APPENDIX J**1**

QUANTITATIVE ANALYSIS OF GENERATION IMPACTS

Upper North Fork Feather River Hydroelectric Project

Revised Draft Environmental Impact Report

State Water Resources Control Board
Sacramento, CA

May 2020

Appendix J1
Quantitative Analysis of Generation Impacts

This appendix is presented as a supplement to Appendix J of the 2014 Draft EIR for the Upper North Feather River Hydroelectric Project. It addresses the inclusion of a new alternative, not originally evaluated in the Draft EIR, as well as changes in power market conditions and related regulatory environment.

Alternatives to be Compared

Table 1 lists the alternatives considered in this supplemental analysis. The analysis focuses on the three powerhouses, Butt Valley, Caribou #1, and Caribou #2, that are affected by the proposed alternatives. These total 247 MW in rated capacity. The important infrastructure and operational attributes that are being varied are:

- The installation of thermal curtains at Caribou and Prattville Intakes
- Modify Canyon Dam Low-Level Outlet to Increase Canyon Dam Release to 250 cfs

Table 1. Summary of Proposed Alternatives

Alternative	Measures
Baseline	Baseline conditions
PG&E Proposed Project	Stream flows set out Table 3.1 and 3.2 of from 2004 Settlement Agreement
Alternative 1	Install Prattville Intake Thermal Curtain
	Install Caribou Intake Thermal Curtain
	Modify Canyon Dam Low-Level Outlet to Increase Canyon Dam Release to 250 cfs for June 15th to September 15th; otherwise flows from PG&E's proposed project
Alternative 2	Install Prattville Intake Thermal Curtain
	Install Caribou Intake Thermal Curtain
	All stream flows as under PG&E's proposed project
Alternative 3	No Thermal Curtains installed
	Modify Canyon Dam Low-Level Outlet to Increase Canyon Dam Release to 250 cfs for June 15th to September 15th; otherwise flows from PG&E's proposed project

Modeling Hourly Operation Changes

Stetson Engineering provided results of its hydrologic analysis of these alternatives described in Appendices E, E1, E2 and E3 of the recirculated draft environmental impact report (RDEIR), as well as the hydrologic engineering operational parameters of Butt Valley, Caribou #1 and 2 powerhouses required to calculate the power output. Table 2 lists the engineering parameters for each powerhouse. The results include actual average discharge rates in cubic feet per second (CFS) for Butt Valley, Caribou #1 and 2 powerhouses, covering June 1 through September 31 for 2002-2004. Stetson also provided results for several alternatives with different changes in average discharge rates per month for each powerhouse, as shown in Tables 3, 4 and 5 for each powerhouse.[1] These alternatives reflected the proposed operational changes illustrated in Table 1 and fully described in Chapter 3 of the RDEIR. The discharge changes were converted to power output and a proportion of the change was allocated to weekdays and weekends, based on the proportion of those days in each month.

Table 2. Powerhouse Properties

Powerhouse	Head (ft)	Efficiency	Max Discharge (CFS)	Max Output (MW)
Butt Valley	362	80.6%	2118	52.3
Caribou #1	1151	69.1%	1114	75
Caribou #2	1150	84.2%	1464	119.9

Table 3. Change in Discharge of Butt Valley PH Relative to Baseline Condition for Different Alternatives

		Change in Discharge (cfs)					
	Alternative	**Jun 1-15**	**Jun 16-30**	**Jul**	**Aug**	**Sep 1-15**	**Sep 16-31**
Change in Discharge by Alternative (cfs)	PG&E Proposed Project	90	90	55	45	25	**25**
	Alternative 1	90	215	215	215	215	**25**
	Alternative 2	90	90	55	45	25	**25**
	Alternative 3	**90**	**215**	**215**	**215**	**215**	**25**

Table 4. Change in Discharge of Caribou #1 PH Relative to Baseline Condition for Different Alternatives

		Change in Discharge (cfs)					
	Alternative	**Jun 1-15**	**Jun 16-30**	**Jul**	**Aug**	**Sep 1-15**	**Sep 16-31**
Change in Discharge by Alternative (cfs)	PG&E Proposed Project	29	29	18	16	8	**8**
	Alternative 1	29	70	69	75	70	**8**
	Alternative 2	29	29	18	16	8	**8**
	Alternative 3	**29**	**70**	**69**	**75**	**70**	**8**

Table 5. Change in Discharge of Caribou #2 PH Relative to Baseline Condition for Different Alternatives

[1] Hourly discharge data for the week of July 18-25, 2003 for Caribou #2 was adjusted to fit more normal operations. Hourly flow for this week was replaced with an average of the previous and subsequent weeks, since PG&E conducted special tests (favoring Caribou #1 PH over Caribou #2), which may not reflect normal operations.

		Change in Discharge (cfs)					
	Alternative	**Jun 1-15**	**Jun 16-30**	**Jul**	**Aug**	**Sep 1-15**	**Sep 16-31**
Change in Discharge by Alternative (cfs)	PG&E Proposed Project	61	61	37	29	17	**17**
	Alternative 1	61	145	146	140	145	**17**
	Alternative 2	61	61	37	29	17	**17**
	Alternative 3	**61**	**145**	**146**	**140**	**145**	**17**

Actual hourly hydro discharges for each month (i.e., 720 or 744 hours for each month) were averaged to obtain daily discharge profiles for each powerhouse, and aggregated by month, and day type (weekday or weekend). The average daily profiles were graphed and fitted with six-degree polynomial equations, which allowed for numerical approximations representing the average for each month for the baseline discharges.[2] "Apparent maximum" powerhouse flows were found averaging flows of all non-zero hours for each powerhouse, and taking the maximum value. The apparent maximums reflected the difference between the rated capacity and the average hourly output, with this difference presumably devoted to the ancillary service markets. These powerhouses almost never run at sustained rated generating capacity because they are used to provide the ancillary services described above. Using engineering parameters from Stetson, discharges were converted to power output in MWs for each hour.

Using an optimization algorithm, a dispatch flow level was used to produce an hourly power generation profile. For alternatives that increased average discharges (positive changes), these changes were added to the hours during peak periods through the optimization routine when the powerhouses were operating at less than full output under the assumption that PG&E would prefer to increase generation during the periods when such power is most valuable, and that the powerhouses could accommodate more peak output. The optimization routine used the historic hourly generation pattern as a proxy for the generation market power prices. That is, when historic generation levels were high within a single day, that reflected that power prices also were high and that hydropower was most valuable then. Changes from the baseline conditions were allocated to the least valuable unconstrained hours so as to maintain generation during the most valuable periods by choosing a historic power output level at which to dispatch the unit in an alternative regime. For alternatives that reduced discharge volume, hours below this dispatch level were reduced to the minimum discharge of that power house, and hours above this level were "turned on" using the baseline flow curve values. An iterative process in calculating the dispatch levels was done for each alternative such that the total flow met the change requirements.

Alternatives with relatively large reductions required minimum flows below the average power profile minimums to meet the requirements. If the alternative reduced generation below the historic minimum generation level, the model produced a flat 24-hour constant generation level. In some cases, the reduction changes were larger than the total flow of the average power profiles, in which case, the power house was reduced to zero. For alternatives that added volume, hours above the dispatch level were increased to the apparent maximum flow for that power house, and flows below the dispatch level used the baseline flow values.

[2] Numerical approximations were truncated to not go below zero or above the maximum capacity of each powerhouse

Attachment A contains graphs of the scenario changes and the baseline energy output (from the numerical approximation).

Hourly Emissions Factors

Hourly emissions factors were obtained from the California Energy Commission's Energy Assessment Division. Emissions are based on 2020 PLEXOS simulation results for imported power for the PG&E Valley Region under SB 350-friendly scenario 1xAAE.

Table 6 shows the overall incremental emission rates used in the analysis. Hourly marginal generation and emission rates across all fuel types were aggregated and averaged for a 24-hour period by day type and month.

Table 6. Incremental CO_2 Emissions for Fossil-Fueled Generation

Incremental Emissions (Metric tonnes / Megawatt-hour)
0.367

Source: CEC Plexos Simulation results

Combining Hourly Operation Changes with Hourly Emission Factors

Incremental CO_2 rates for each case were multiplied by the hourly MWh scenario changes from part 1. Total emission changes were aggregated for all powerhouses, and broken down by month (June to September), hourly operation alternatives, and for years 2002 to 2004. CO_2 rates for each year were combined and weighted by the occurrence of each water year type, represented by 2002, 2003 and 2004. Water year types for 1901-2009 were obtained from DWR, and aggregated to the categories below, each occurring in 2002-2004 (CDWR 2010). Weights were assigned to each year's incremental CO_2 rates based on the fraction of occurrences of those year types in the past (1901-2009) as shown in Table 7.

Table 7. Water Year Type Weight Factors for Representative Annual Impacts

Data Year	Water Year Type	Weight % (1901-2009)
2002	Dry (dry)	33%
2003	AN (above normal)	16.5%
2004	BN (below normal)	50.5%

Based on the hourly operational changes multiplied by the hourly incremental emission rates, weighted by water year type, a range of forecasted average monthly and annual changes in GHG emissions are shown in Table 8. These show the results of the analysis for PG&E's proposed project and the action alternatives compared to baseline conditions.

Table 8. Average GHG Emissions By Month and Project Alternative (MT CO2)

	PG&E's Proposed Project	Alternative 1	Alternative 2	Alternative 3
June	1,955	3,229	1,955	3,229
July	1,825	6,604	1,825	6,604
August	1,502	6,278	1,502	6,278
September	1,006	3,951	1,006	3,951
ANNUAL	**6,288**	**20,062**	**6,288**	**20,062**

Findings

The proposed operational changes include:

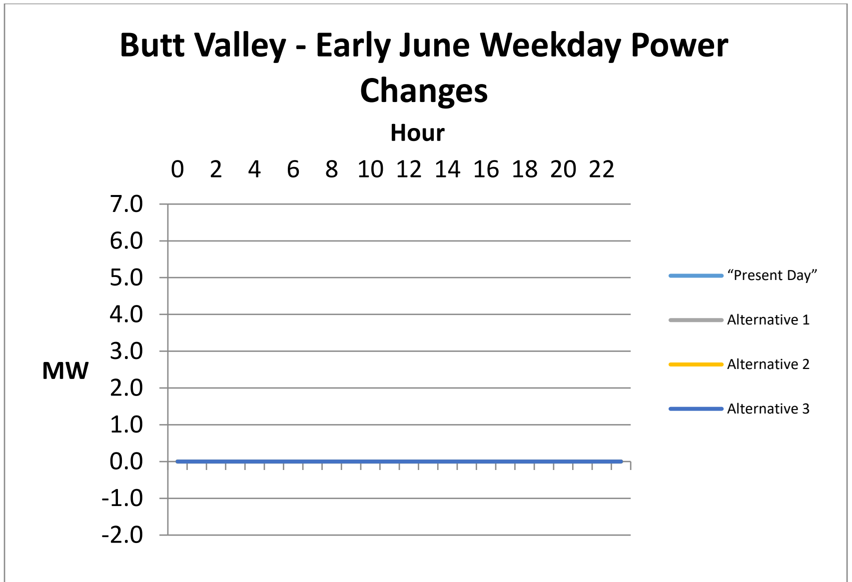
- Installing thermal curtains[3]
- Increasing Canyon Dam releases[4]

The largest expected emissions impact is 20,062 metric tonnes of CO_2e per year for Alternatives 1 and 3. This change is 13,774 tonnes per year higher than the proposed conditions (Table 12). Alternative 2 has the same flows and therefore the same emissions level as the present-day scenario. GHG emissions under alternatives 1 and 3 exceed ARB's proposed interim threshold of 7,000 tonnes per year and the BAAQMD's adopted threshold of 10,000 tonnes per year.

Table 8 summarizes the results for PG&E's proposed project and the three alternatives. The change associated with PG&E's proposed project will not increase GHG emissions compared to baseline conditions. Adding only thermal curtains will not change the operations, and thus, the emissions under Alternative 2 also will remain unchanged from baseline conditions. Adding a bypass requirement at Canyon Dam of 250 CFS under Alternatives 1 and 3 would result in a net increase of 13,773 metric tonnes of CO_2e compared to present day conditions, or 20,062 metric tonnes of CO_2e per year.

Although a chosen alternative may increase the range of potential average emissions, the Air Resources Board has adopted and implemented regulations to achieve state-wide emission reductions through a cap-and-trade program that encompasses the electricity and large industrial stationary sources sectors. The cap-and-trade program requires the offset of increases in emissions through compensating reductions from other sources. PG&E would be left with the discretion as to where to find these reductions, including acquiring allowances from other program participants. In this situation, the cap-and-trade program will mitigate any potential increases in GHG emissions created by a chosen alternative.

