

# **MONTGOMERY - 1**

# REDACTED

**From:** Montgomery,Ryan,SAINT LOUIS,Engineering  
**Sent:** Thursday, August 8, 2019 9:00 AM  
**To:** Haffer,Ashley,ST LOUIS,NPPC St. Louis Engineering  
**Subject:** RE: HRT - Legal Documents

Ashley –

Please find the updated projected average Diversified kW requirement once we have three and four full lines up and running in Hartwell (last two columns). Below are the diversified loads that were originally shared with Walton EMC, in the attached updated spreadsheet we are showing that we are at 12+ MW which is roughly 3 MW less than shown below (peak versus average loads). Please let me know if you have any questions or need any follow-up.

Required from GP	Diversified Load	Required by Dates	Projected Timeline
Plan for 8MW	8MW (L1, WW, VP, DC)	July 2019	1-2 months (Immediately)
Plan for 15 MW	9.9MW (L2 <u>Proc</u> , L3 Pack)	October 2019	6-9 months (short term)
Plan for 15 MW	13MW (L2 Pack, L3 <u>Proc</u> , WW)	April 2020	6-9 months (short term)
Plan for 25 MW	>15MW (L4, L5, etc.)	After April 2020	12-18 months (long term)

Thanks,  
Ryan

*This e-mail, its electronic document attachments, and the contents of its website linkages may contain confidential information. This information is intended solely for use by the individual or entity to whom it is addressed. If you have received this information in error, please notify the sender immediately and promptly destroy the material and any accompanying attachments from your system.*

	DC, WW, L1, HVAC Commissioning and Equipment Testing (bumping)	DC, WW, L1, HVAC, VP Commissioning (lots of start/stop)	DC, WW, L1, HVAC, (VP only a couple of days) Running	DC, WW, L1, HVAC, (VP only a couple of days) Running	DC, WW, L1, L2 Process, L3 Packaging, HVAC, (VP only a couple of days) Running	DC, WW, L1, L2 Process, L3 Packaging, HVAC, (VP only a couple of days) Running	DC, WW, L1, L2 Process, L3 Packaging, HVAC, (VP only a couple of days) Running	DC, WW, L1, L2 Process, L3 Packaging, HVAC, (VP only a couple of days) Running	DC, WW, L1, L2 Process, L3 Packaging, HVAC, (VP only a couple of days) Running	DC, WW, L1, L2 Process, L3 Packaging, HVAC, (VP only a couple of days) Running	3 Full Lines Active (adding Line 3 & Building 10 addition)	4 Full Lines Active (adding Line 4)
	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Late 2020	Late 2021	
Estimated kW demand	6,310	6,310	6,310	6,310	8,521	8,521	8,521	8,521	8,521	11,229	14,301	
<b>Diversified kW usage, average</b>	<b>2,524</b>	<b>3,786</b>	<b>5,048</b>	<b>5,048</b>	<b>6,817</b>	<b>7,243</b>	<b>7,243</b>	<b>7,243</b>	<b>7,243</b>	<b>9,545</b>	<b>12,156</b>	
Operating efficiency factor	0.40	0.60	0.80	0.80	0.80	0.85	0.85	0.85	0.85	0.85	0.85	
<b>Estimated monthly consumption kWH</b>	<b>363,452</b>	<b>1,090,357</b>	<b>2,907,619</b>	<b>2,907,619</b>	<b>3,926,314</b>	<b>4,171,709</b>	<b>4,171,709</b>	<b>4,171,709</b>	<b>4,171,709</b>	<b>5,497,694</b>	<b>7,002,012</b>	
Number of production lines	0.25	0.5	1	1.25	1.5	2	2	2	2	2	2	
Number of total 24 hr oper days per month	6	12	24	24	24	24	24	24	24	24	24	
Number of operating hours per day	24	24	24	24	24	24	24	24	24	24	24	
Number of operating hours per month	144	288	576	576	576	576	576	576	576	576	576	

	KVA	KW (0.9PF)		KVA	KW (0.9PF)	3 Lines active Total KW	4 lines active
Building Systems/base load	3597.10	3237.39	Building Systems/b	1598.42	1438.58		
Line 1	3413.94	3072.55	Line 3	1410.80	1269.72		
Line 2	2456.34	2210.71	Total L3 & Bldg addition		2708.30	11228.95	<b>14301.49</b>
	9467.39						
Total Line 1 running		6309.94					
Total Lines 1 & 2 running		8520.65					
No lines running		3237.39					

SUMMARY OF TOTAL ESTIMATED POWER USAGE BY MONTH										
	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	
<b>Estimated monthly consumption kWH</b>	<b>363,452</b>	<b>1,090,357</b>	<b>2,907,619</b>	<b>2,907,619</b>	<b>3,926,314</b>	<b>4,171,709</b>	<b>4,171,709</b>	<b>4,171,709</b>	<b>4,171,709</b>	