33,147	116,490,297	119,922,748	124,558,799	136,209,200	45,885,649	2.06%	2.86%	3.72%	9.35%	1.72%	3.94%
<i>TOT</i>									36,246,257	36,879,168				YTD	1.72%	

### 2015 - 2019 KWH LOAD