[3] Alternatives 1 and 3
[4] Increased releases from Canyon Dam would occur under PG&E's proposed project and the alternatives; higher summertime releases under Alternatives 1 and 3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Hour
0 2 4 6 8 10 12 14 16 18 20 22
MW
7.0
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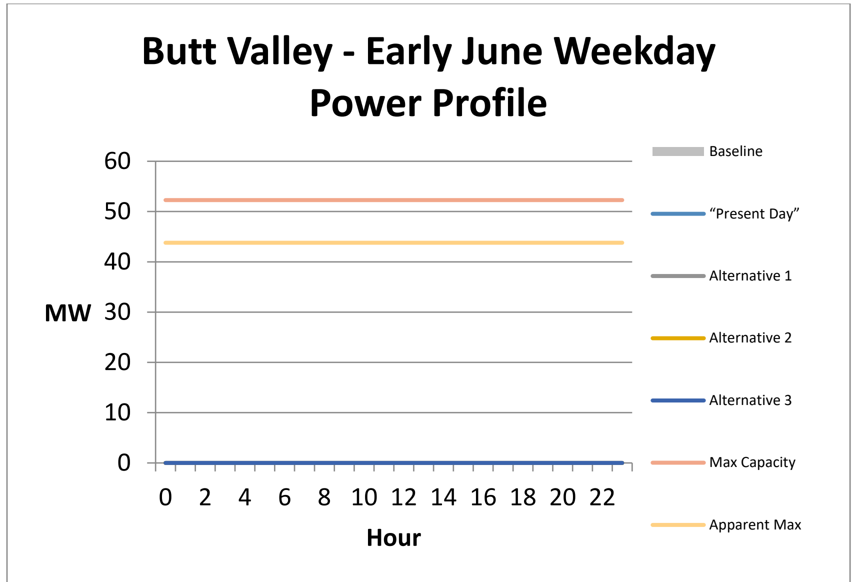
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Butt Valley - Early June Weekday Power Profile
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Alternative 2
Alternative 3
Max Capacity
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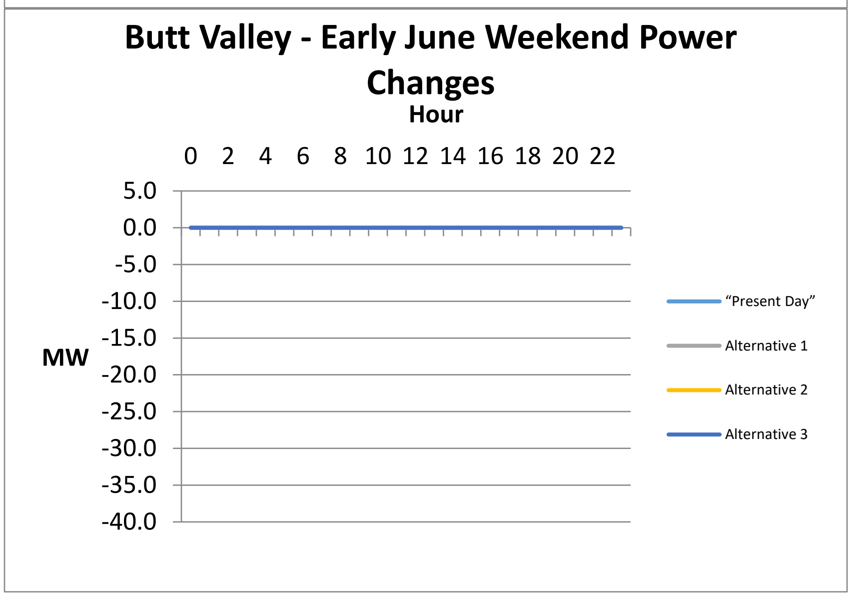
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MW
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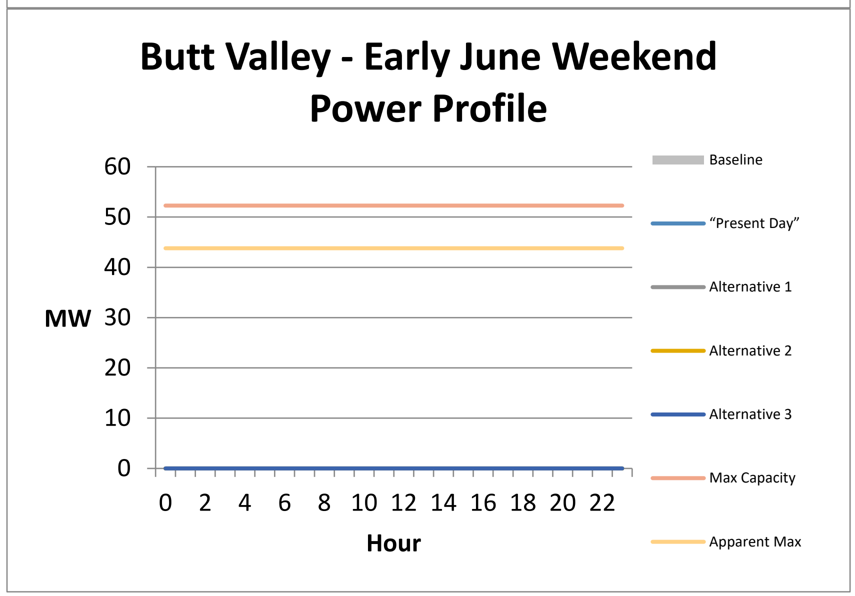
Alternative 2
Alternative 3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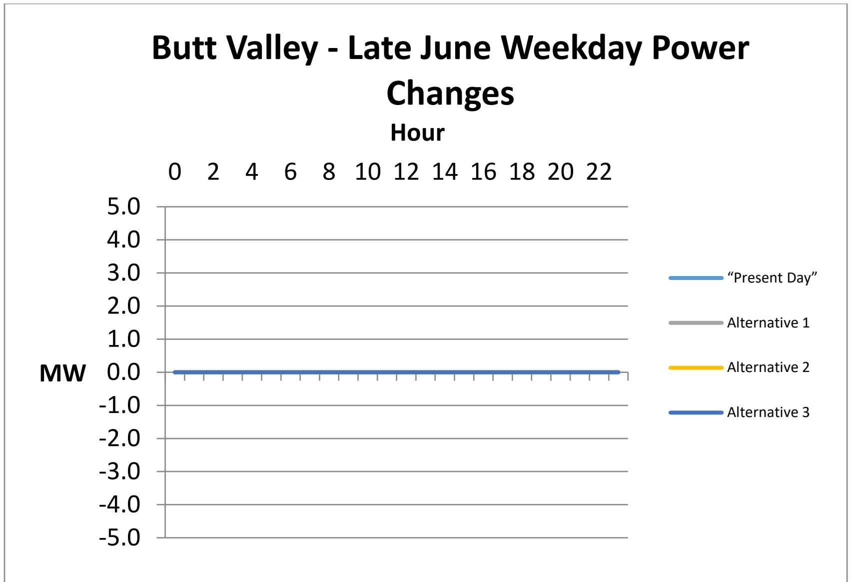
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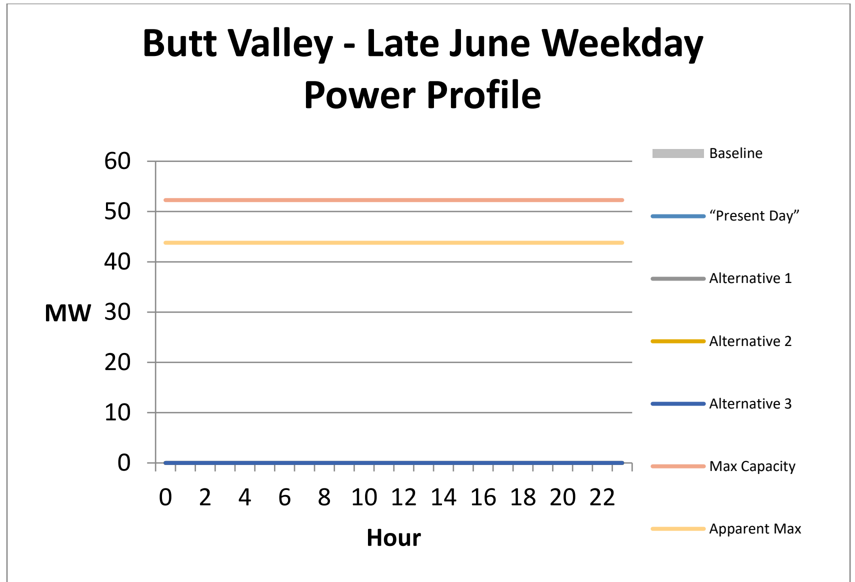
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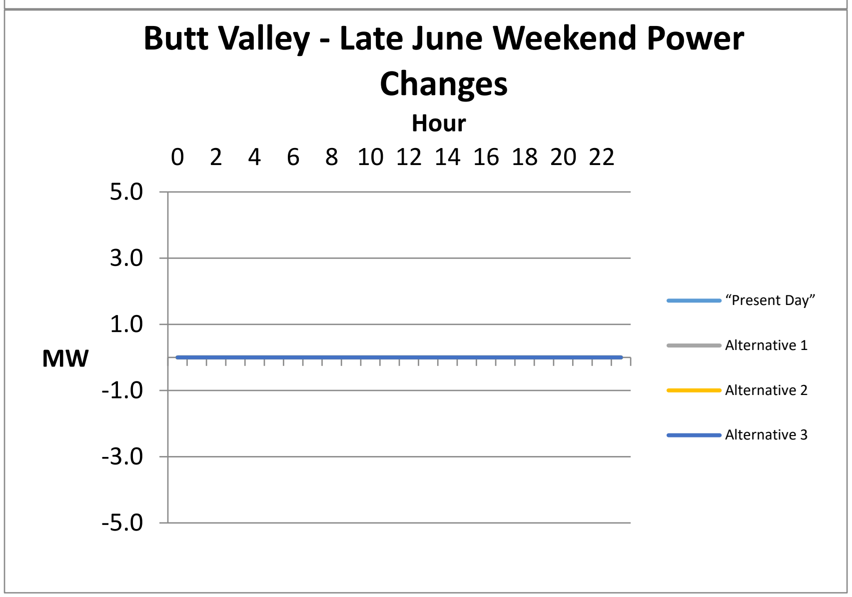
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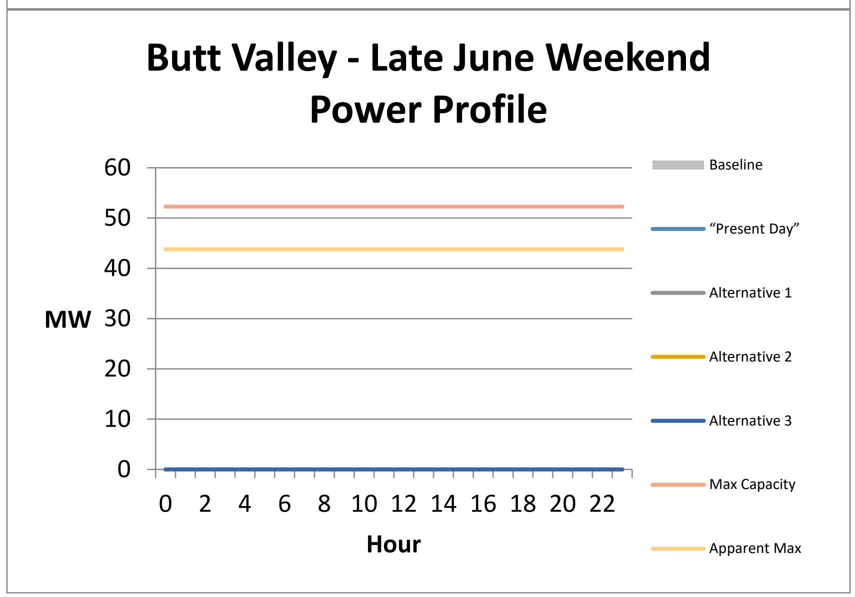
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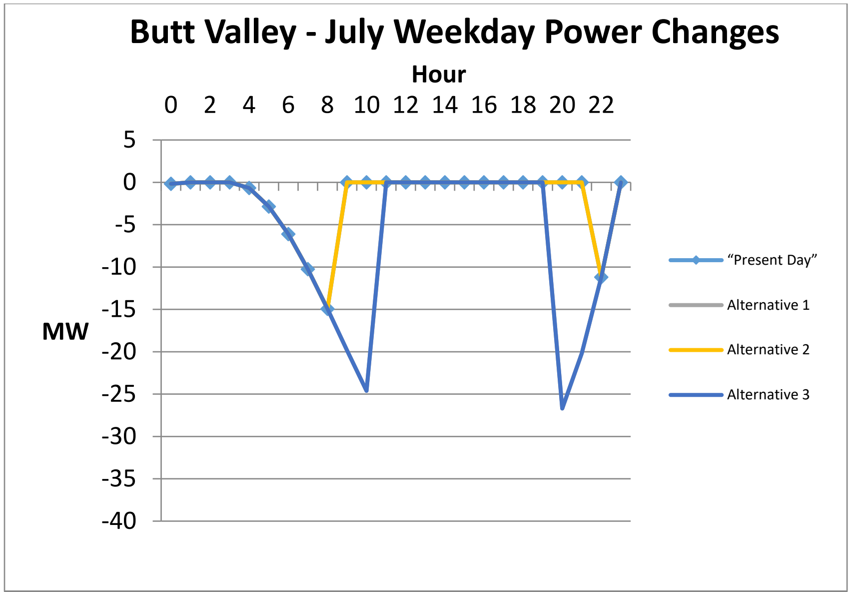
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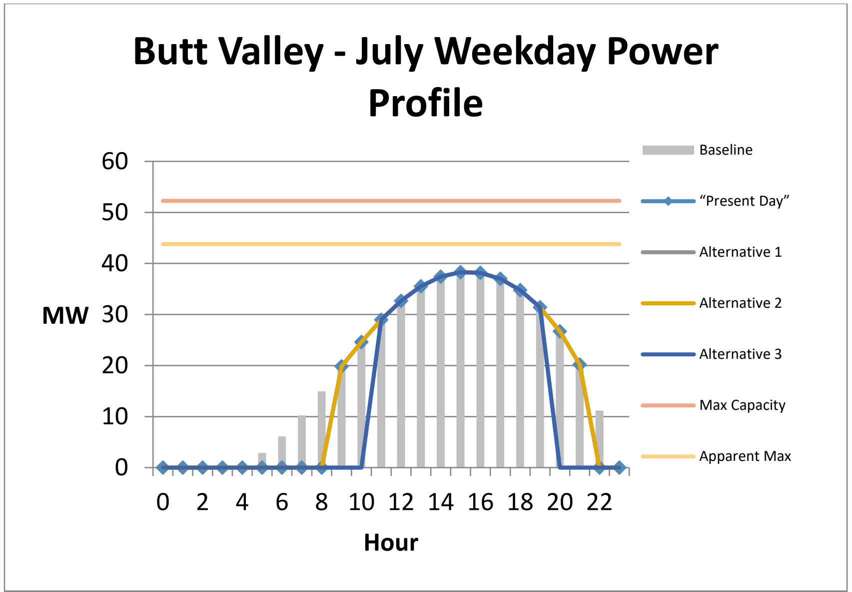
"Present Day"
Alternative 1
Alternative 2
Alternative 3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"Present Day"
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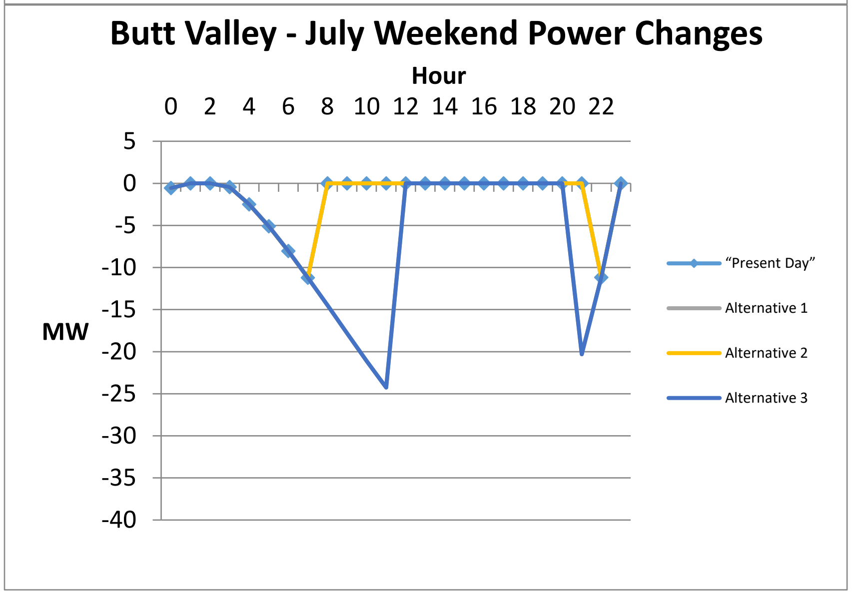
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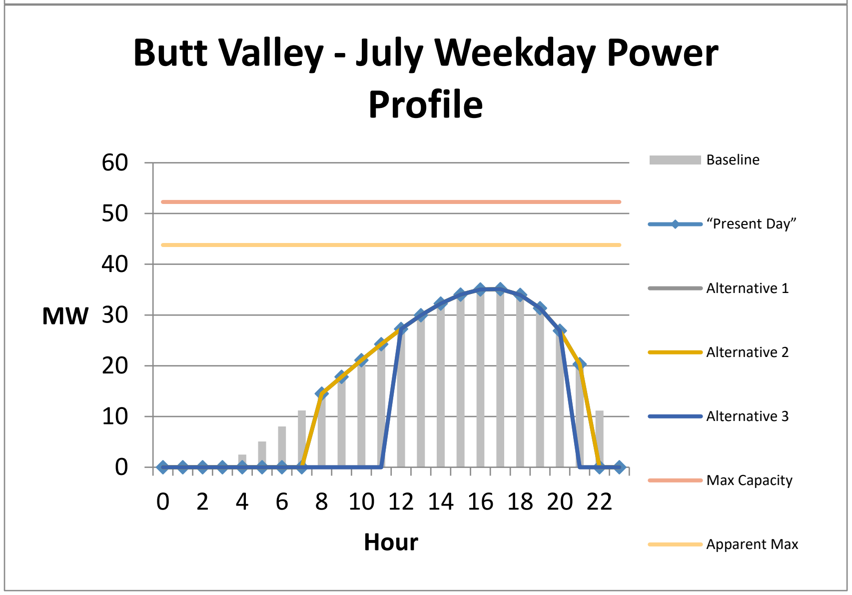
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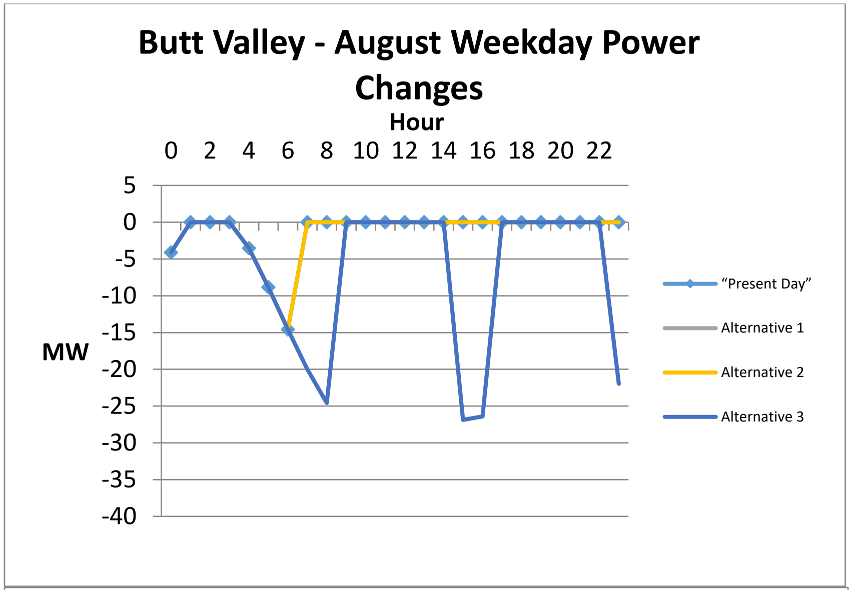
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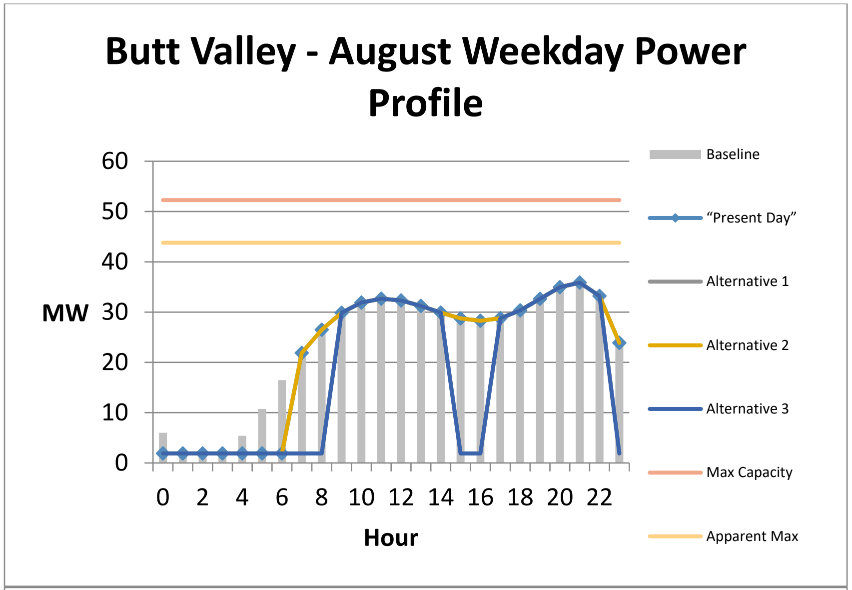
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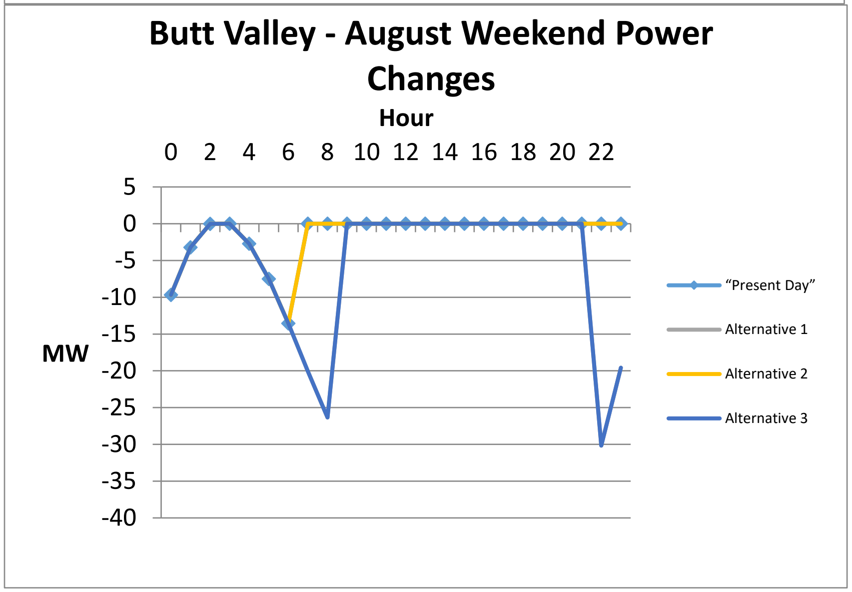
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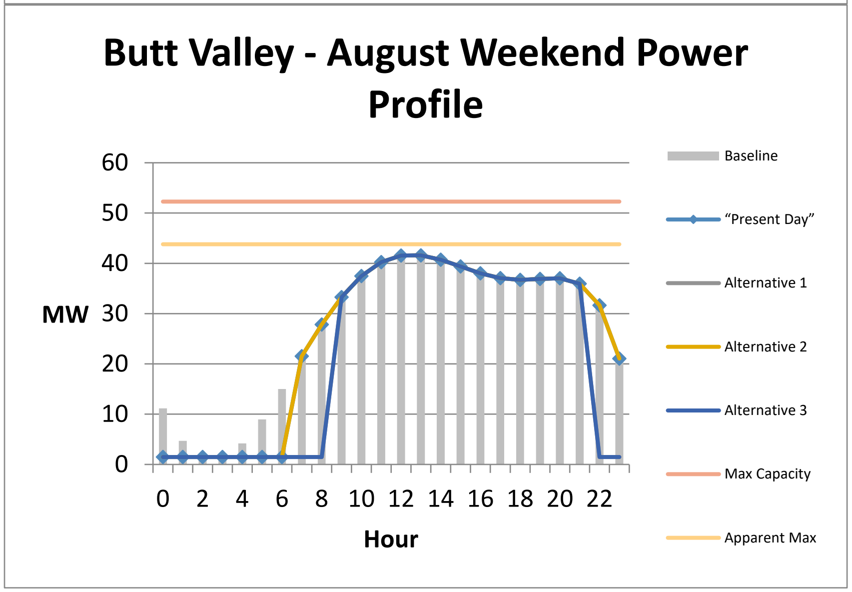
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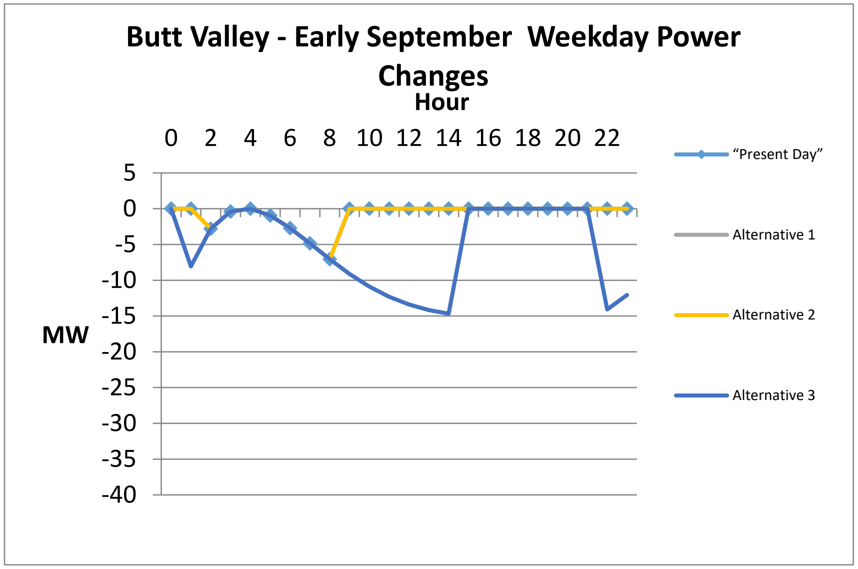
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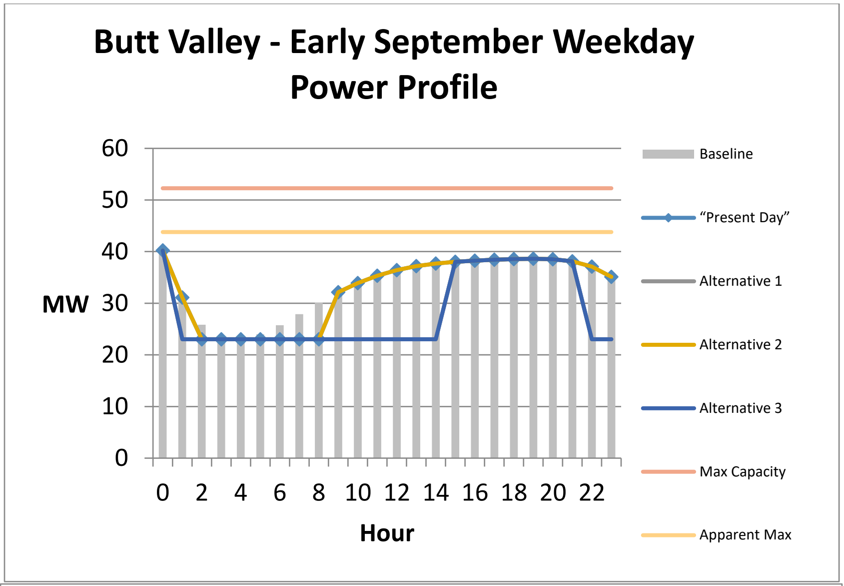
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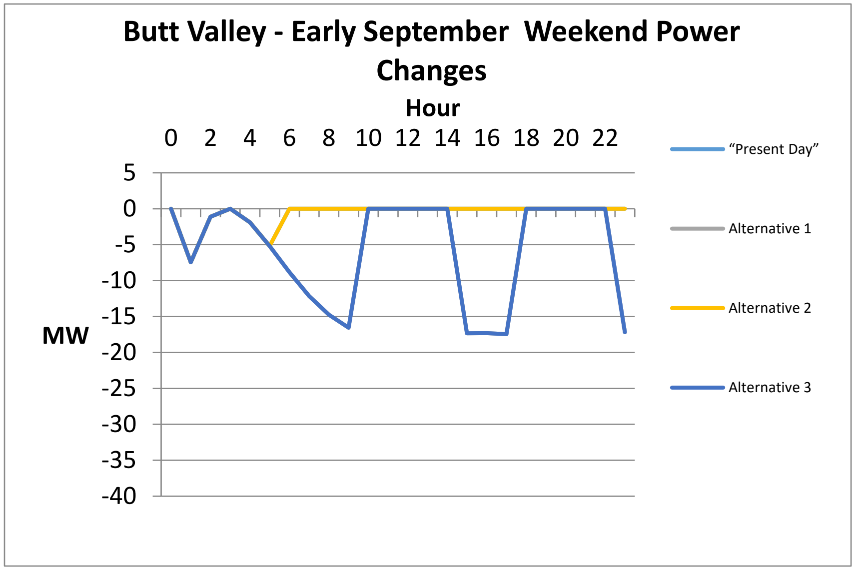
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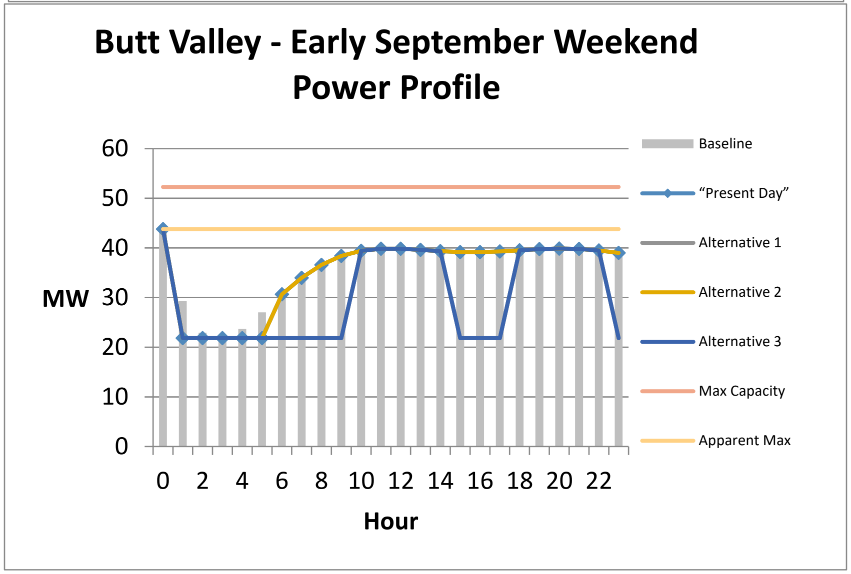
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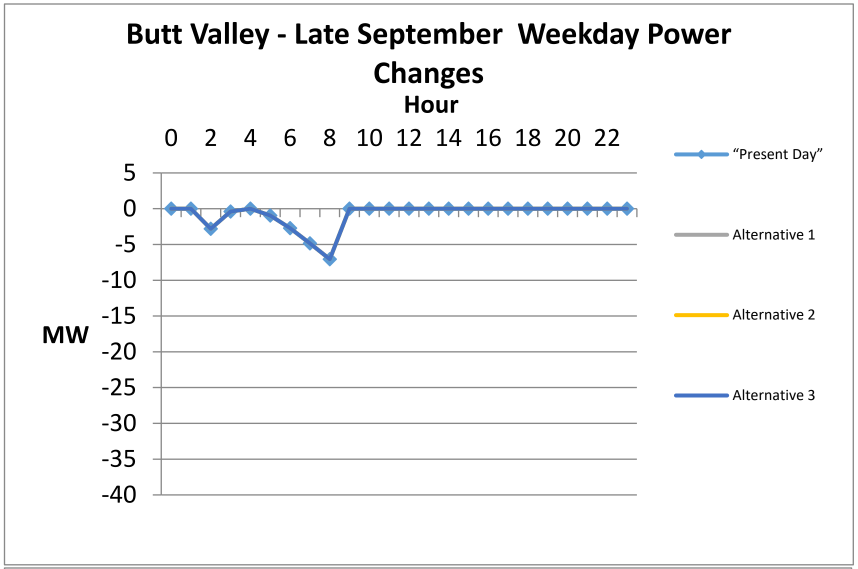
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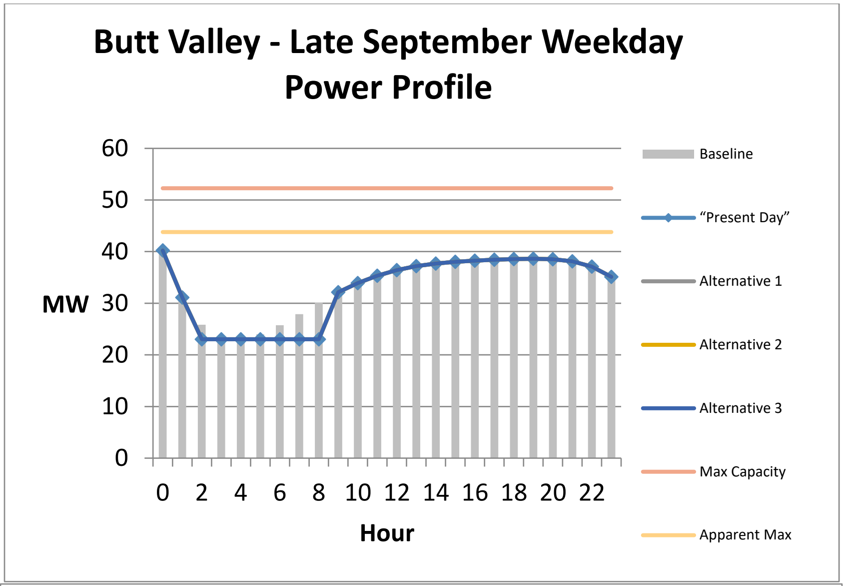
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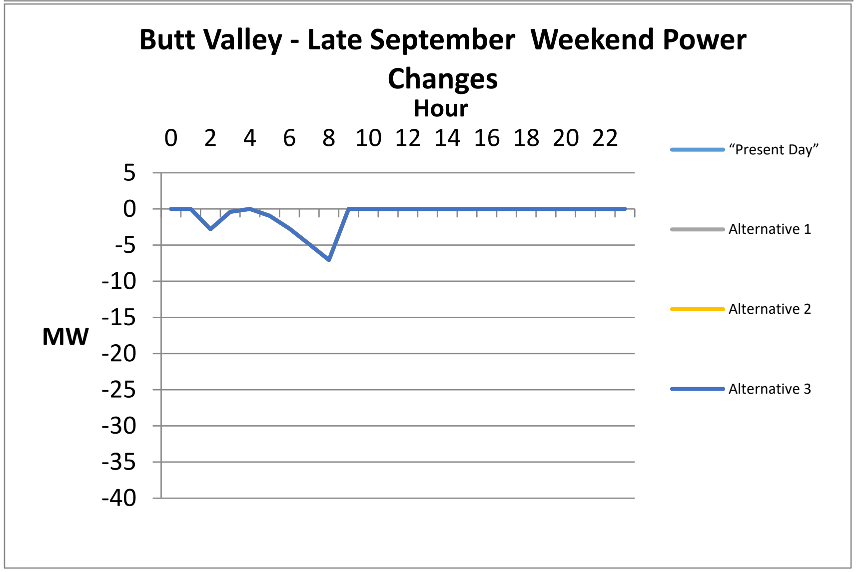
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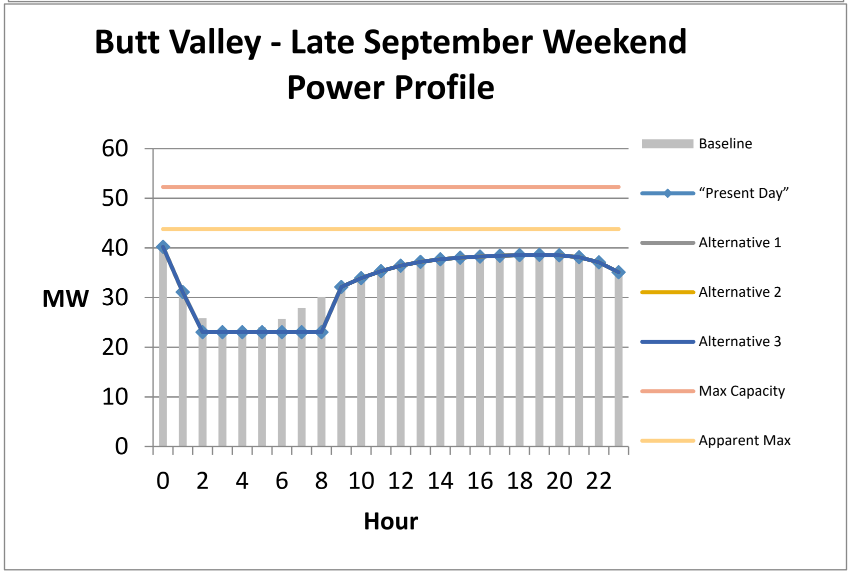
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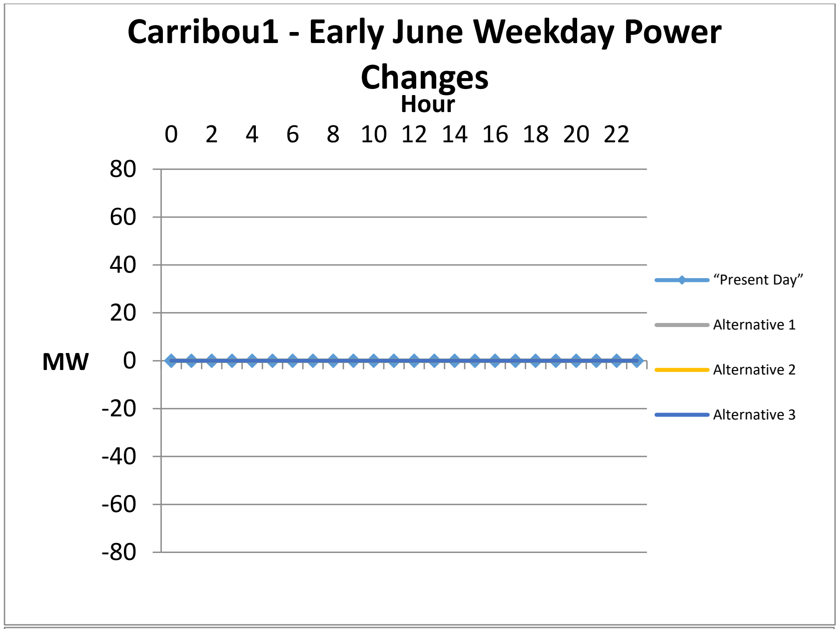
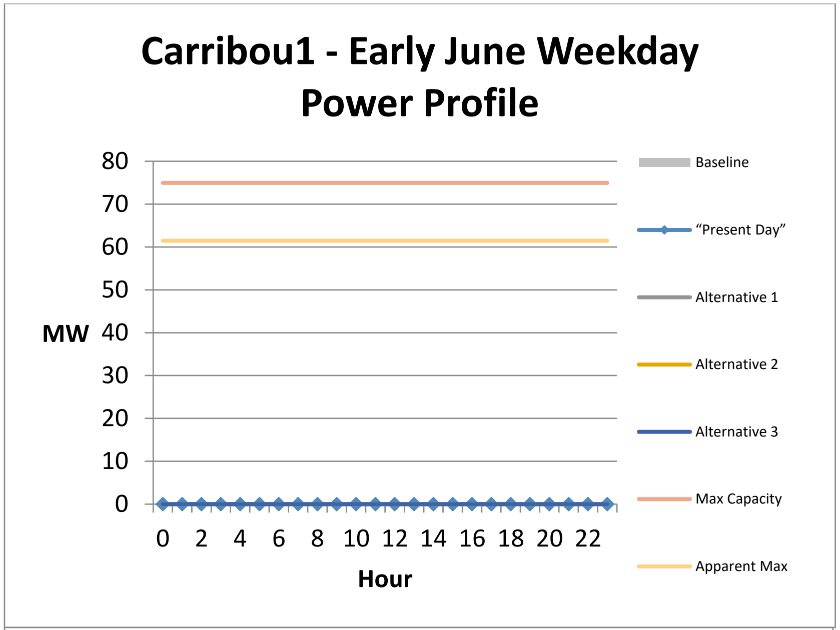
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Carribou1 - Early June Weekday Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
80
60
40
20
MW 0
-20
-40
-60
-80
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou1 - Early June Weekday Power Profile
80
70
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MW 40
30
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Hour
Baseline
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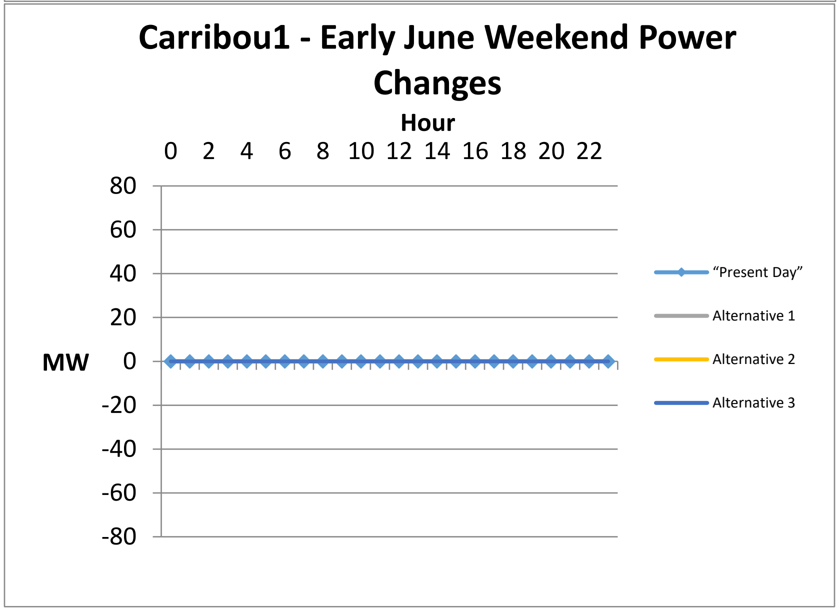
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Carribou1 - Early June Weekend Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
80
60
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MW 0
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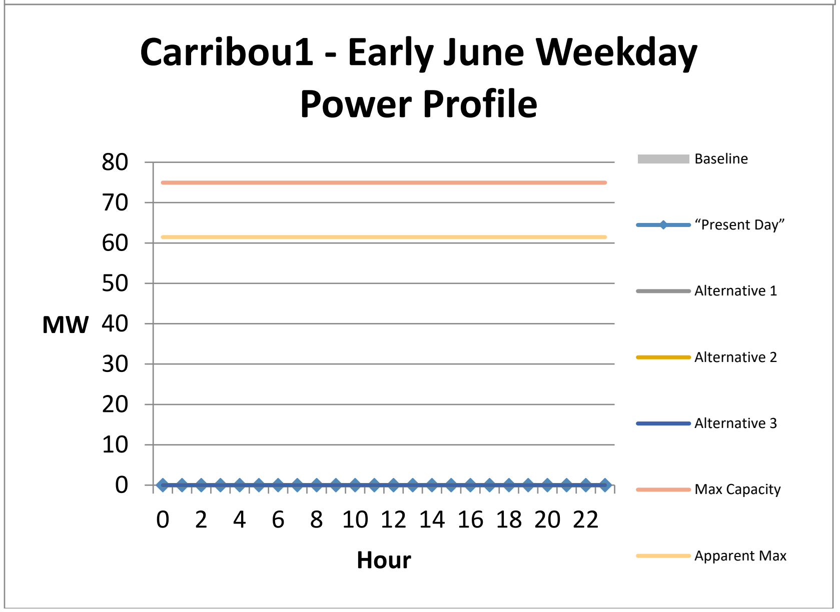
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou1 - Early June Weekday Power Profile
80
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MW 40
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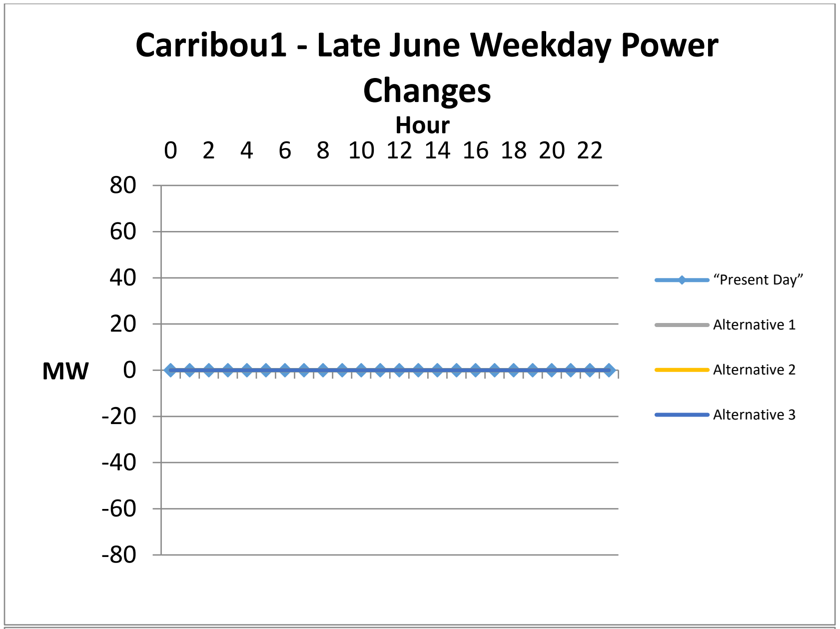
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Carribou1 - Late June Weekday Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
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MW 0
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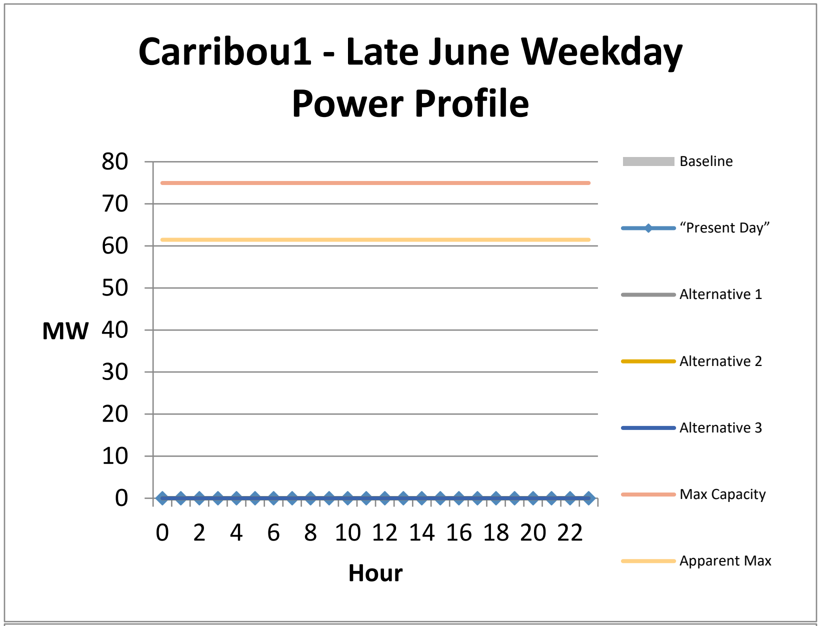
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou1 - Late June Weekday Power Profile
80
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MW 40
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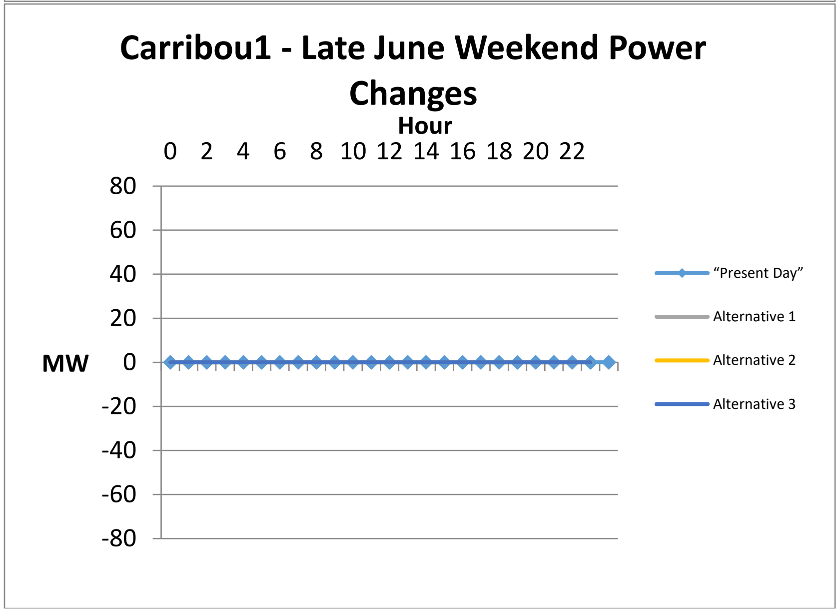
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Carribou1 - Late June Weekend Power Changes
Hour
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MW 0
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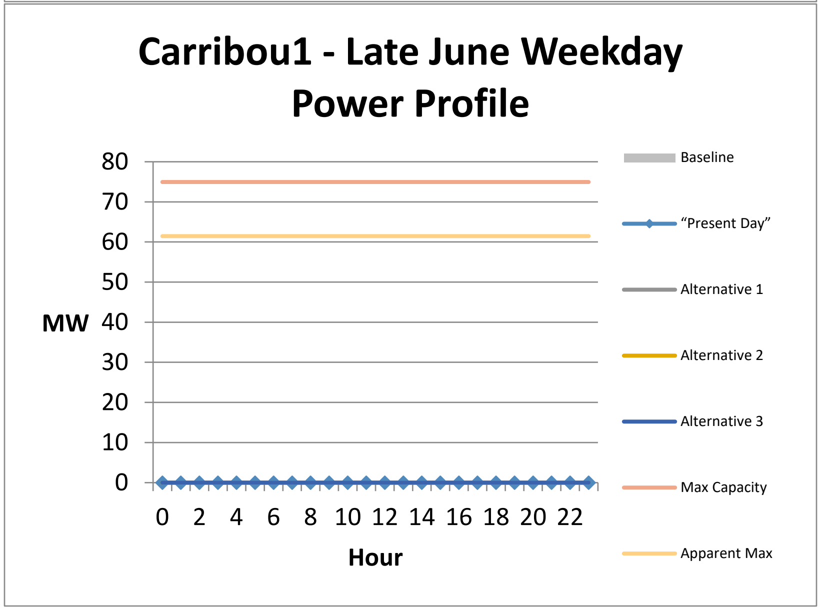
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou1 - Late June Weekday Power Profile
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MW 40
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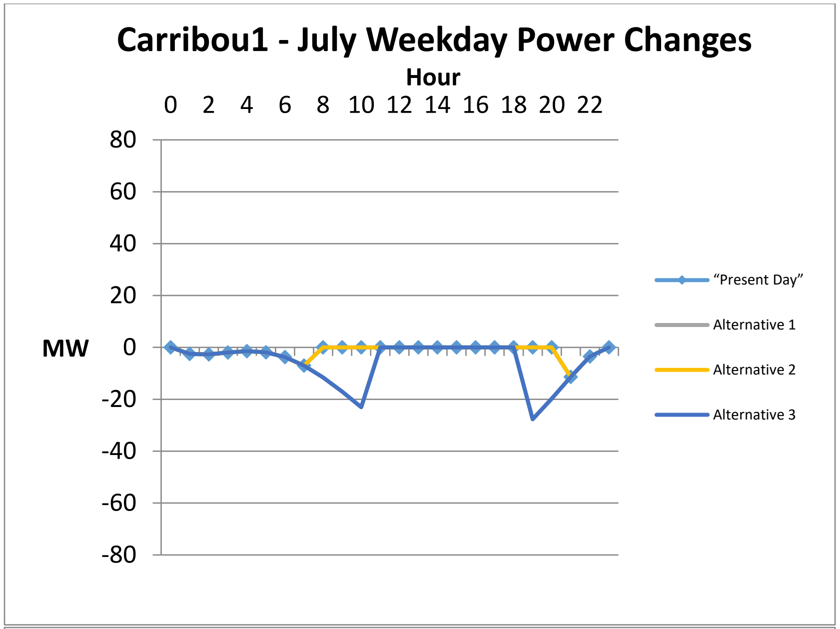
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Carribou1 - July Weekday Power Changes
Hour
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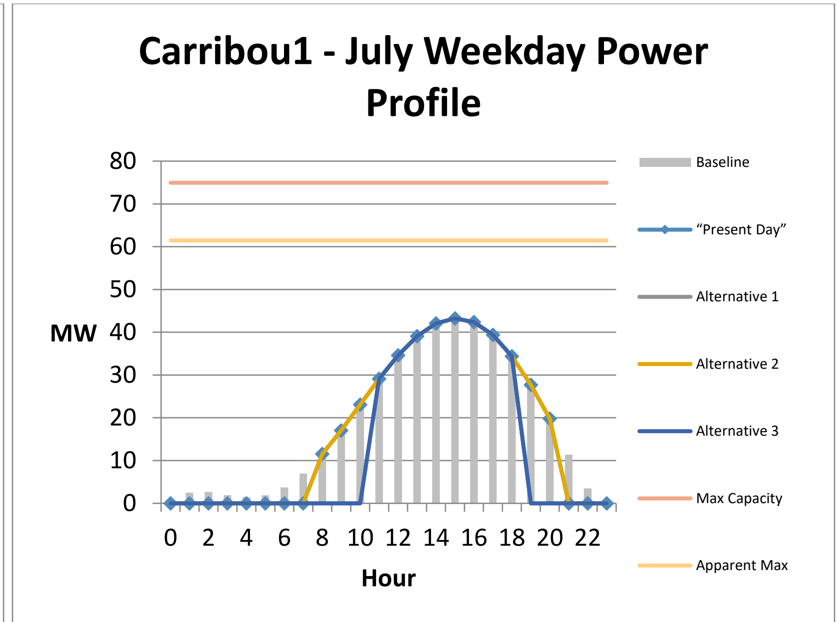
MW
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou1 - July Weekday Power Profile
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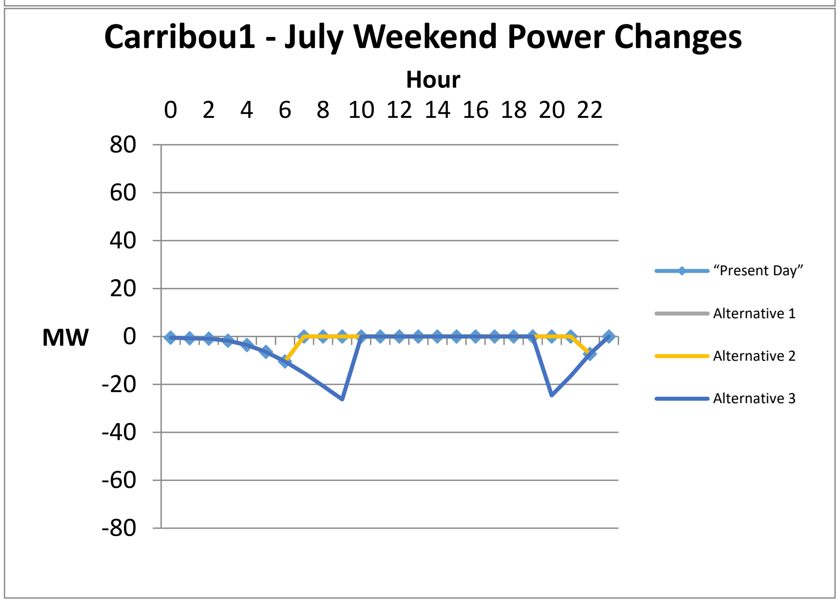
Carribou1 - July Weekend Power Changes
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MW
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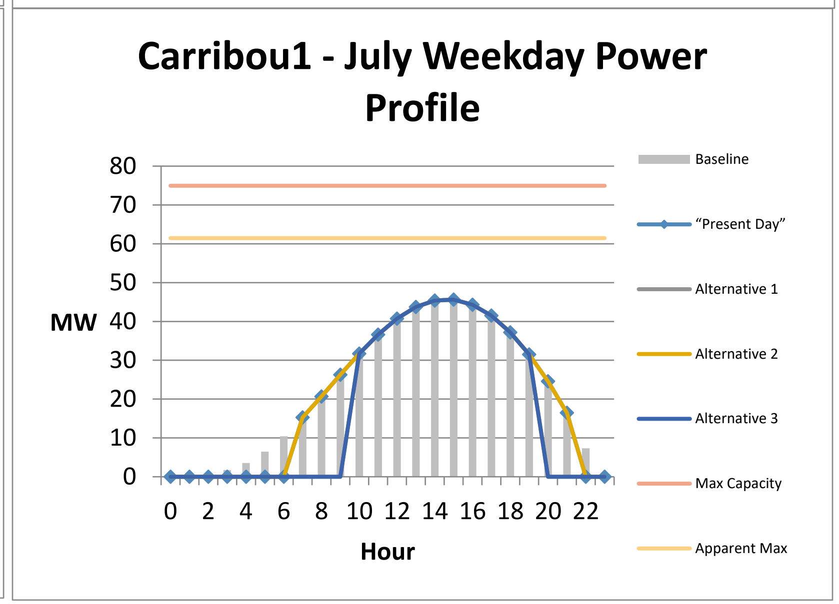
Alternative 2
Alternative 3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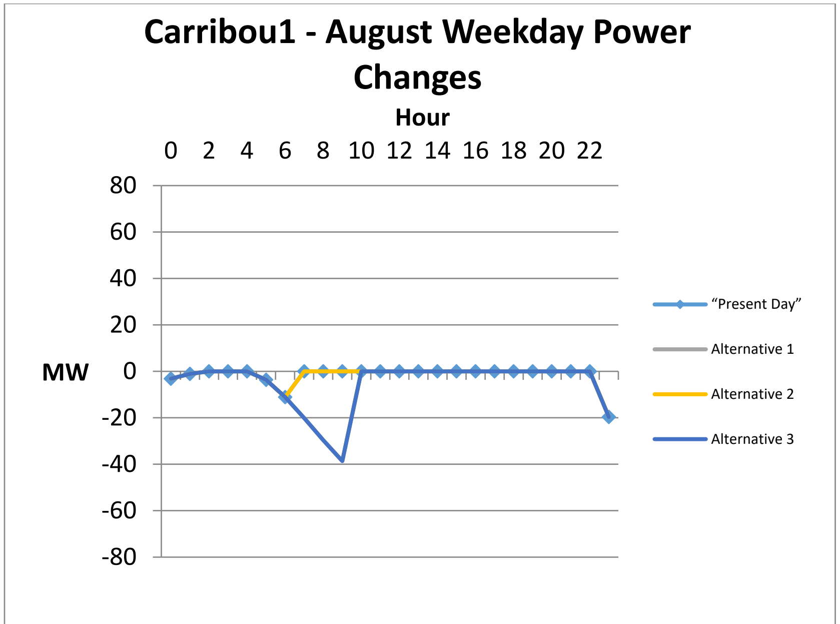
Carribou1 - August Weekday Power Changes
Hour
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"Present Day"
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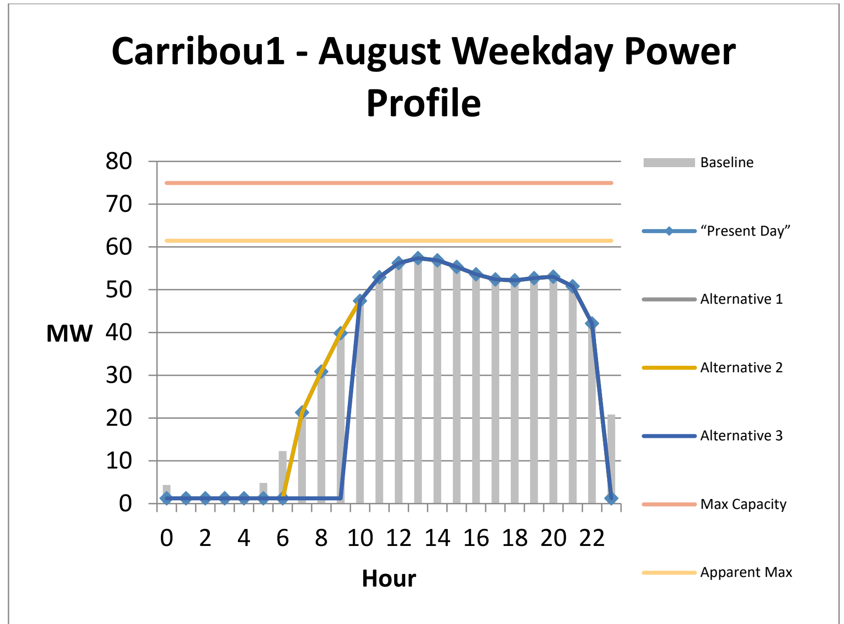
Alternative 3


Carribou1 - August Weekday Power Profile
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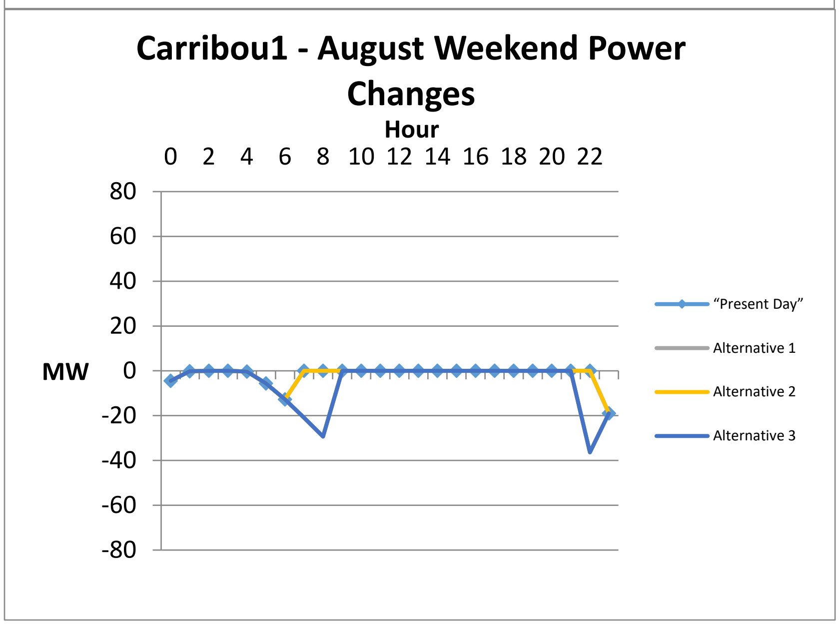
Carribou1 - August Weekend Power Changes
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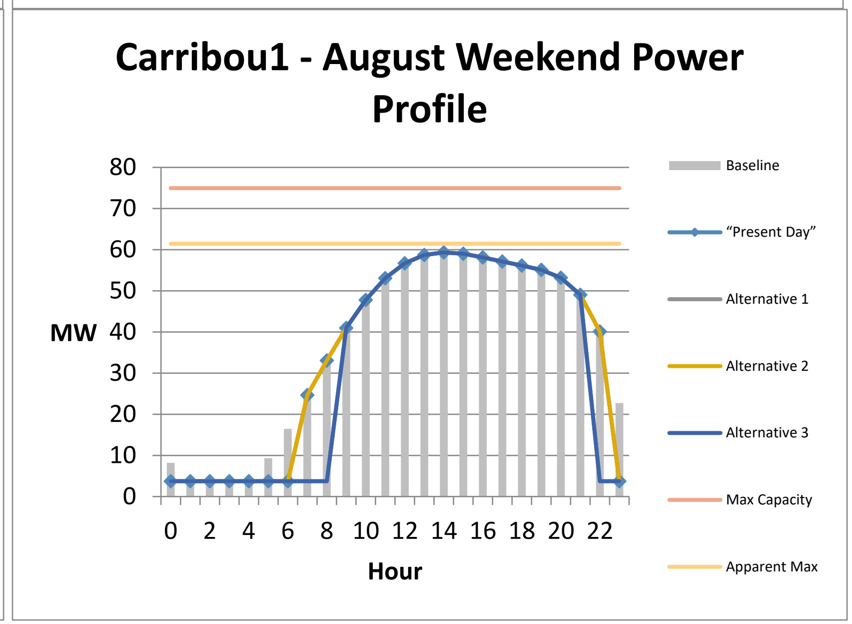
Carribou1 - August Weekend Power Profile
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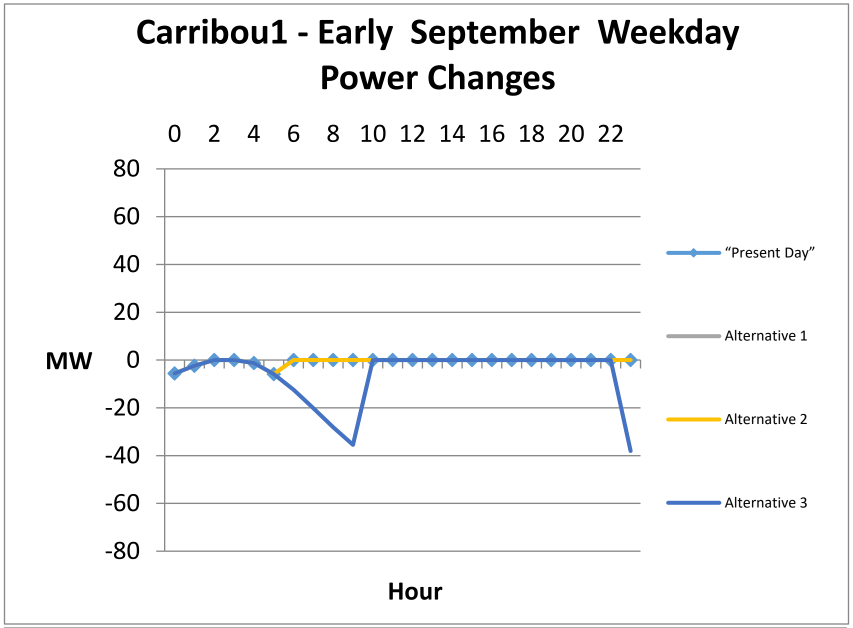
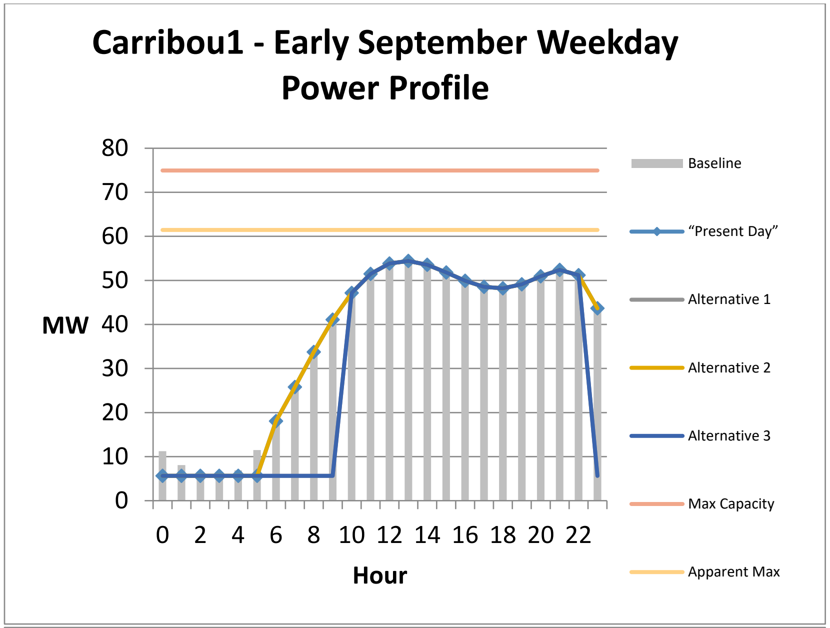

Carribou1 - Early September Weekday
Power Changes
MW
Hour
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou1 - Early September Weekday
Power Profile
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"Present Day"
Alternative 1
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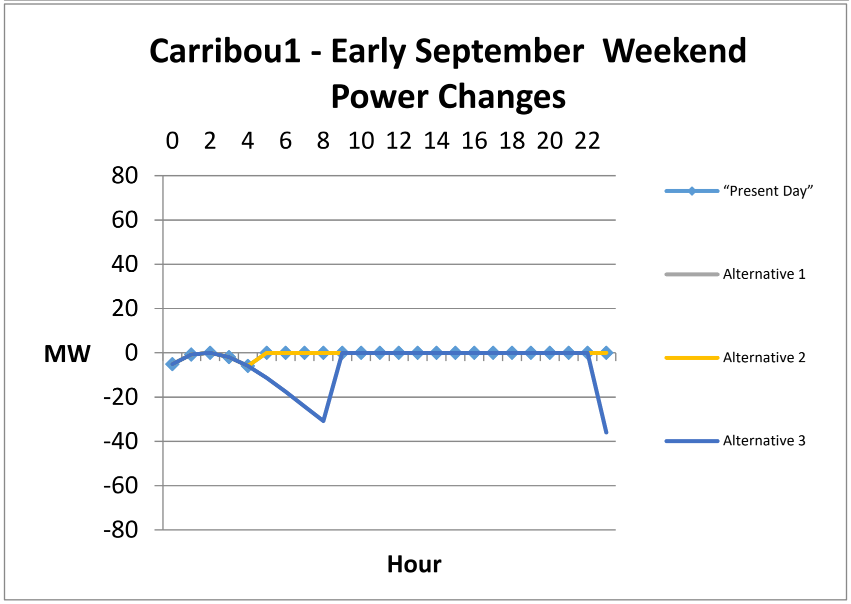
Alternative 3
Max Capacity
Apparent Max


Carribou1 - Early September Weekend
Power Changes
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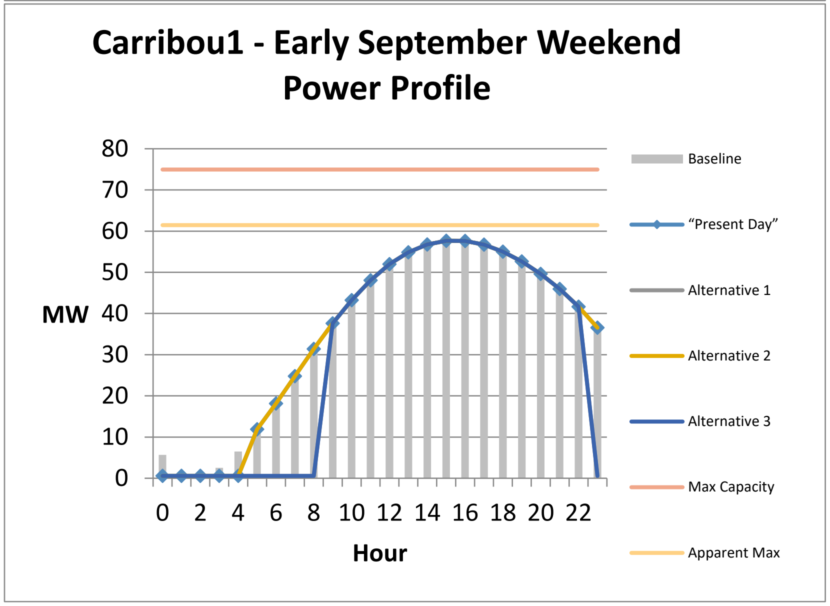
Carribou1 - Early September Weekend
Power Profile
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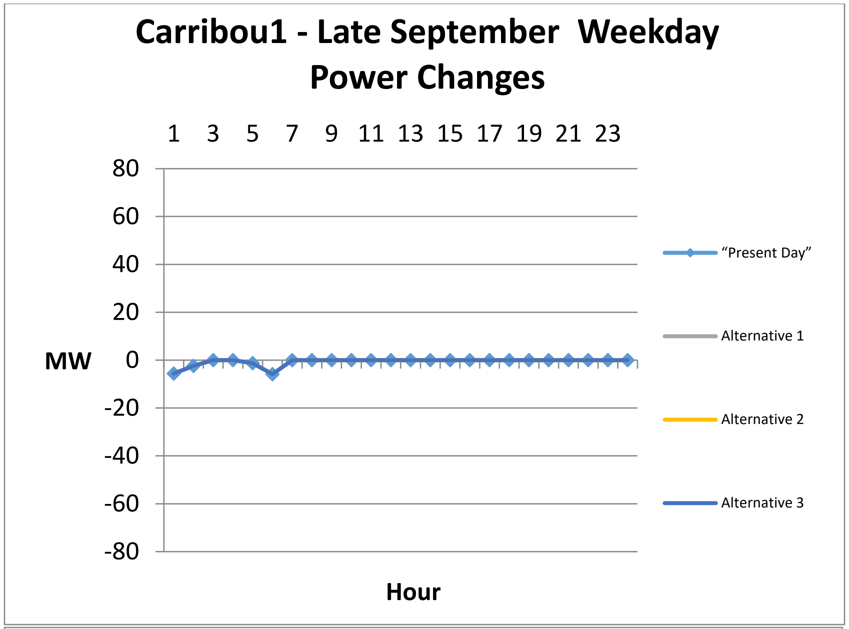
Carribou1 - Late September Weekday
Power Changes
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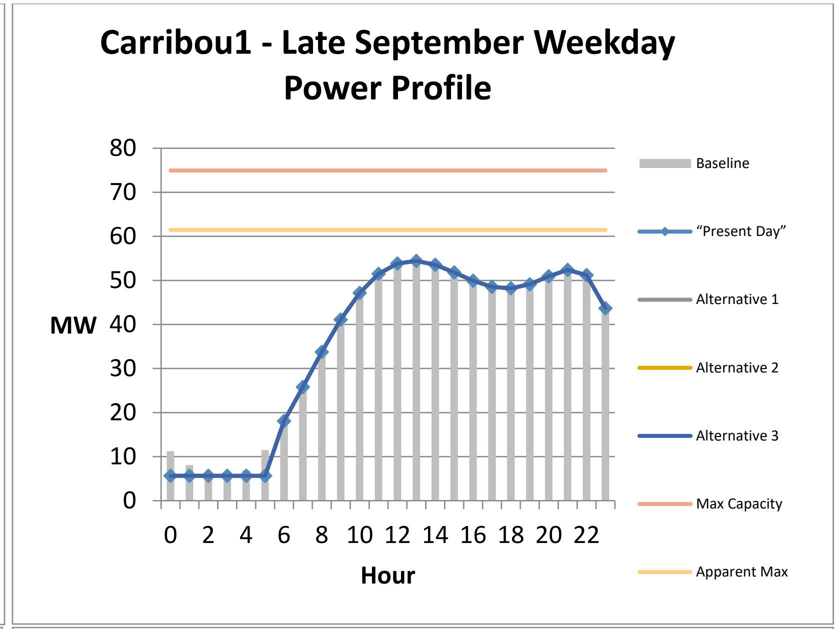
MW
Hour
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou1 - Late September Weekday
Power Profile
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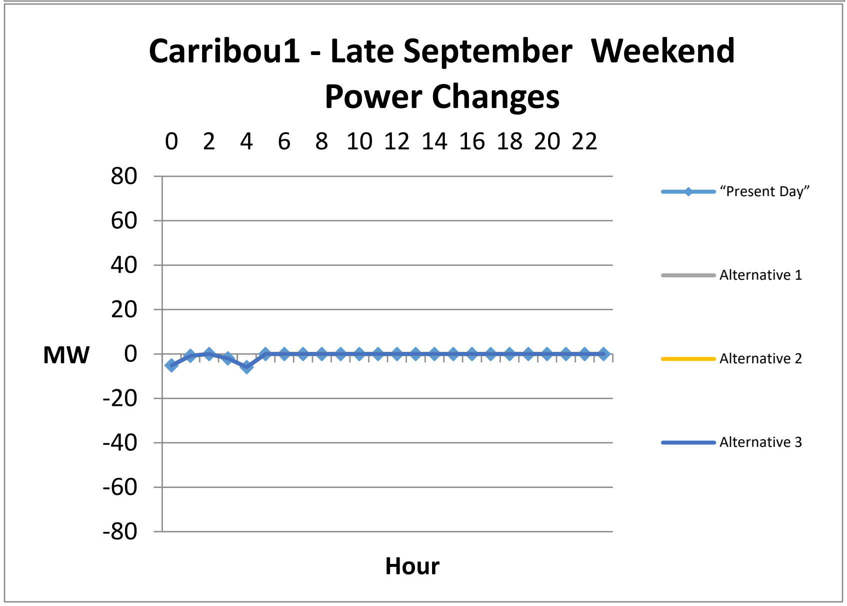
Apparent Max


Carribou1 - Late September Weekend
Power Changes
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Hour
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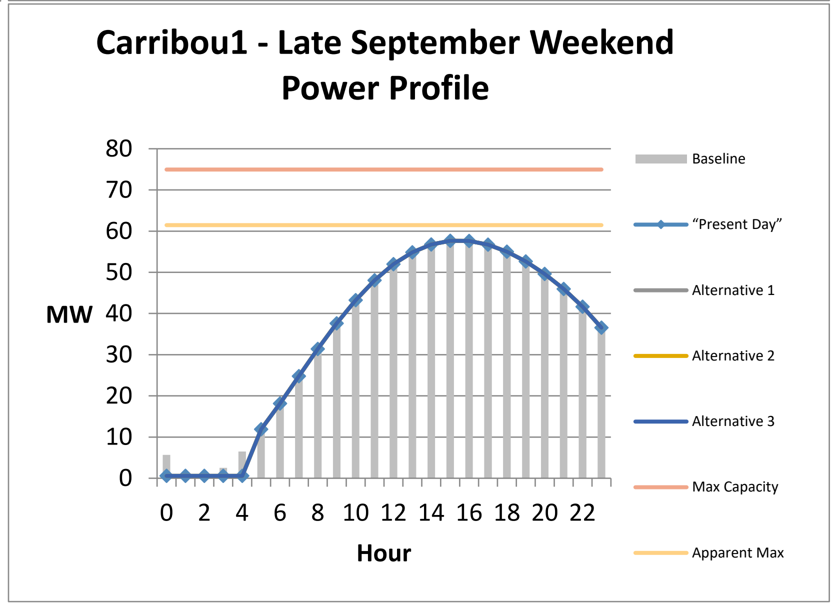
Carribou1 - Late September Weekend
Power Profile
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Baseline
"Present Day"
Alternative 1
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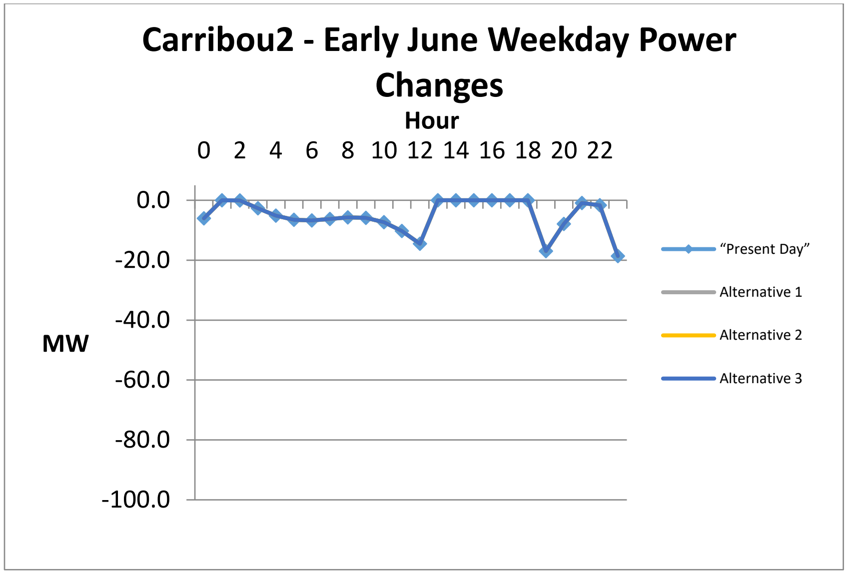
Max Capacity
Apparent Max


Carribou2 - Early June Weekday Power Changes
Hour
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MW
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-20.0
-40.0
-60.0
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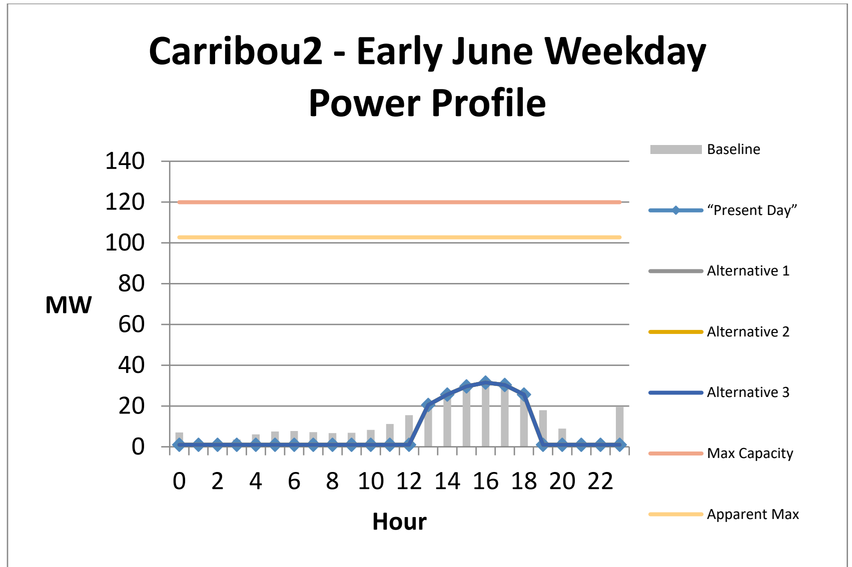
-100.0
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou2 - Early June Weekday Power Profile
MW
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Hour
Baseline
"Present Day"
Alternative 1
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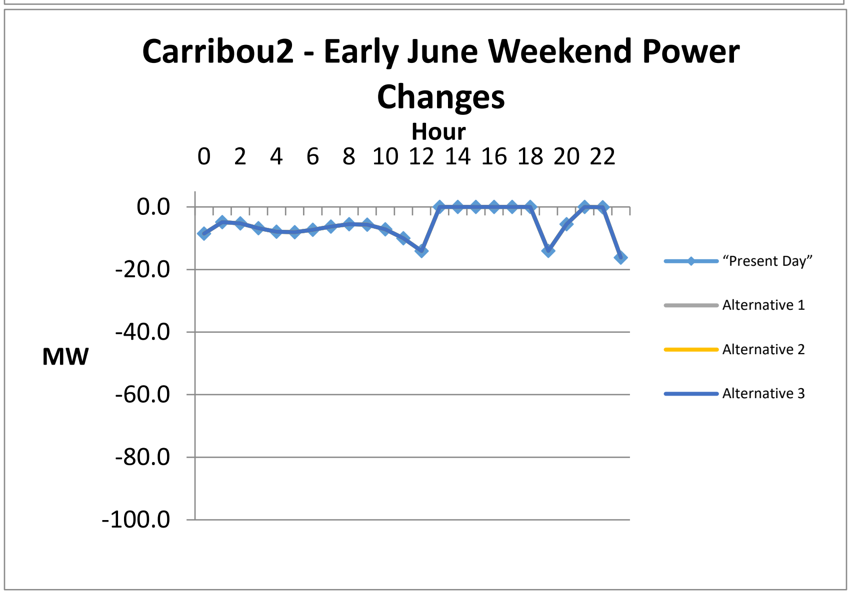
Alternative 3
Max Capacity
Apparent Max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Hour
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"Present Day"
Alternative 1
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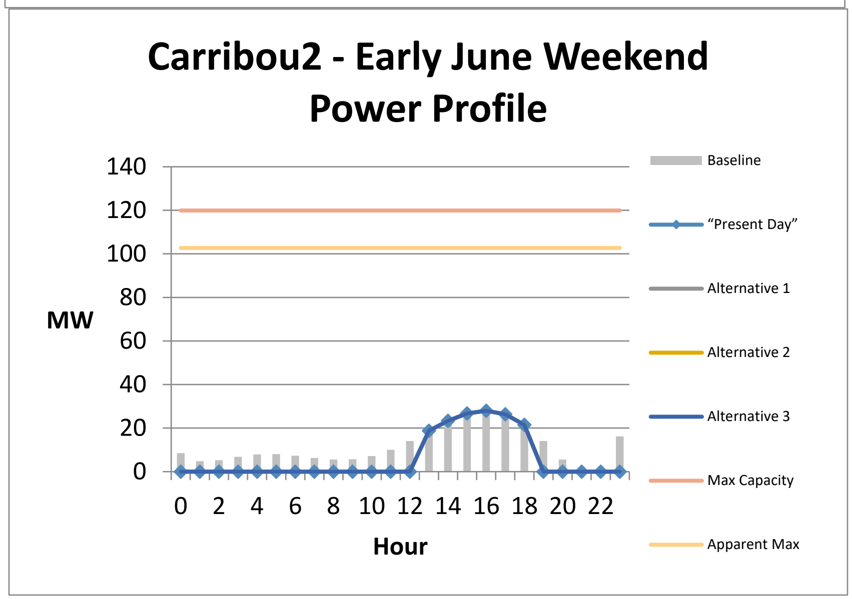
Carribou2 - Early June Weekend Power Profile
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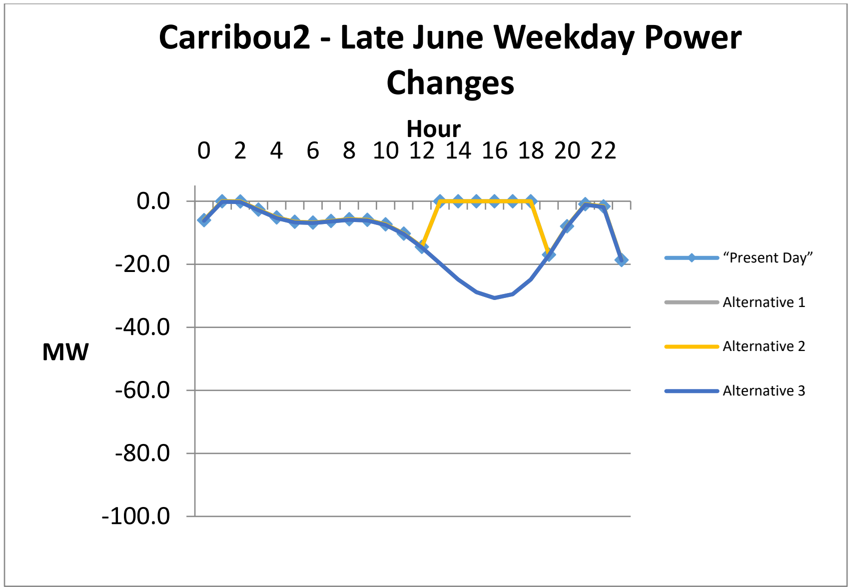
Carribou2 - Late June Weekday Power Changes
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MW
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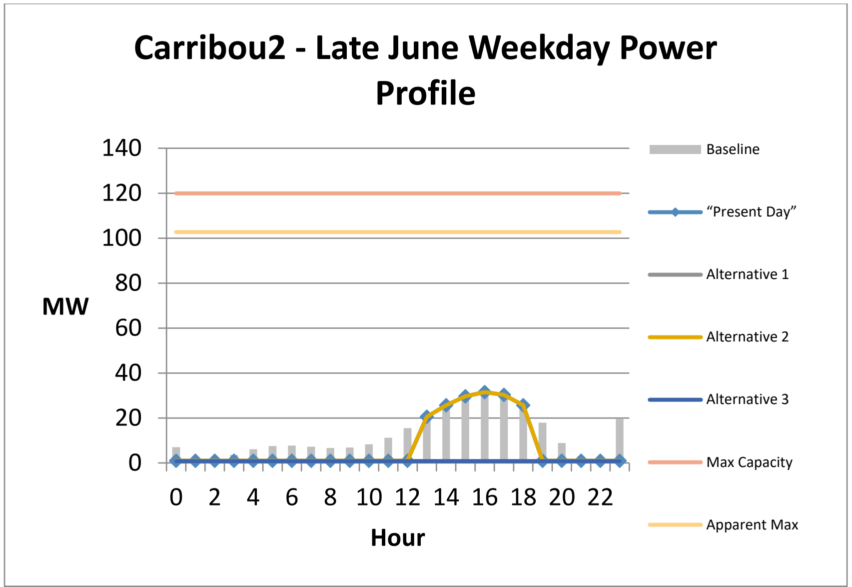
Carribou2 - Late June Weekday Power Profile
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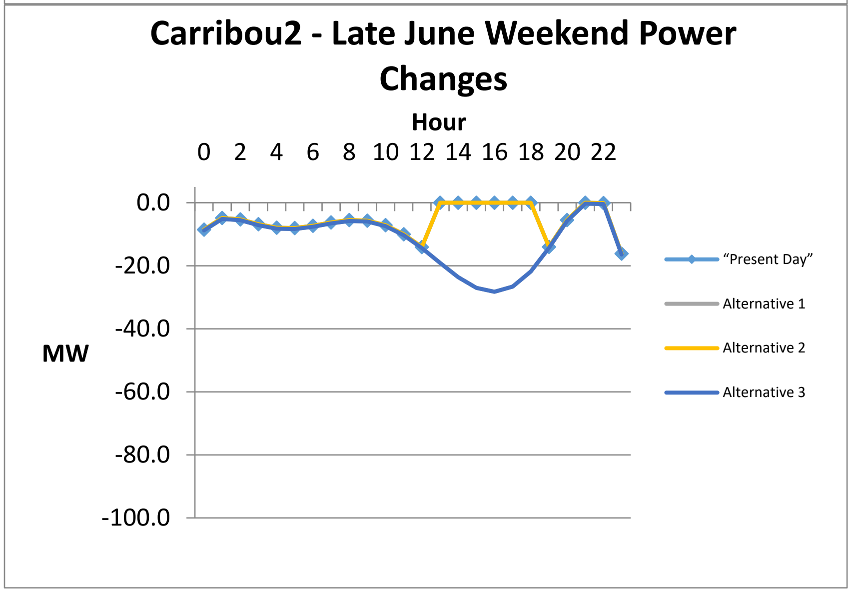
Carribou2 - Late June Weekend Power Changes
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MW
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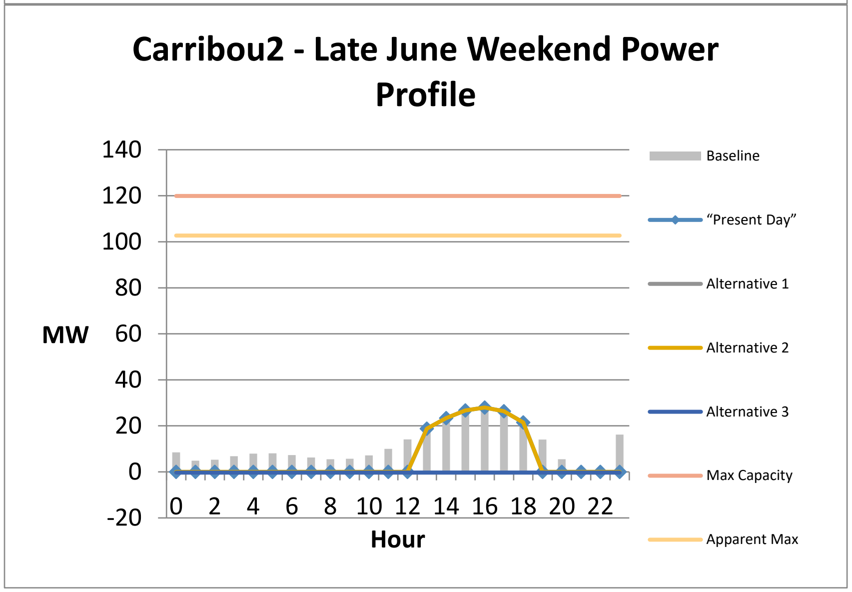
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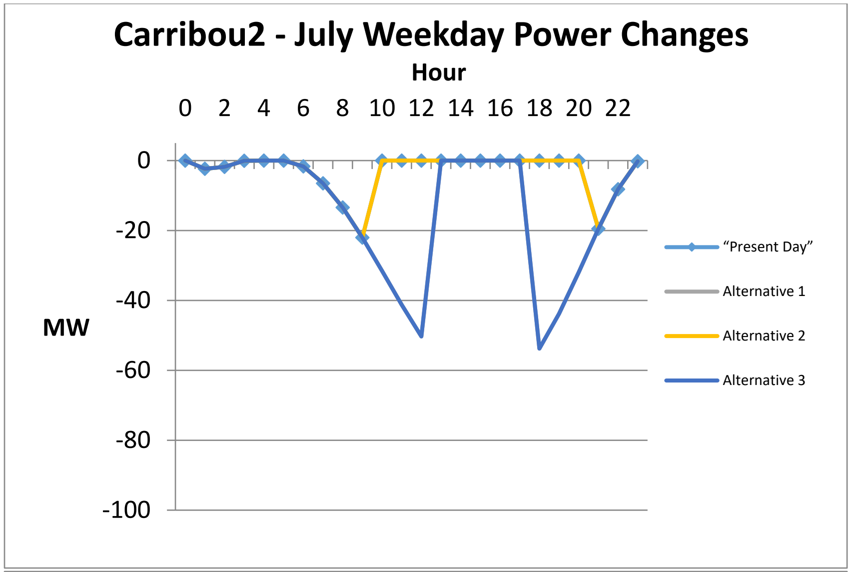
Carribou2 - July Weekday Power Changes
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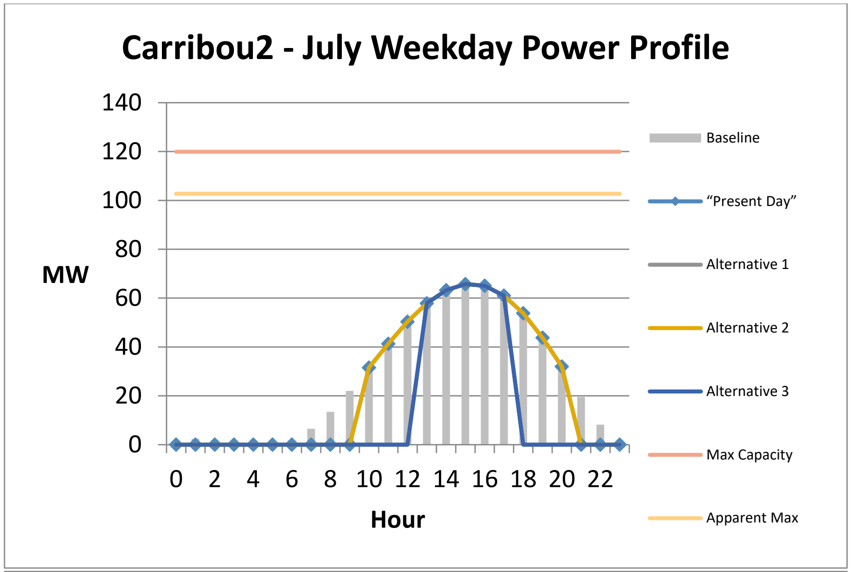
Carribou2 - July Weekday Power Profile
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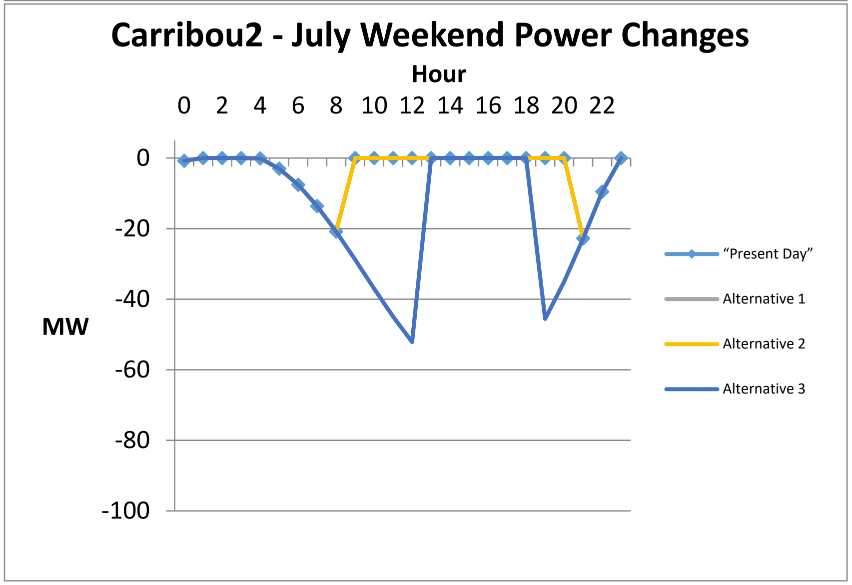
Carribou2 - July Weekend Power Changes
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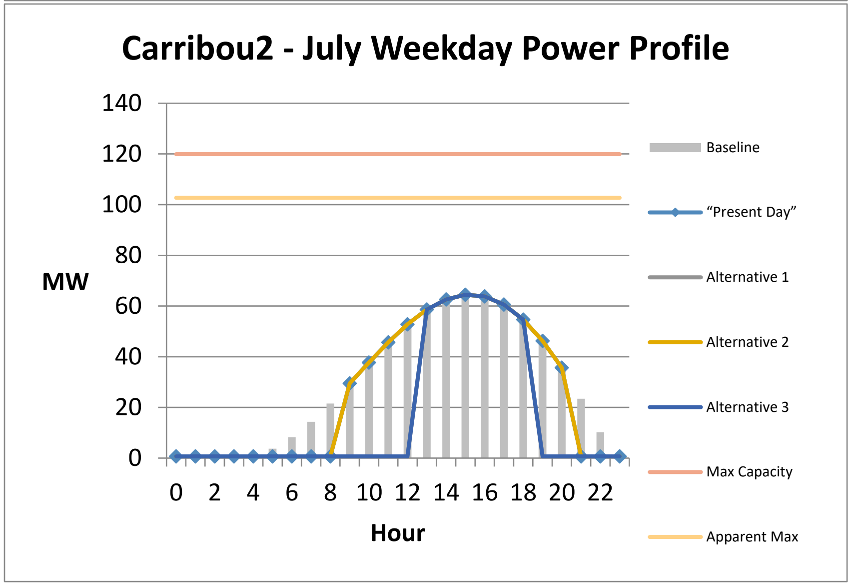
Carribou2 - July Weekday Power Profile
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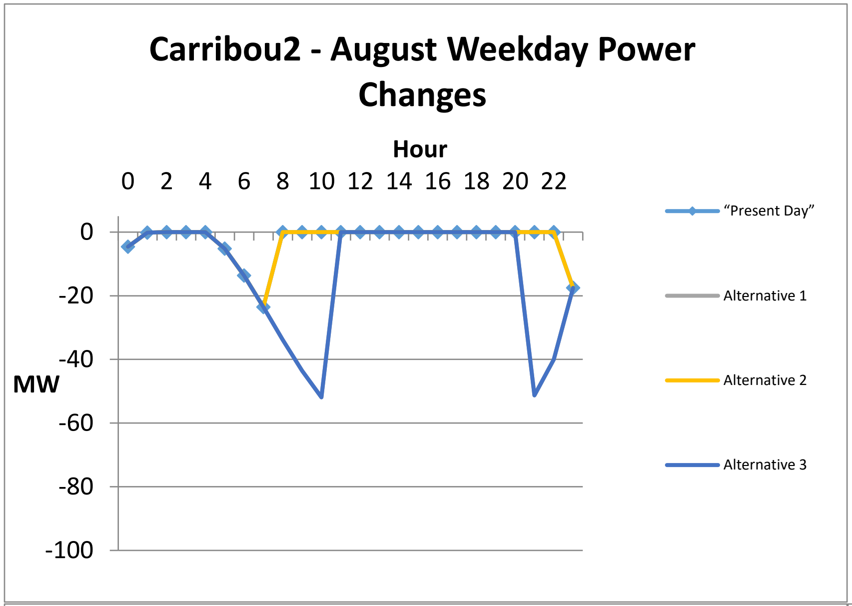
Carribou2 - August Weekday Power Changes
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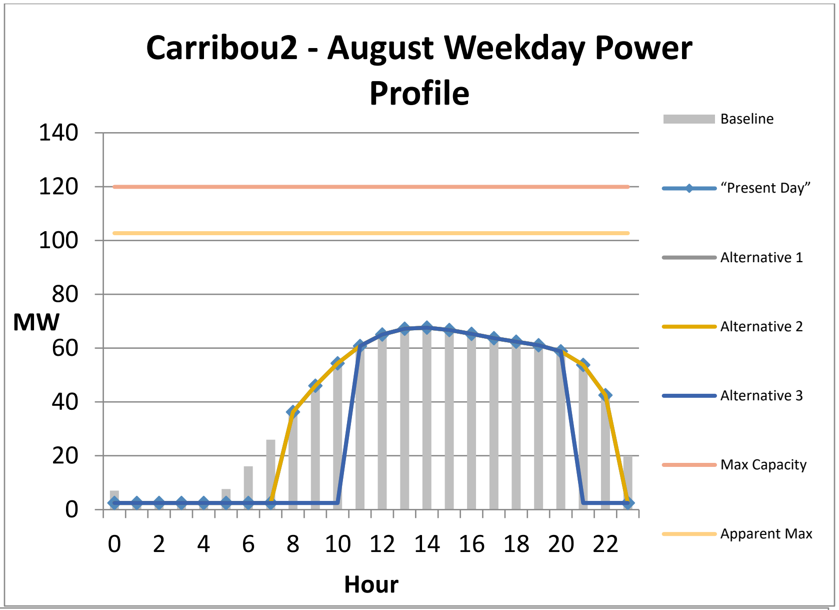
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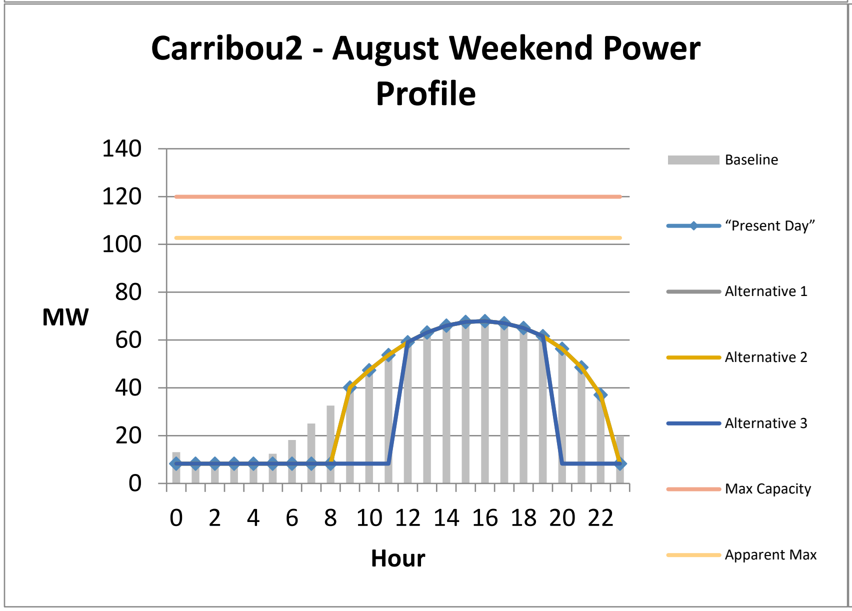
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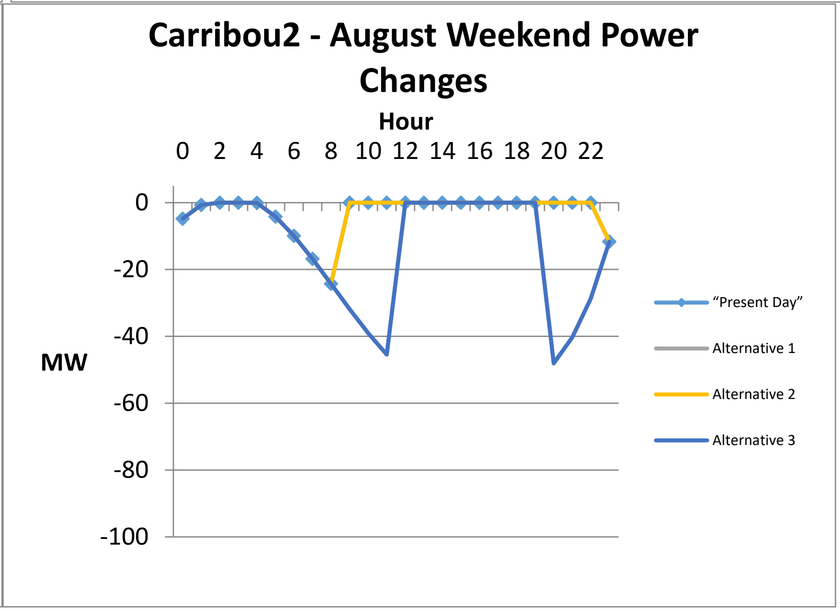
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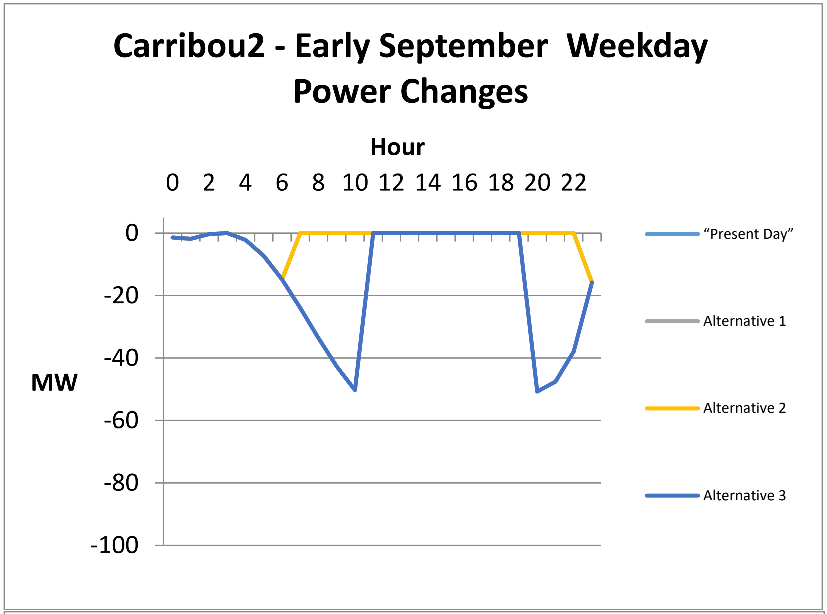
Carribou2 - Early September Weekday
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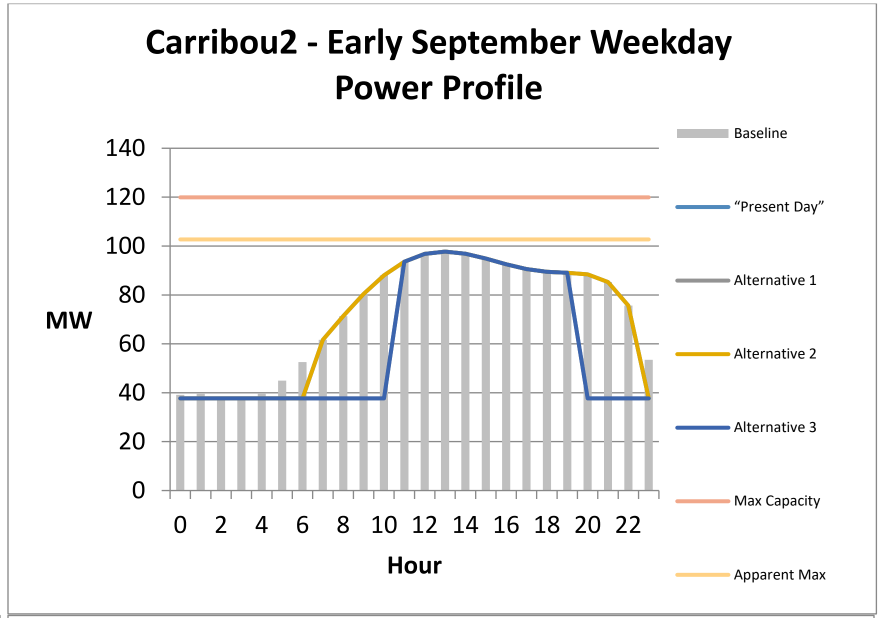
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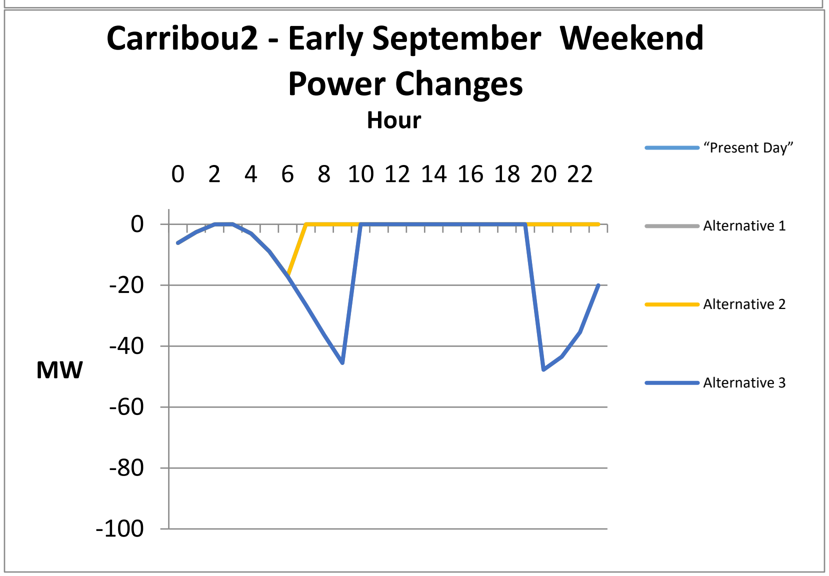
Carribou2 - Early September Weekend
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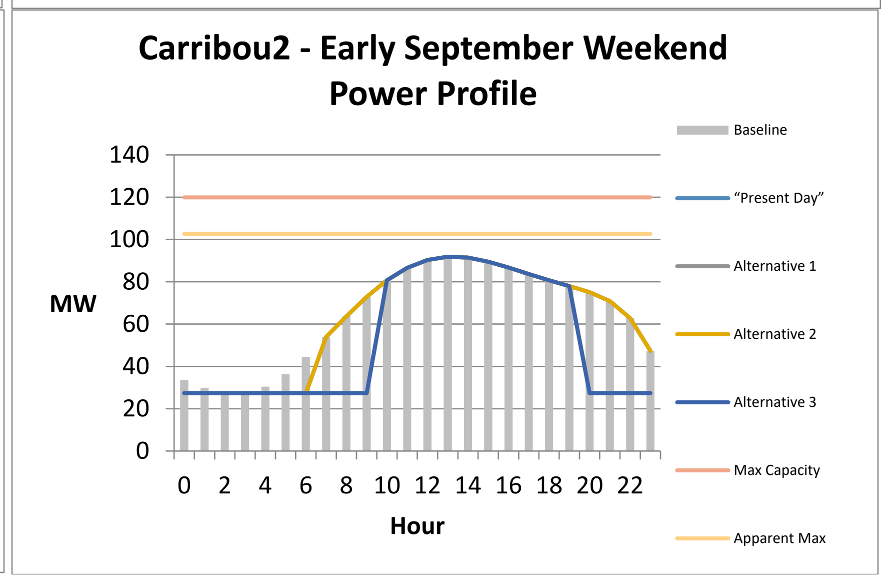
Carribou2 - Early September Weekend
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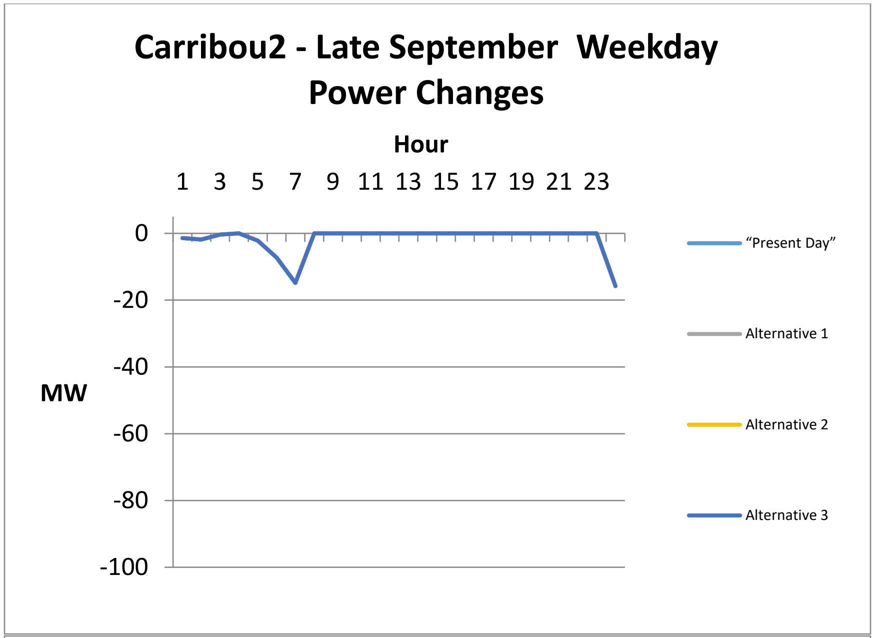
Carribou2 - Late September Weekday
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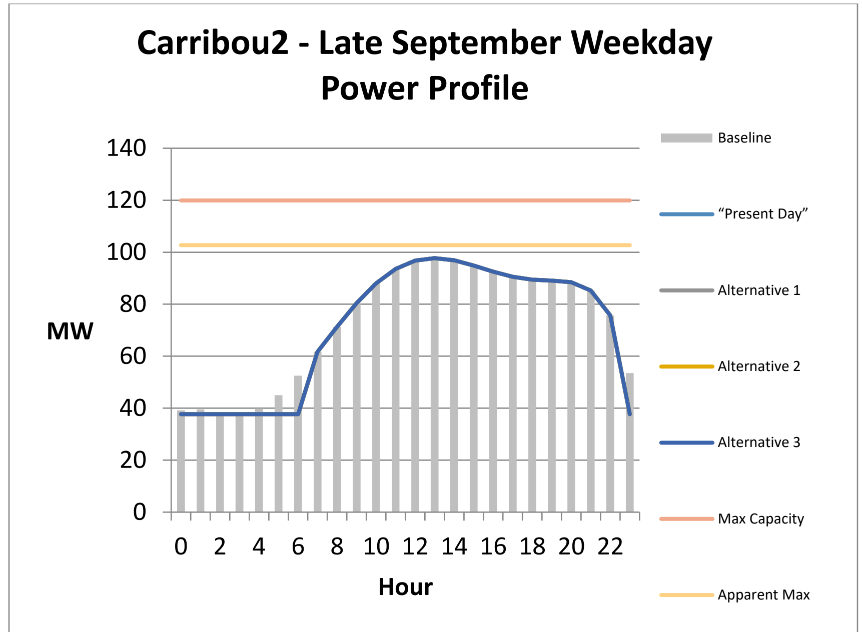
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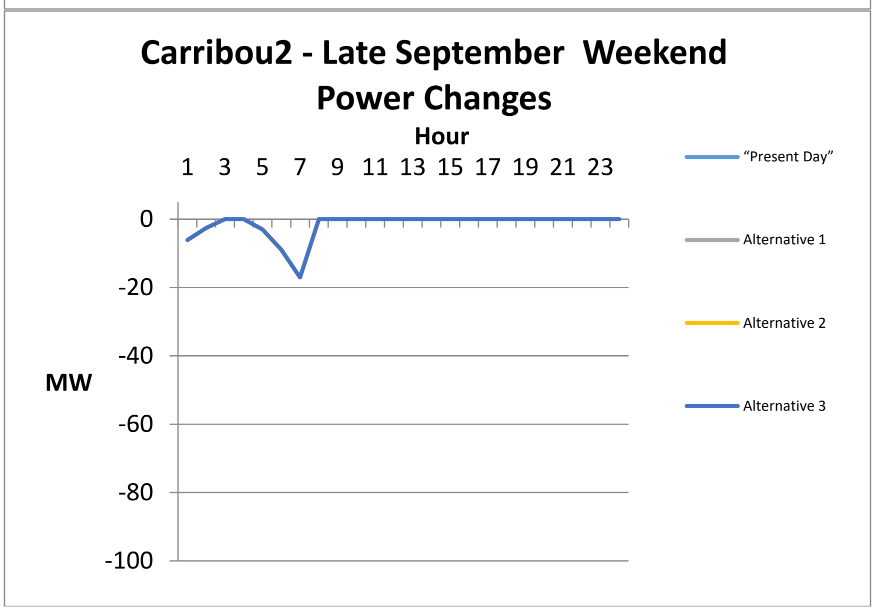
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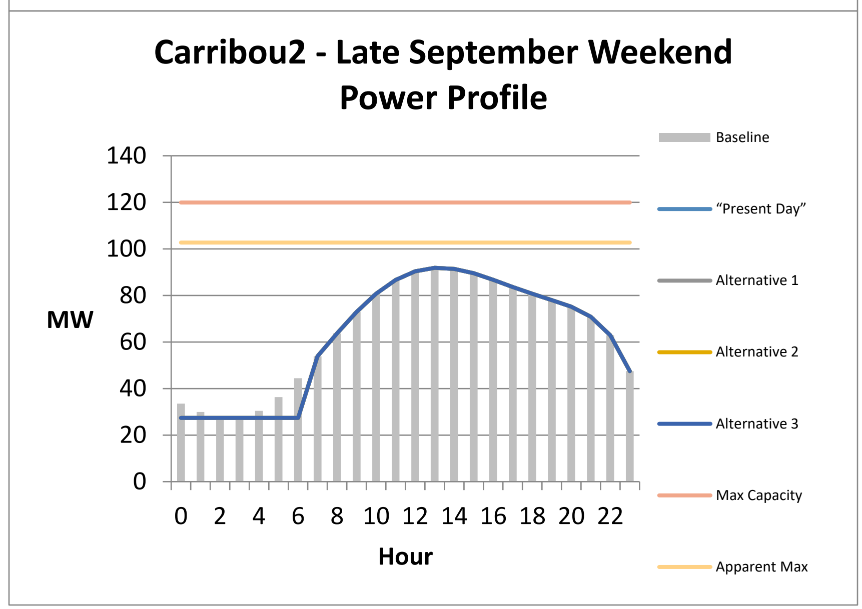
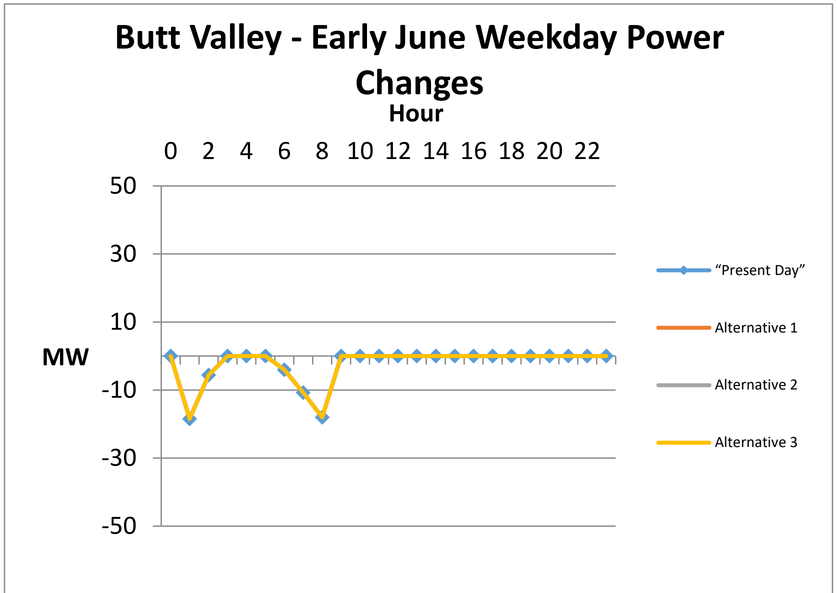
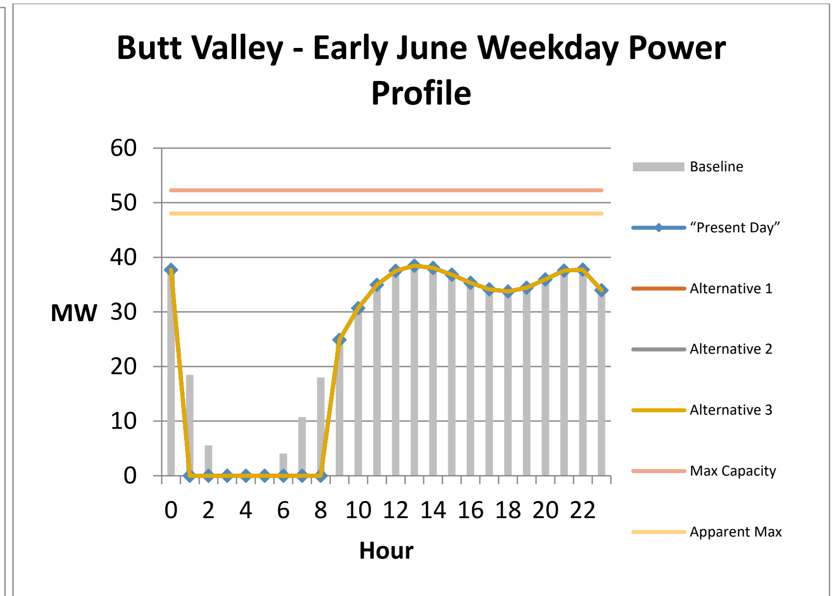
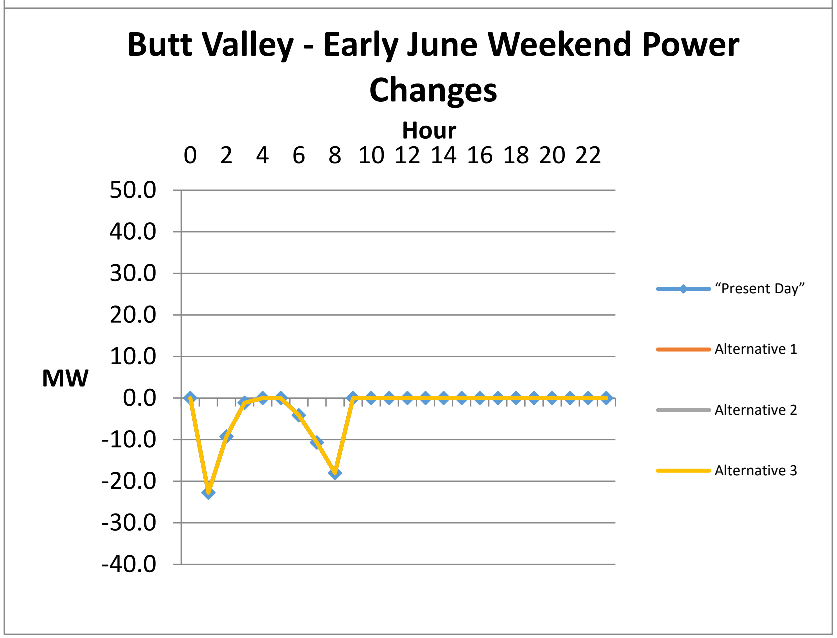
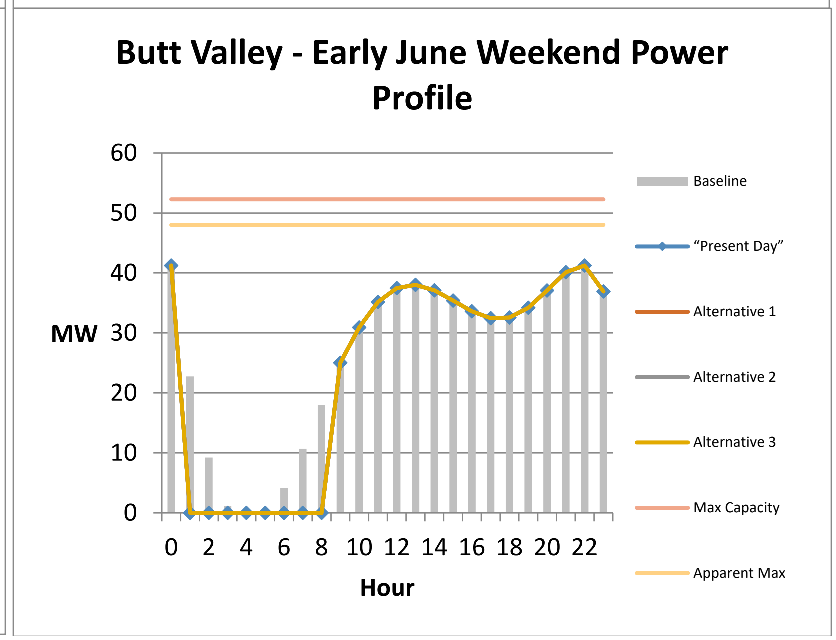
Alternative 2
Alternative 3

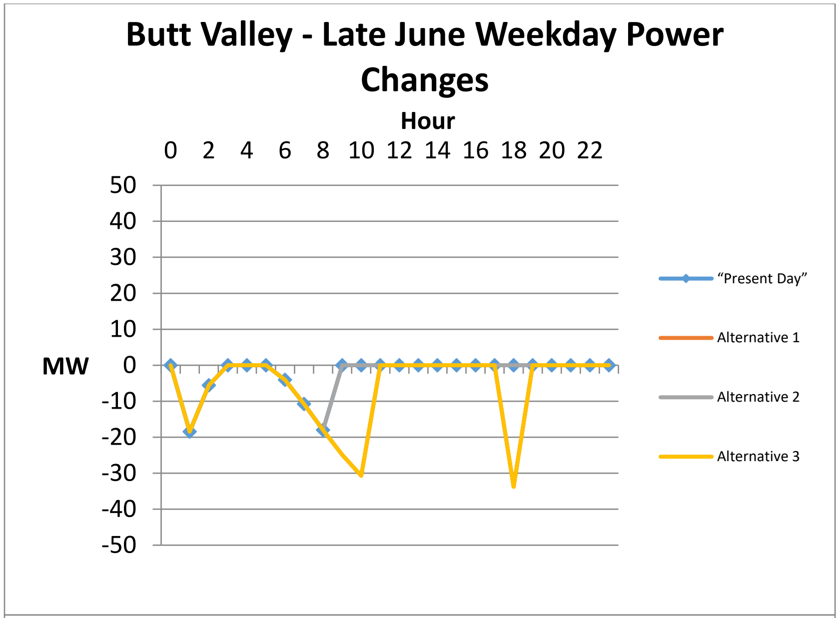

Carribou2 - Late September Weekend
Power Profile
140
120
100
80
60
40
20
0
MW
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max

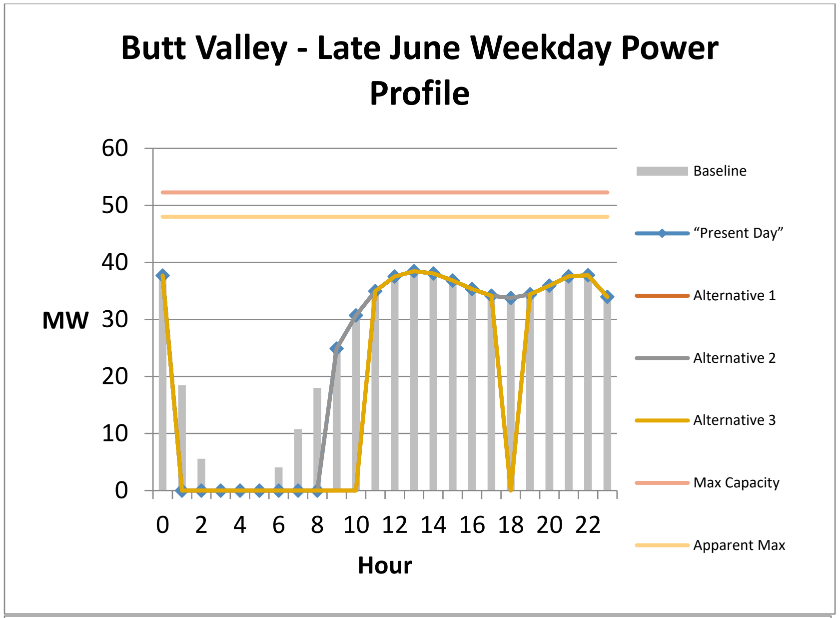

Butt Valley - Early June Weekday Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
50
30
10
MW
-10
-30
-50
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Butt Valley - Early June Weekday Power Profile
60
50
40
MW 30
20
10
0
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Butt Valley - Early June Weekend Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
50.0
40.0
30.0
20.0
10.0
MW
0.0
-10.0
-20.0
-30.0
-40.0
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Butt Valley - Early June Weekend Power Profile
60
50
40
MW 30
20
10
0
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Butt Valley - Late June Weekday Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
MW
50
40
30
20
10
0
-10
-20
-30
-40
-50
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Butt Valley - Late June Weekday Power Profile
60
50
40
30
20
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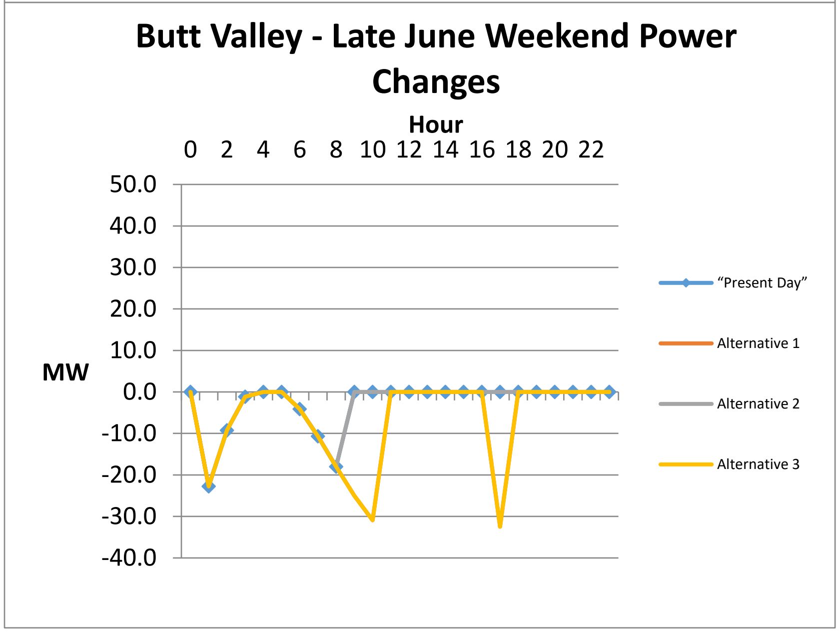
MW
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Butt Valley - Late June Weekend Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
MW
50.0
40.0
30.0
20.0
10.0
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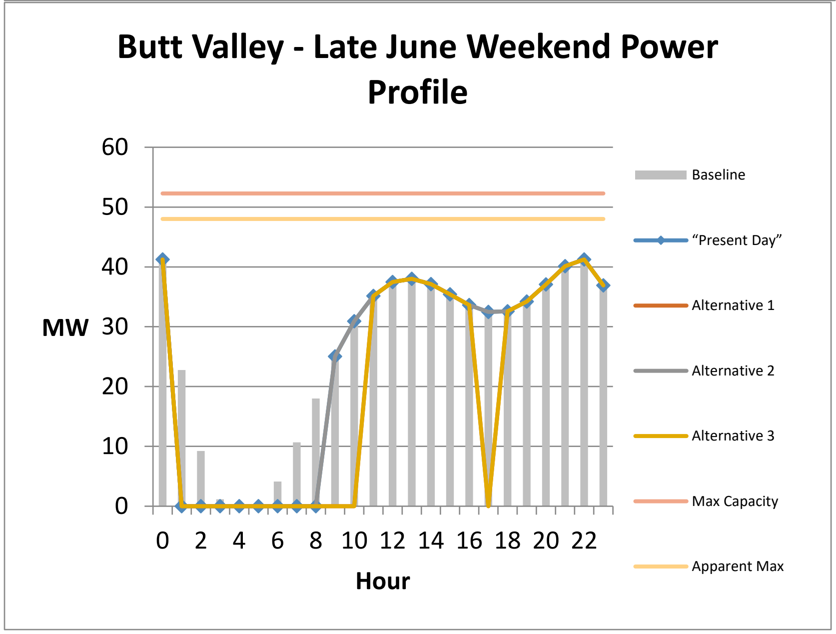
-10.0
-20.0
-30.0
-40.0
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Butt Valley - Late June Weekend Power Profile
60
50
40
30
20
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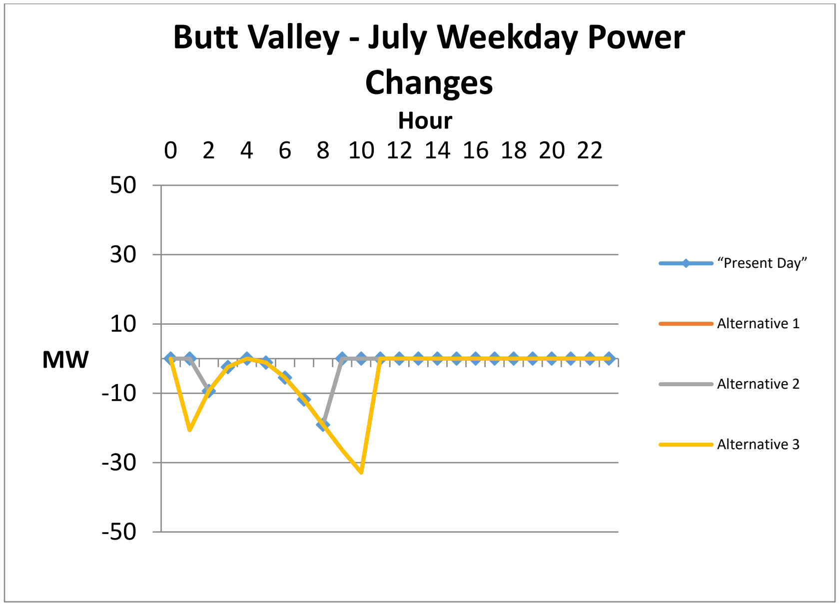
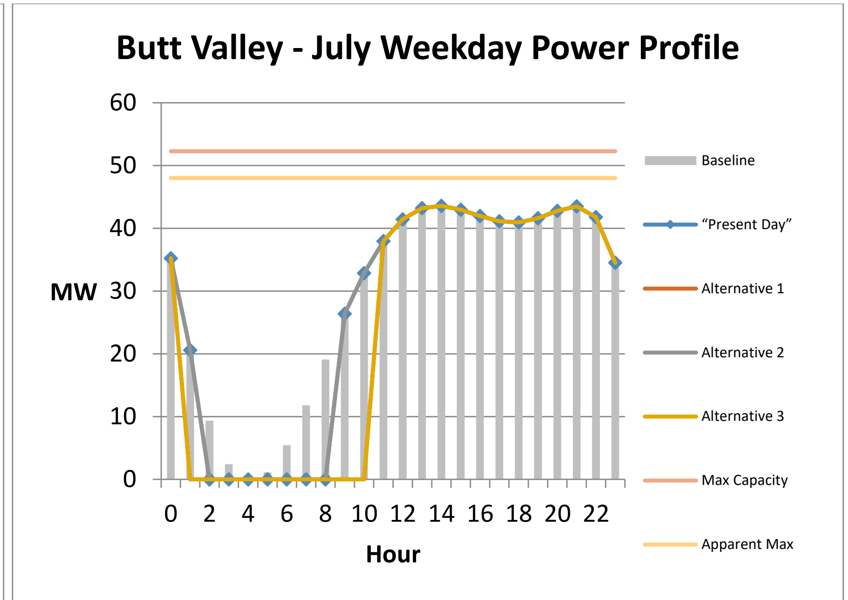
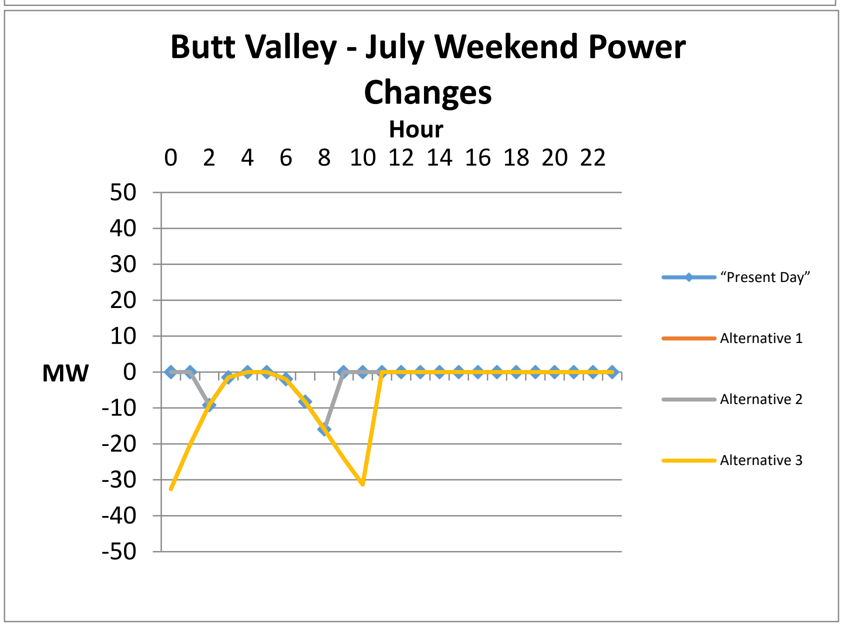
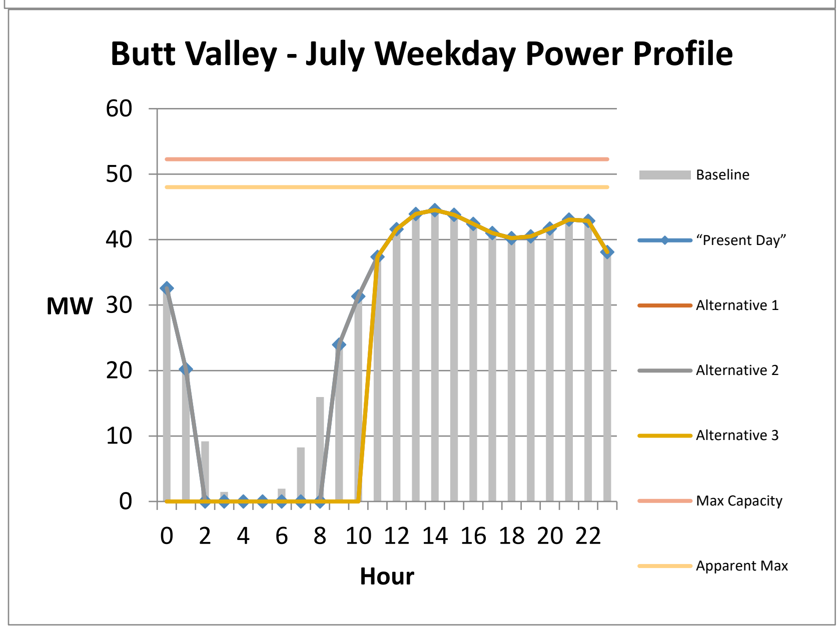
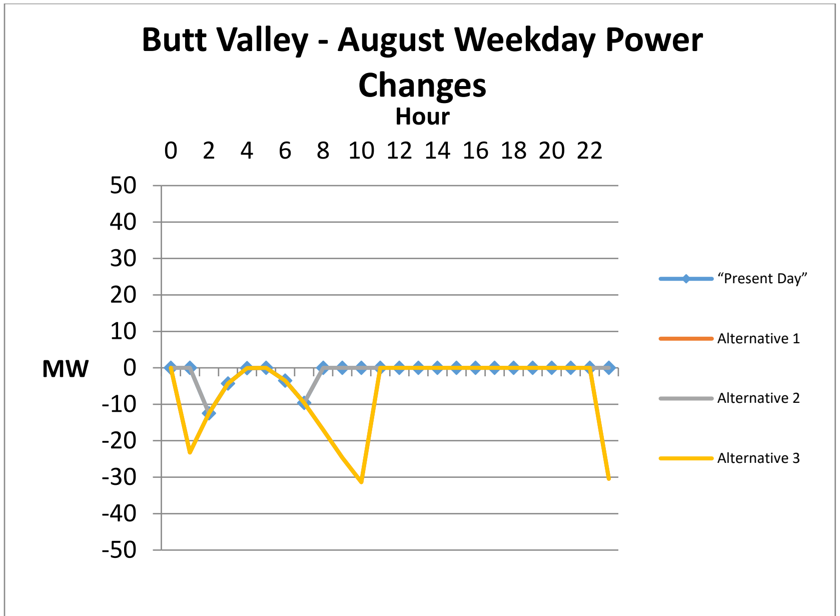
MW
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max

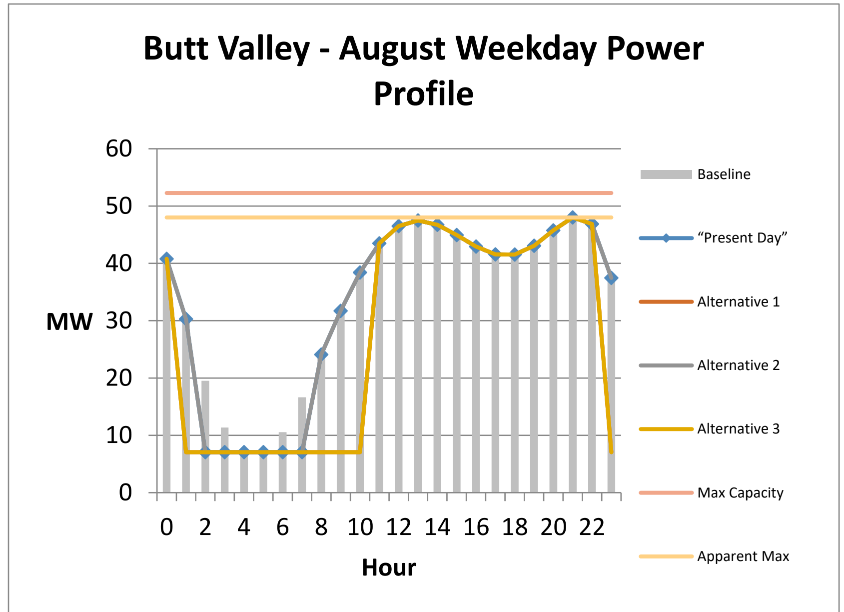

Butt Valley - July Weekday Power Changes
Hour
MW
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Butt Valley - July Weekday Power Profile
MW
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Butt Valley - July Weekend Power Changes
Hour
MW
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Butt Valley - July Weekday Power Profile
MW
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Butt Valley - August Weekday Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
MW
50 40 30 20 10 0 -10 -20 -30 -40 -50
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Butt Valley - August Weekday Power Profile
MW
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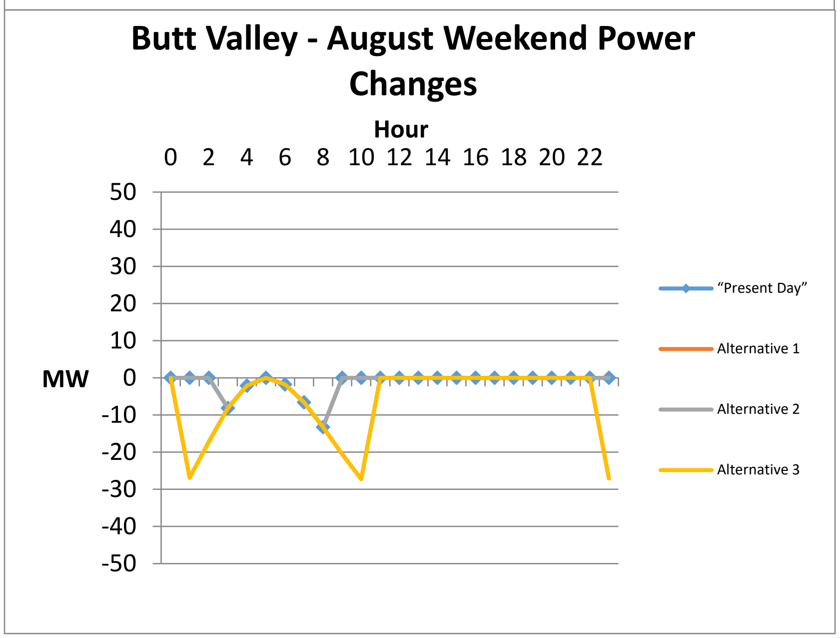
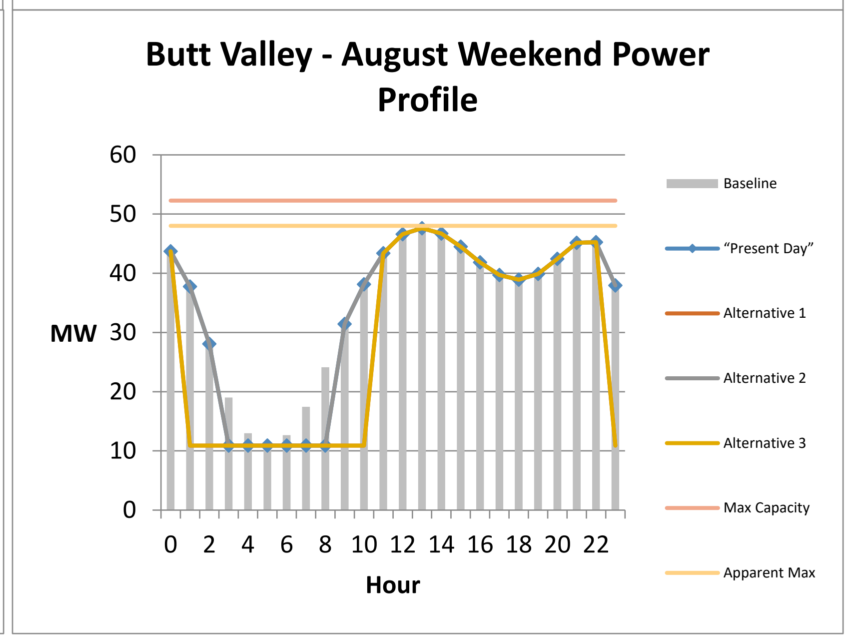
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Butt Valley - August Weekend Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
MW
50 40 30 20 10 0 -10 -20 -30 -40 -50
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Butt Valley - August Weekend Power Profile
MW
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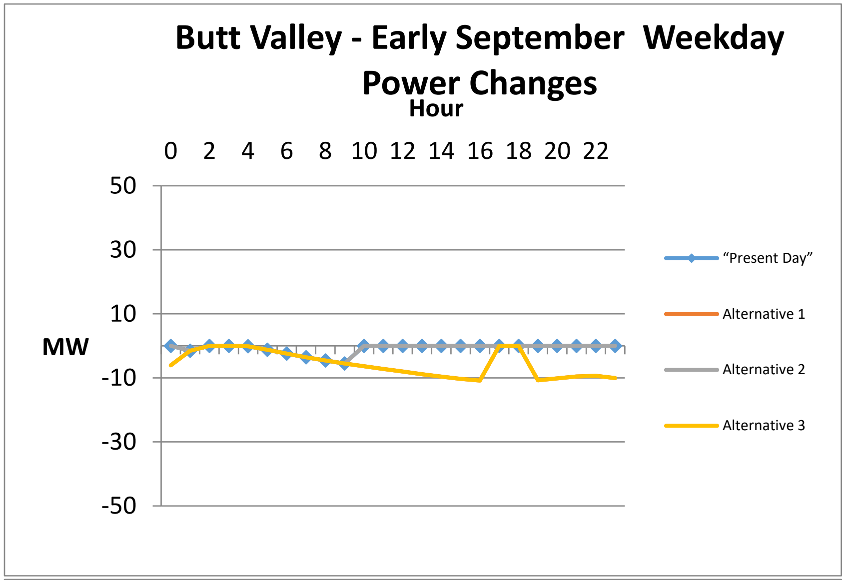
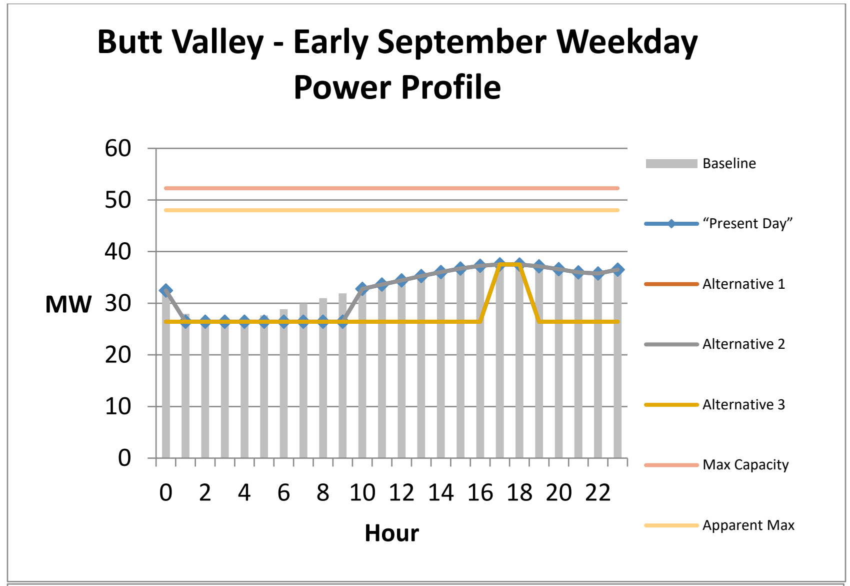
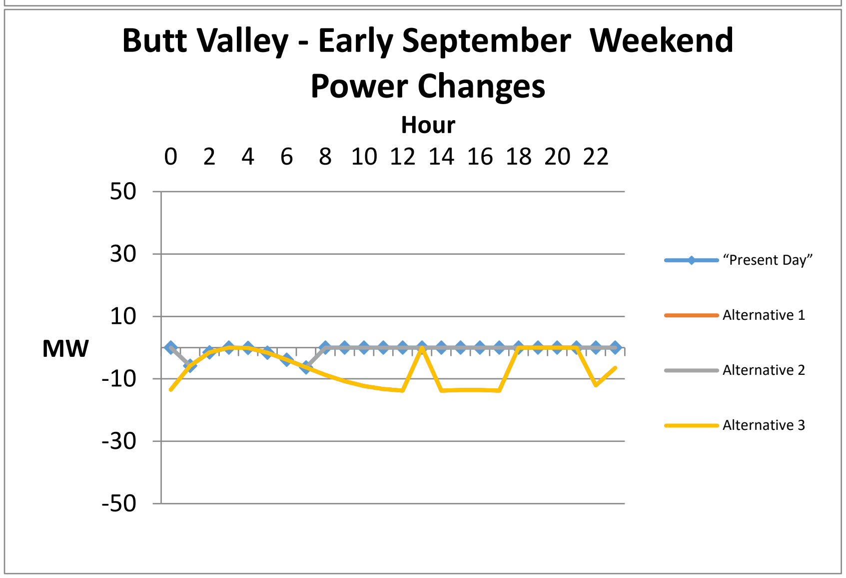
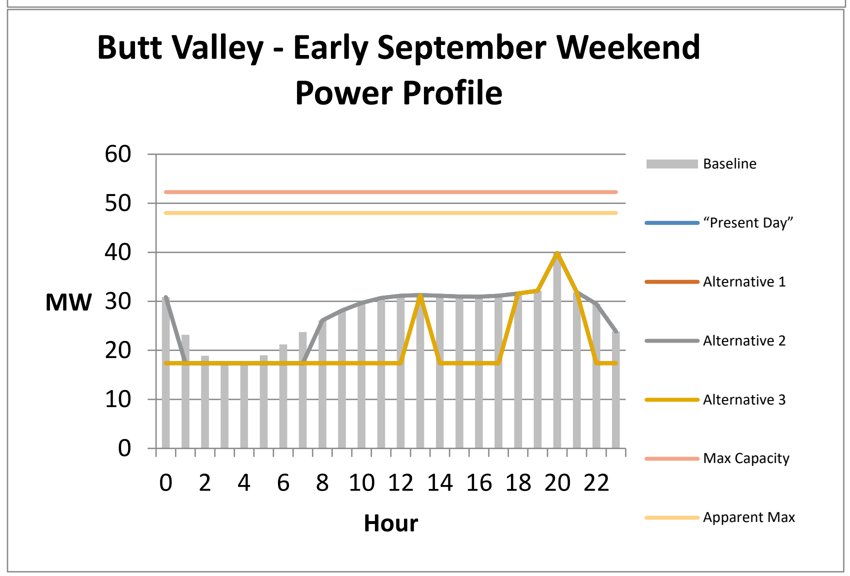
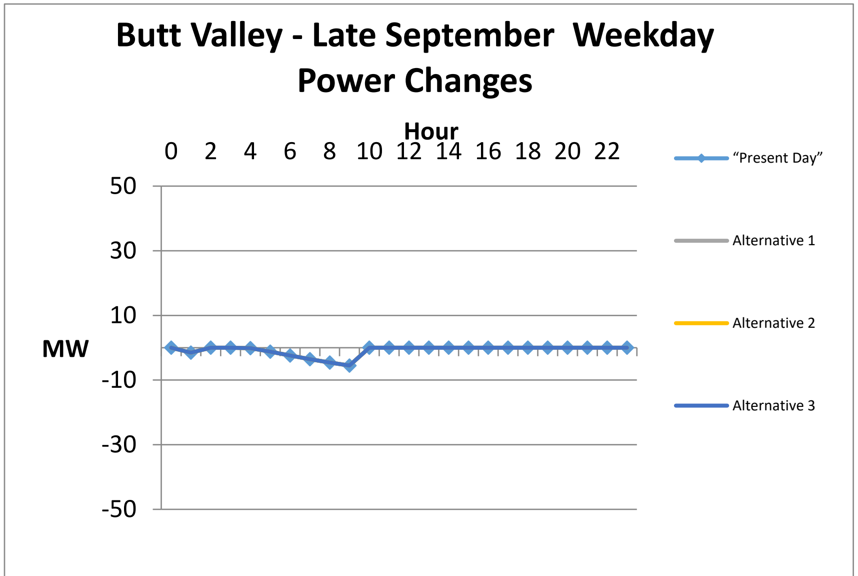
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max

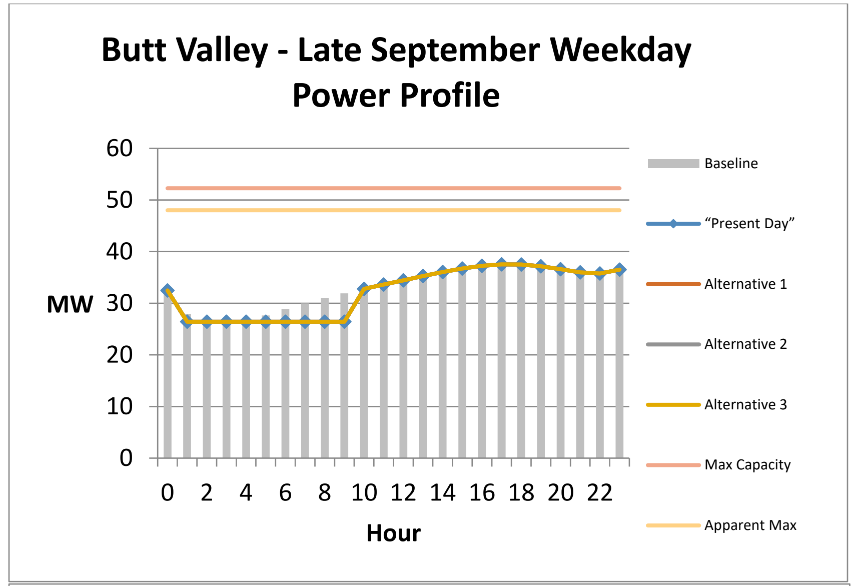

Butt Valley - Early September Weekday Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
50
30
10
MW
-10
-30
-50
"Present Day"
Alternative 1
Alternative 2
Alternative 3

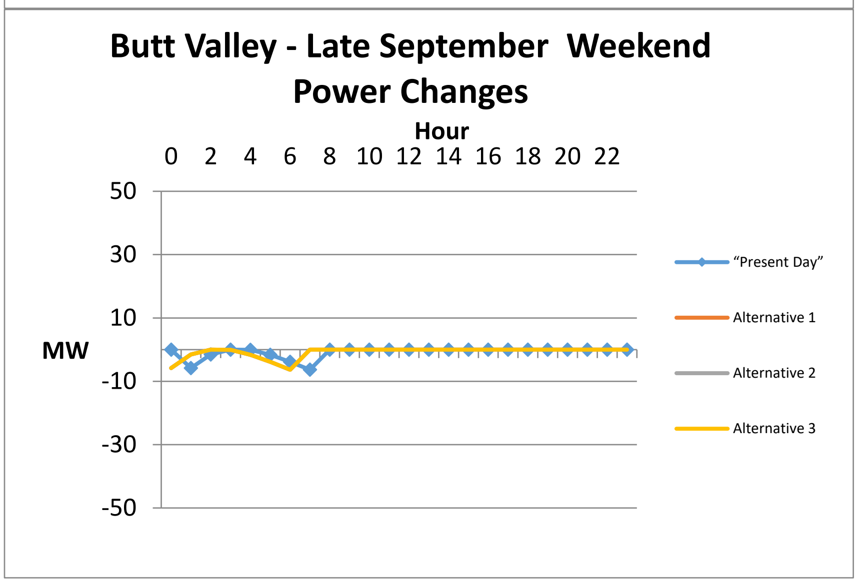

Butt Valley - Early September Weekday Power Profile
60
50
40
MW 30
20
10
0
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max

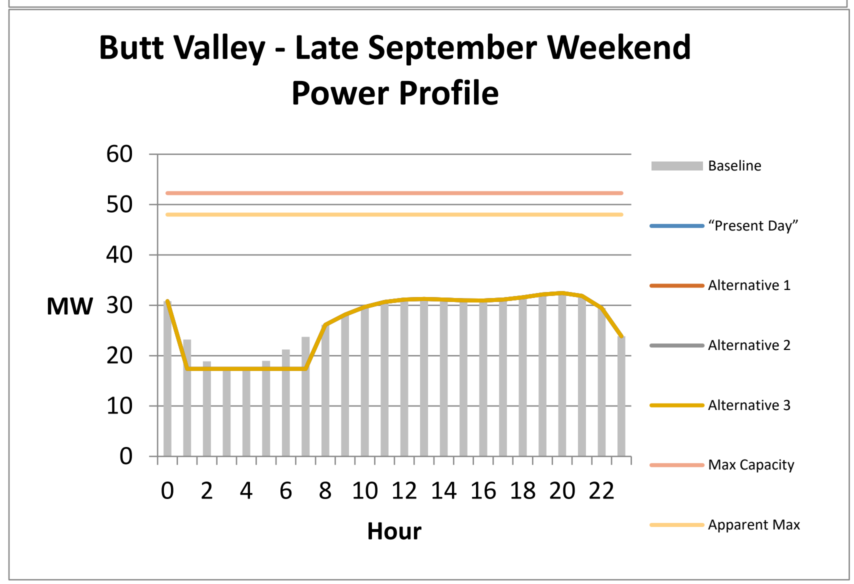

Butt Valley - Early September Weekend Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
50
30
10
MW
-10
-30
-50
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Butt Valley - Early September Weekend Power Profile
60
50
40
MW 30
20
10
0
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max

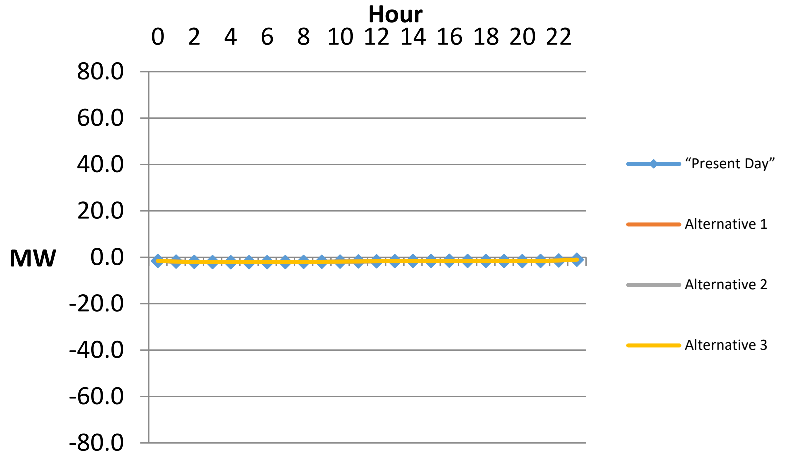

Butt Valley - Late September Weekday
Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
50
30
10
-10
-30
-50
MW
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Butt Valley - Late September Weekday
Power Profile
60
50
40
30
20
10
0
MW
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max

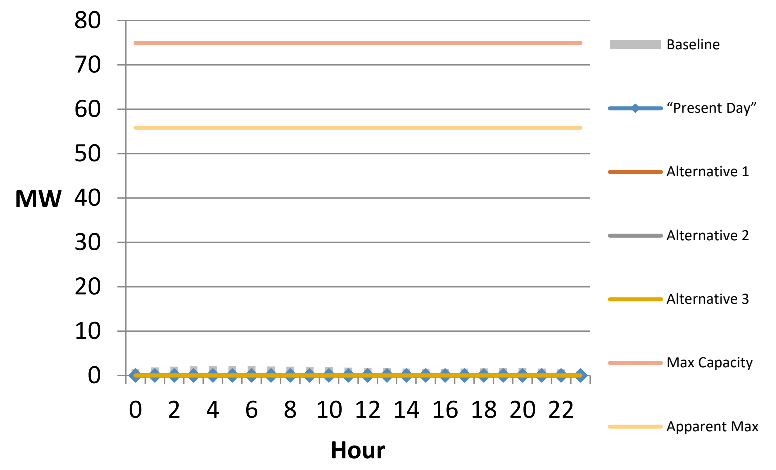

Butt Valley - Late September Weekend
Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
50
30
10
-10
-30
-50
MW
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Butt Valley - Late September Weekend
Power Profile
60
50
40
30
20
10
0
MW
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max

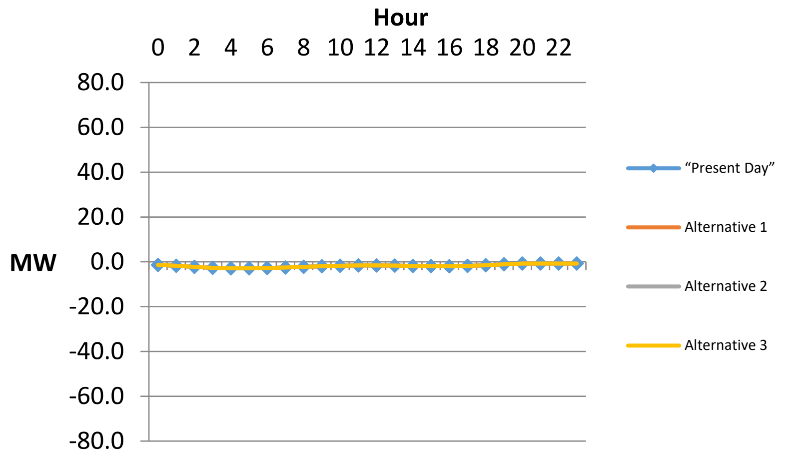
Carribou1 - Early June Weekday Power Changes



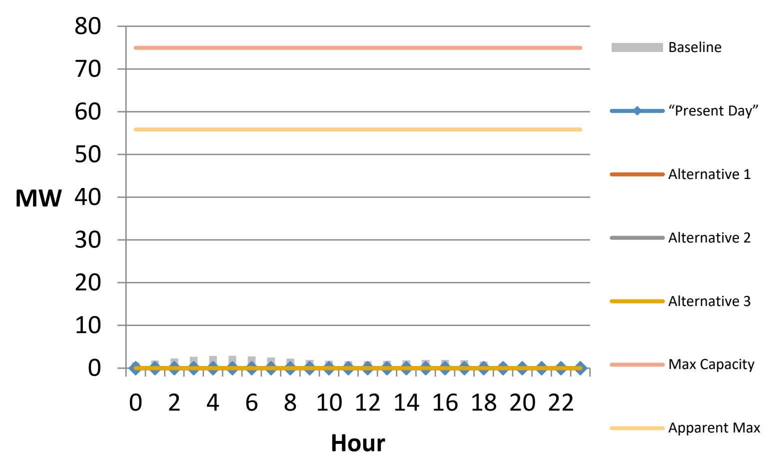
Carribou1 - Early June Weekday Power Profile

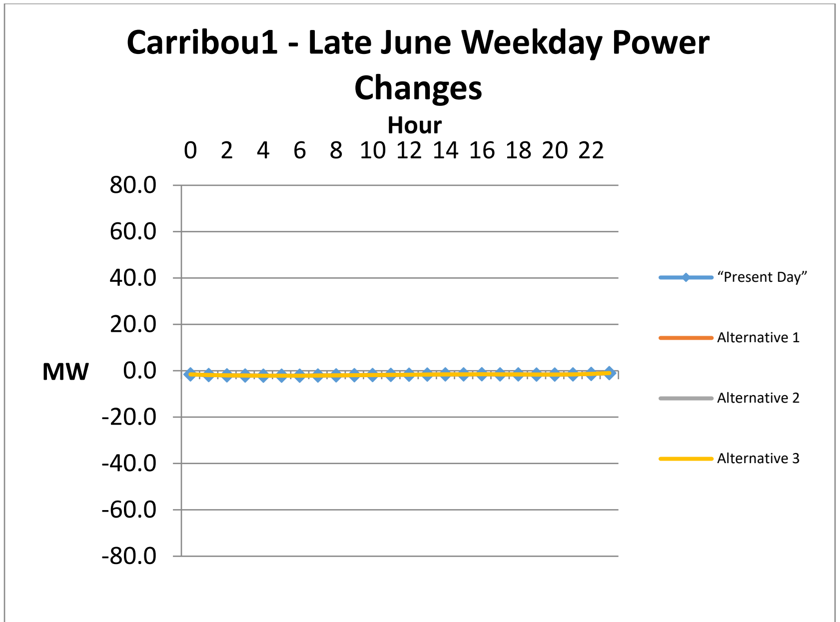


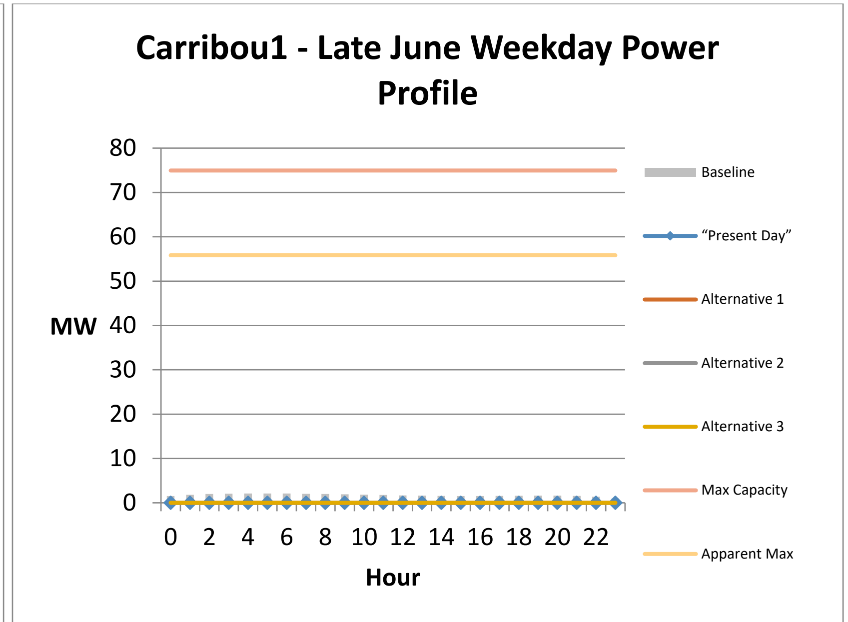
Carribou1 - Early June Weekend Power Changes

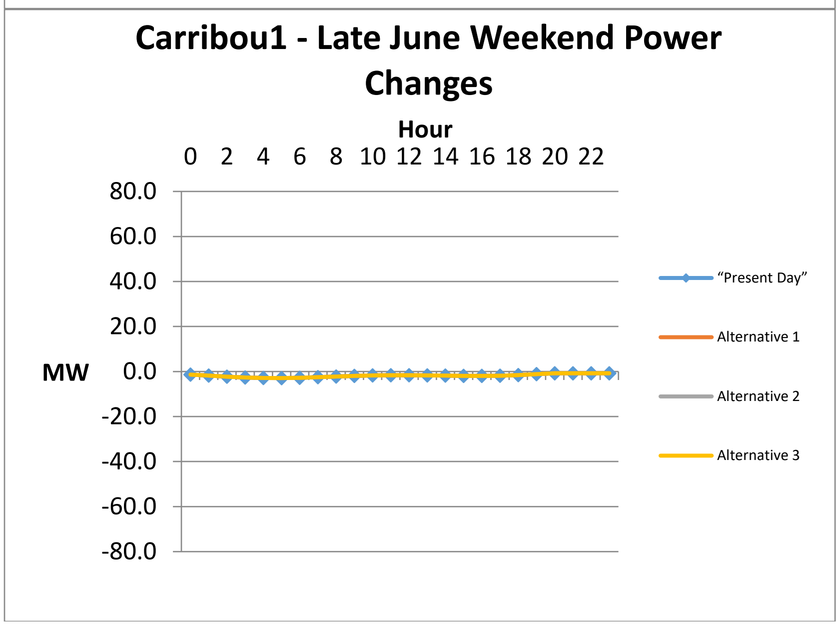


Carribou1 - Early June Weekend Power Profile




Carribou1 - Late June Weekday Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
80.0
60.0
40.0
20.0
0.0
-20.0
-40.0
-60.0
-80.0
MW
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou1 - Late June Weekday Power Profile
80
70
60
50
40
30
20
10
0
MW
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Carribou1 - Late June Weekend Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
80.0
60.0
40.0
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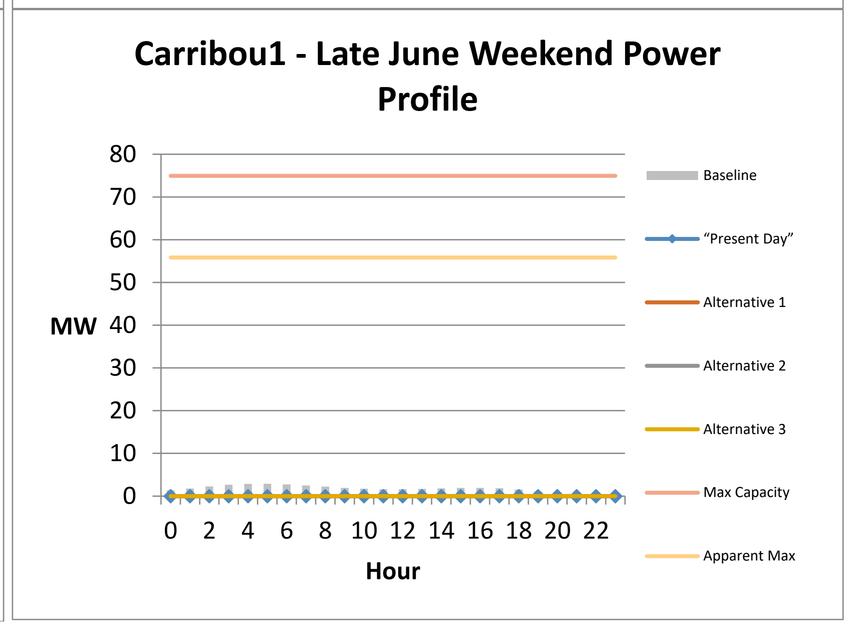
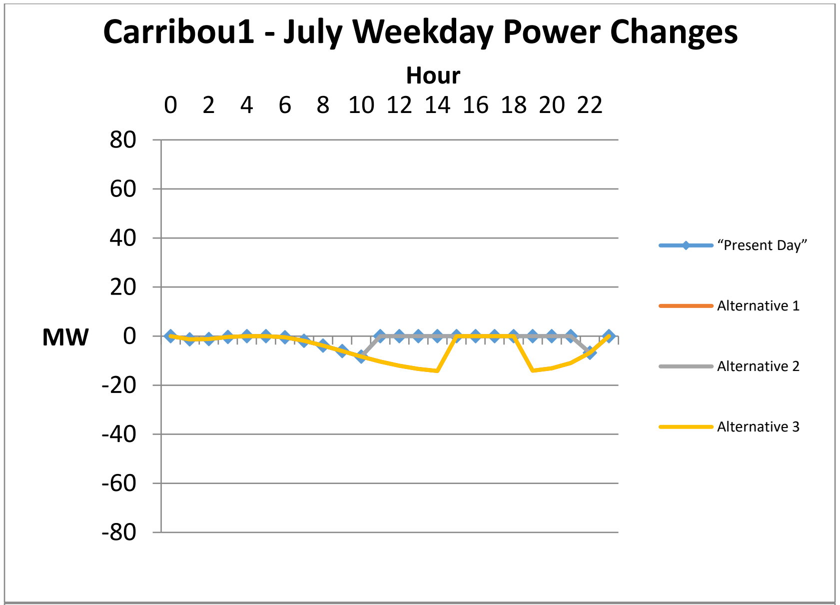
-20.0
-40.0
-60.0
-80.0
MW
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou1 - Late June Weekend Power Profile
80
70
60
50
40
30
20
10
0
MW
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Carribou1 - July Weekday Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
MW
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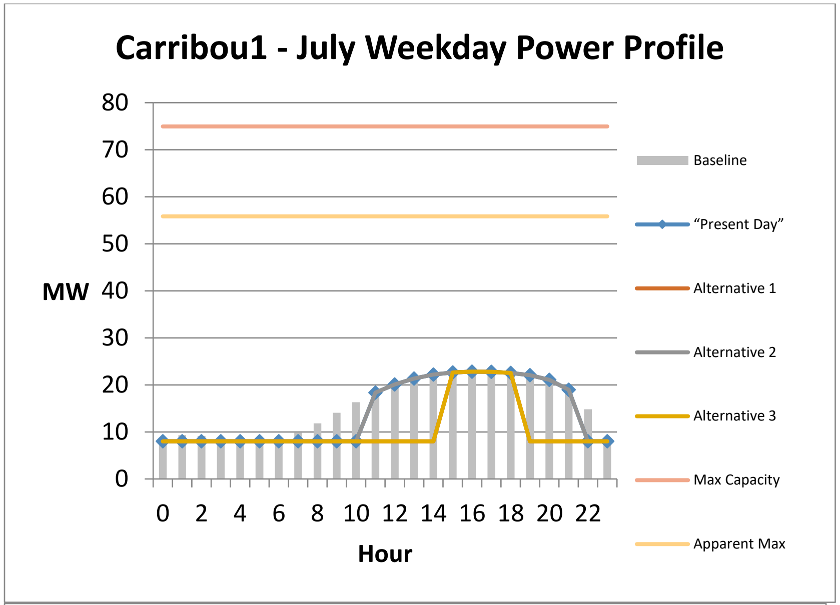
60
40
20
0
-20
-40
-60
-80
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou1 - July Weekday Power Profile
MW
80
70
60
50
40
30
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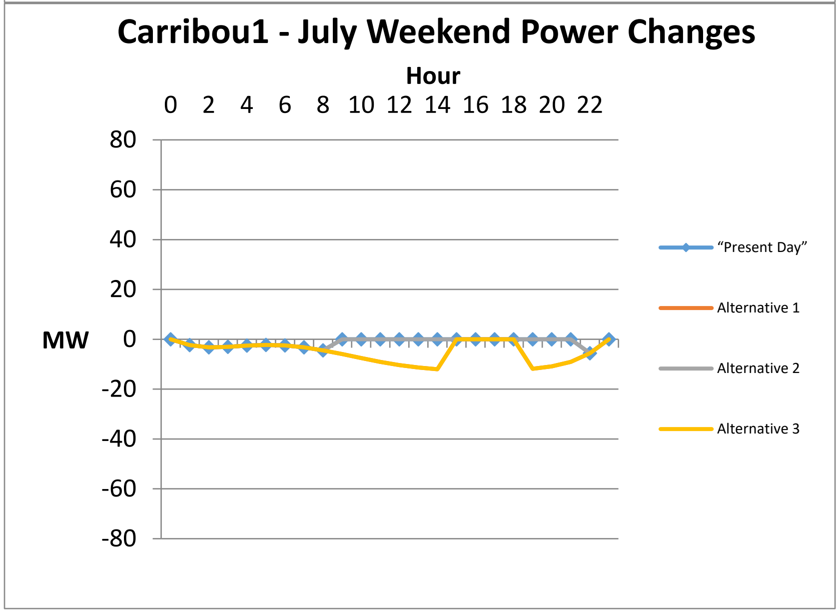
10
0
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Carribou1 - July Weekend Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
MW
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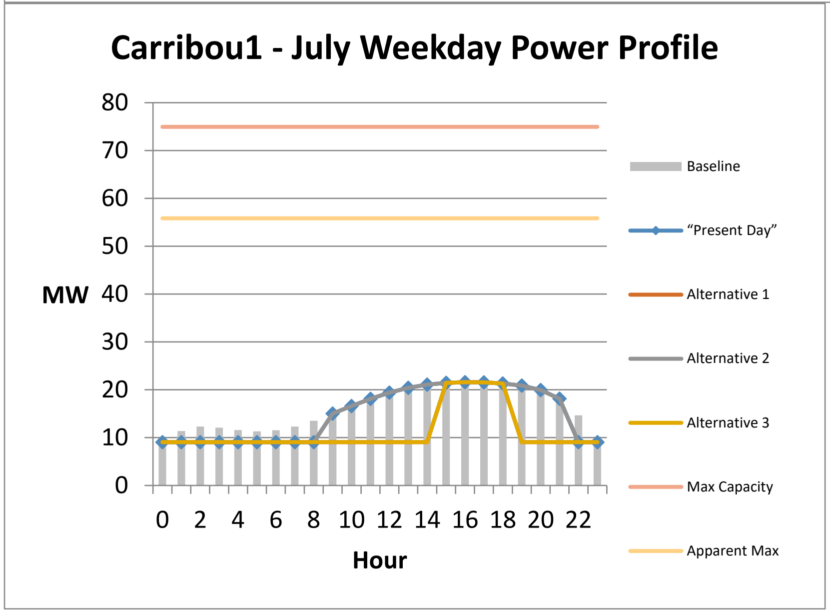
-60
-80
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou1 - July Weekday Power Profile
MW
80
70
60
50
40
30
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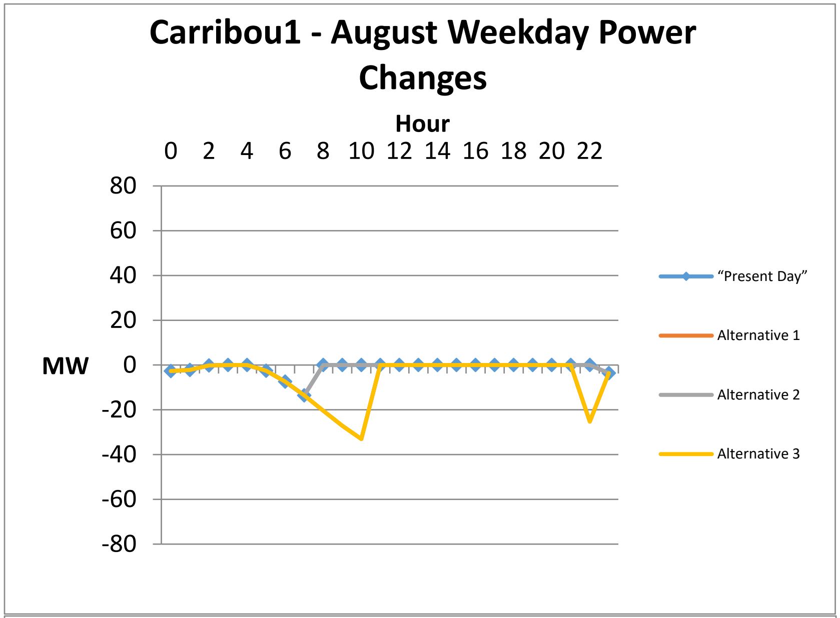
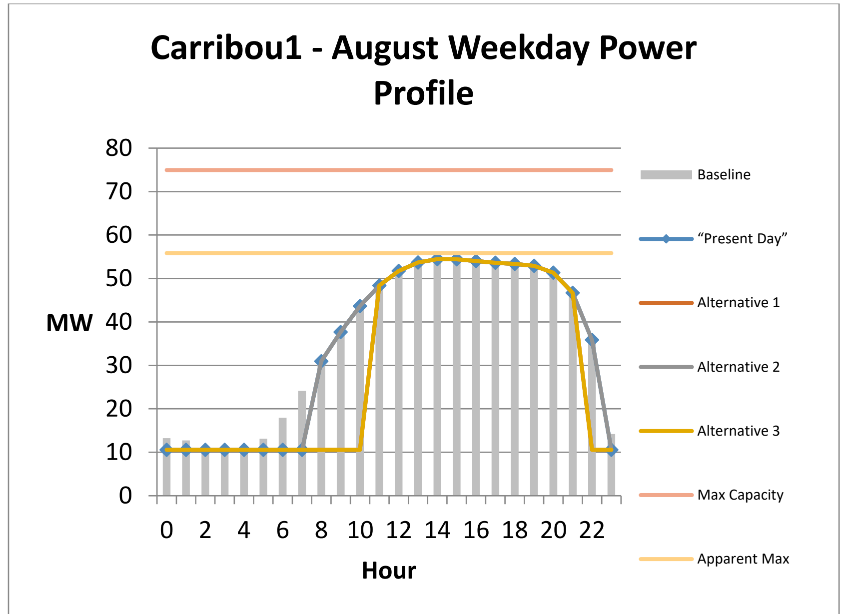
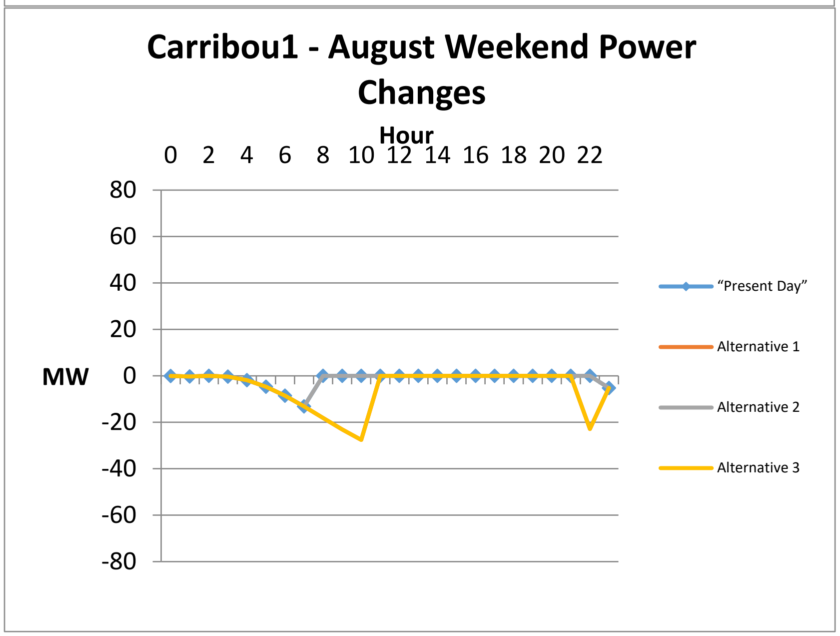
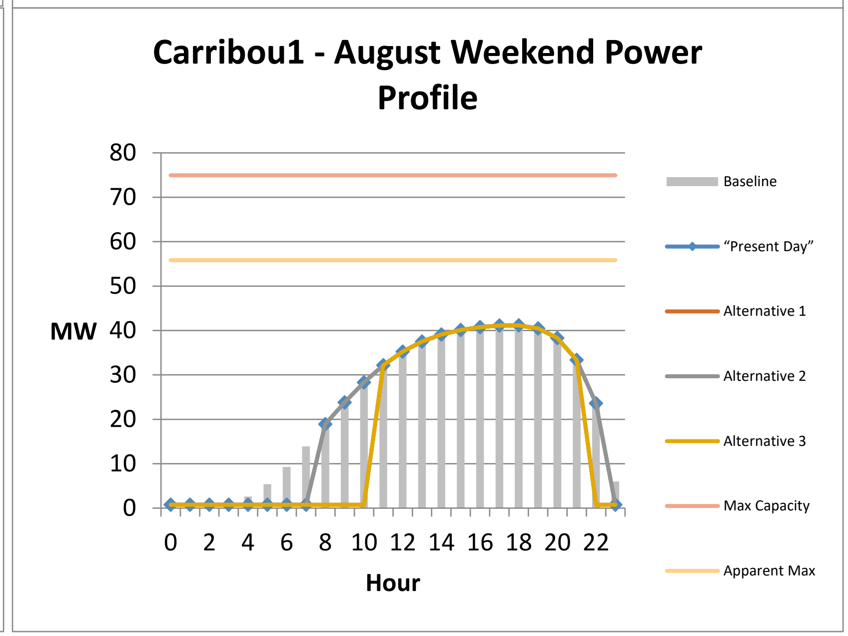
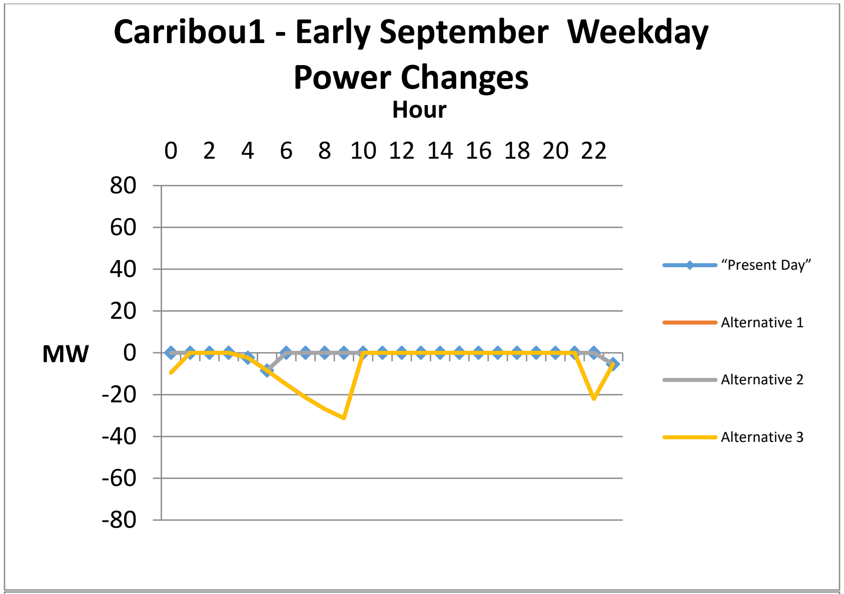
10
0
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max

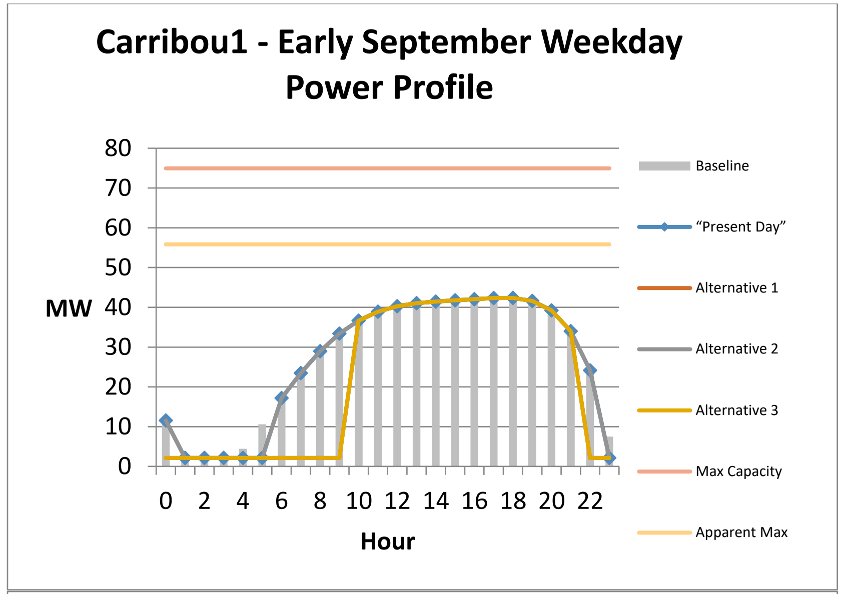

Carribou1 - August Weekday Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
80
60
40
20
MW 0
-20
-40
-60
-80
"Present Day"
Alternative 1
Alternative 2
Alternative 3

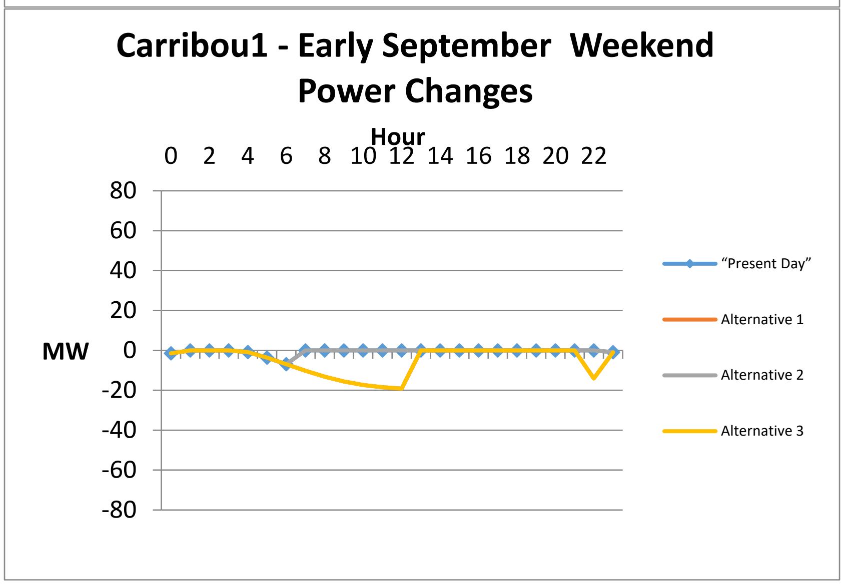

Carribou1 - August Weekday Power Profile
80
70
60
50
MW 40
30
20
10
0
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Carribou1 - August Weekend Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
80
60
40
20
MW 0
-20
-40
-60
-80
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou1 - August Weekend Power Profile
80
70
60
50
MW 40
30
20
10
0
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Carribou1 - Early September Weekday Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
80
60
40
20
0
-20
-40
-60
-80
MW
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou1 - Early September Weekday Power Profile
80
70
60
50
40
30
20
10
0
MW
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Carribou1 - Early September Weekend Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
80
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40
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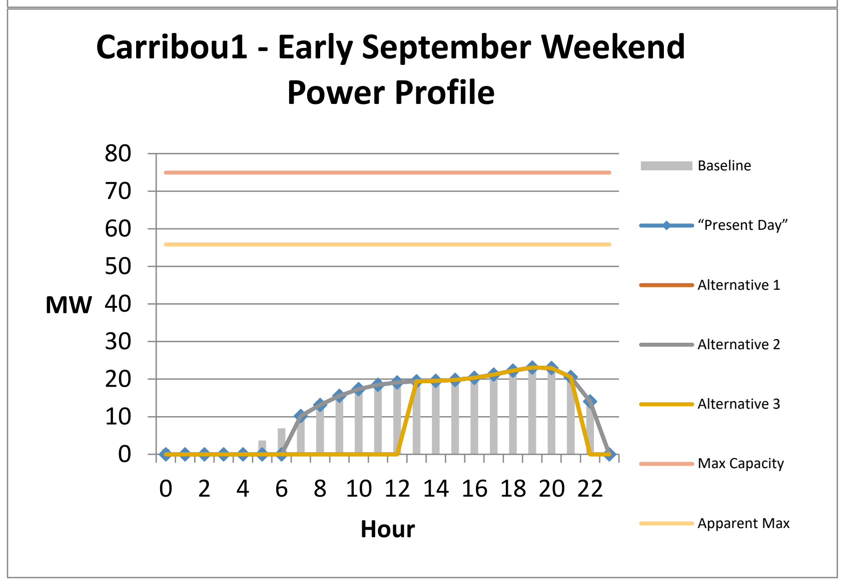
-20
-40
-60
-80
MW
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou1 - Early September Weekend Power Profile
80
70
60
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40
30
20
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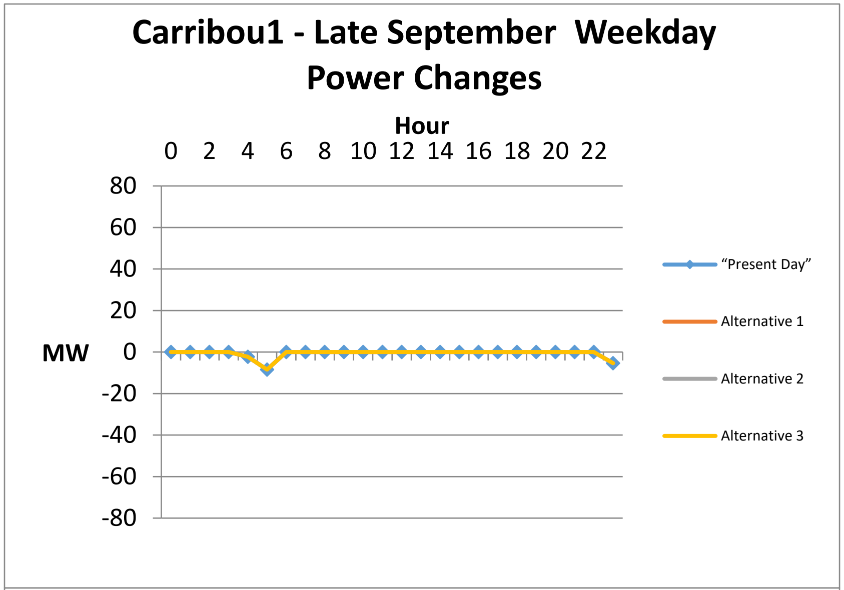
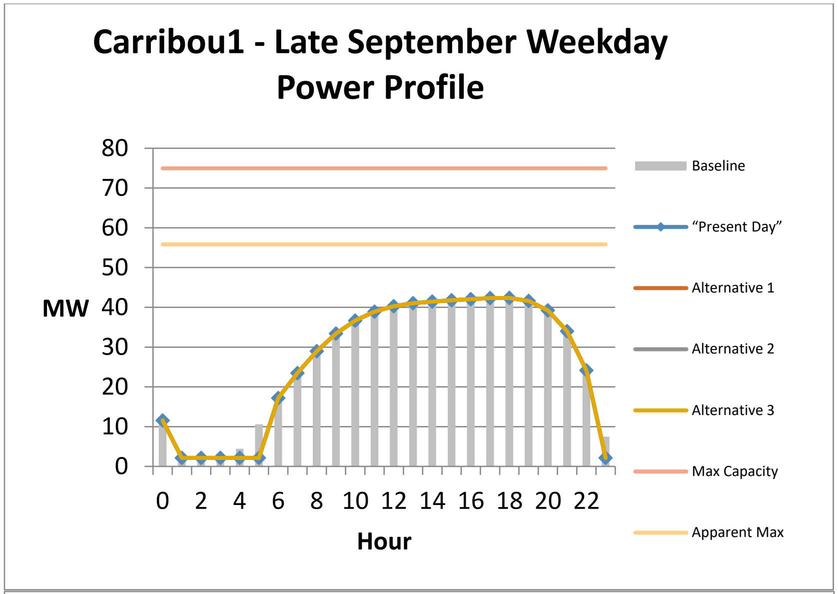
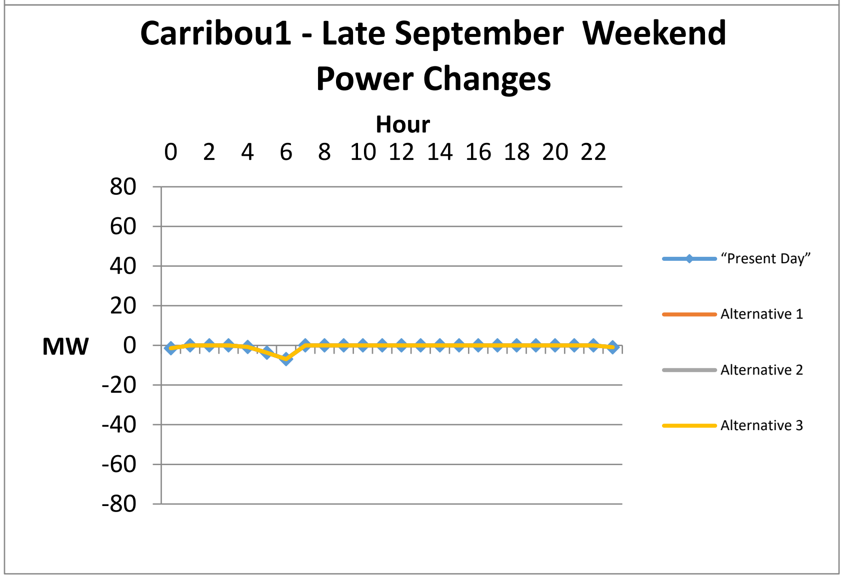
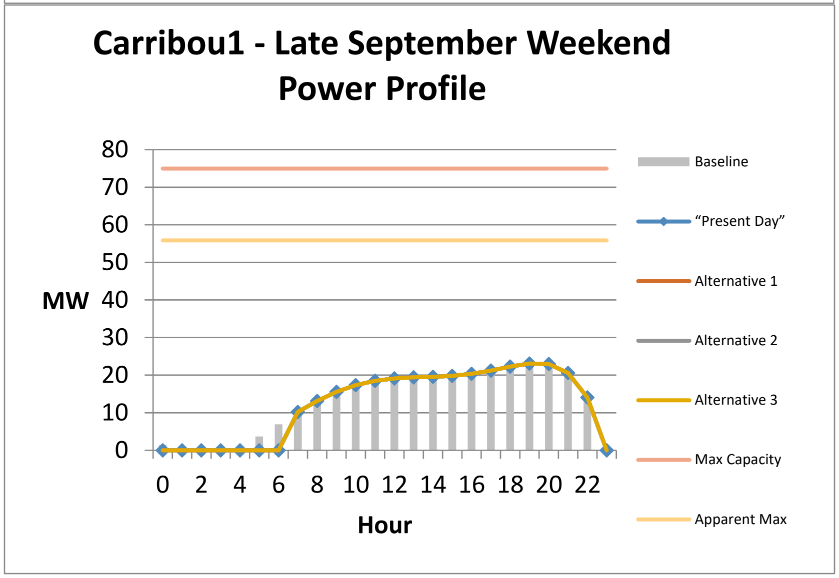
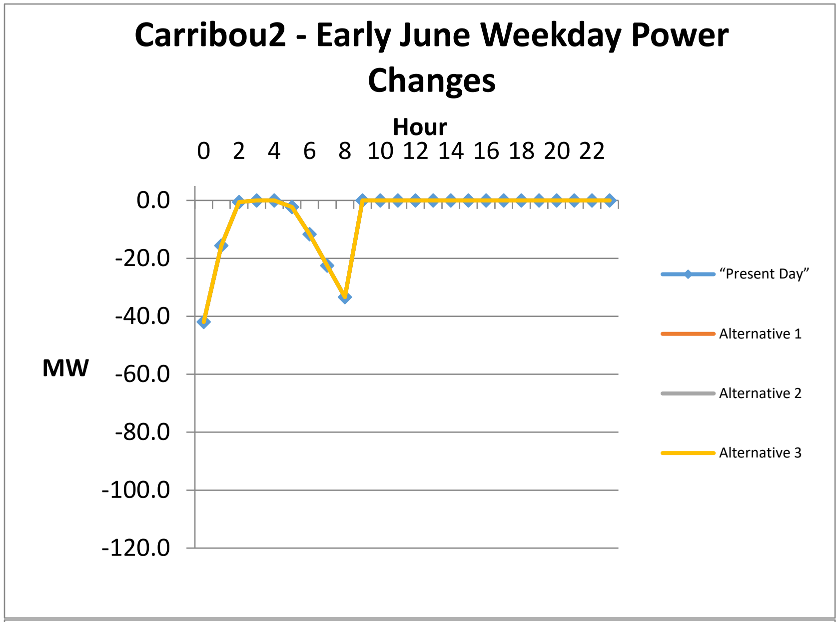
MW
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max

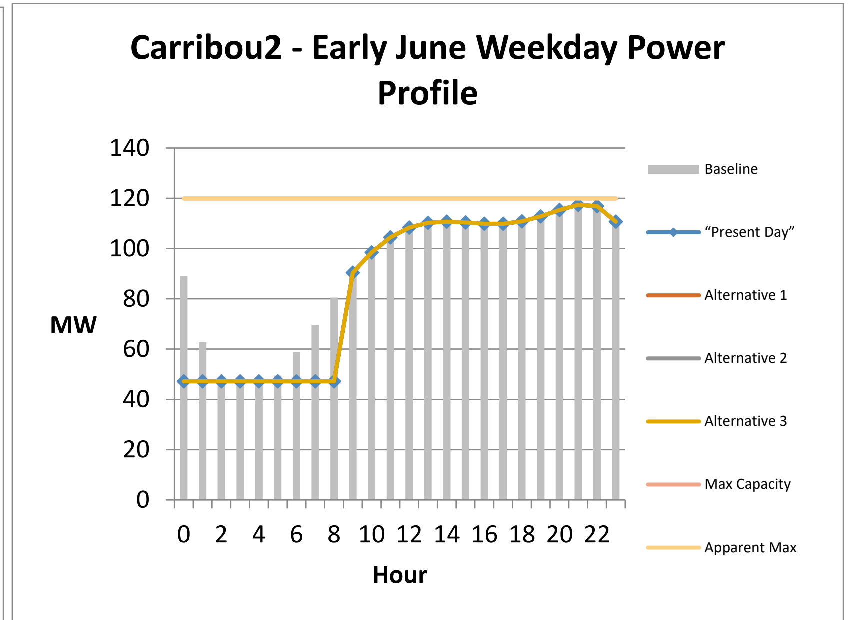

Carribou1 - Late September Weekday Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
80
60
40
20
0
-20
-40
-60
-80
MW
"Present Day"
Alternative 1
Alternative 2
Alternative 3

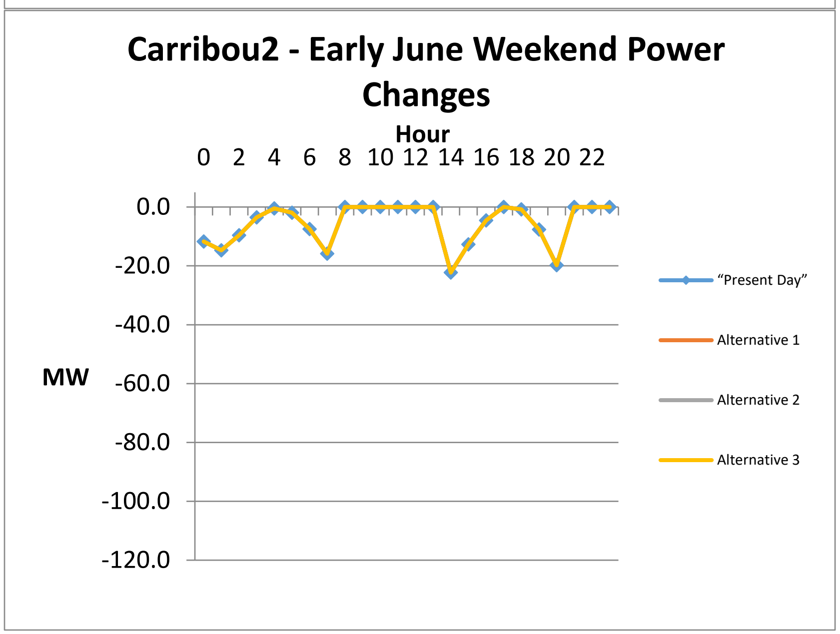

Carribou1 - Late September Weekday Power Profile
80
70
60
50
40
30
20
10
0
MW
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max

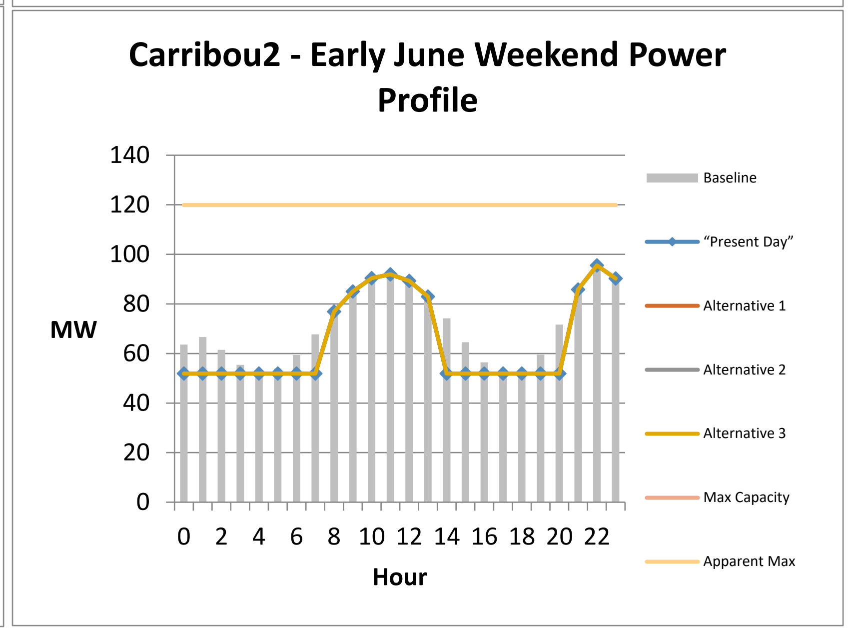

Carribou1 - Late September Weekend Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
80
60
40
20
0
-20
-40
-60
-80
MW
"Present Day"
Alternative 1
Alternative 2
Alternative 3

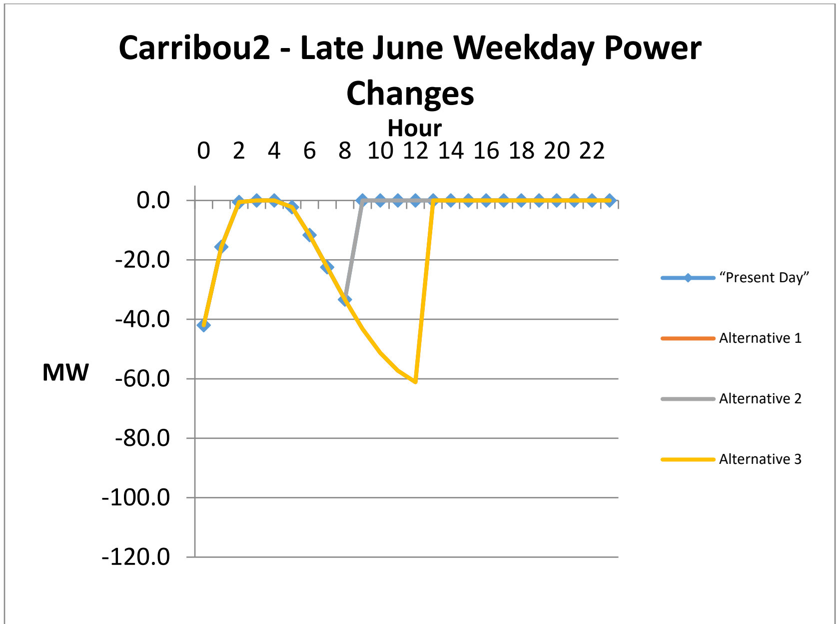

Carribou1 - Late September Weekend Power Profile
80
70
60
50
40
30
20
10
0
MW
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max

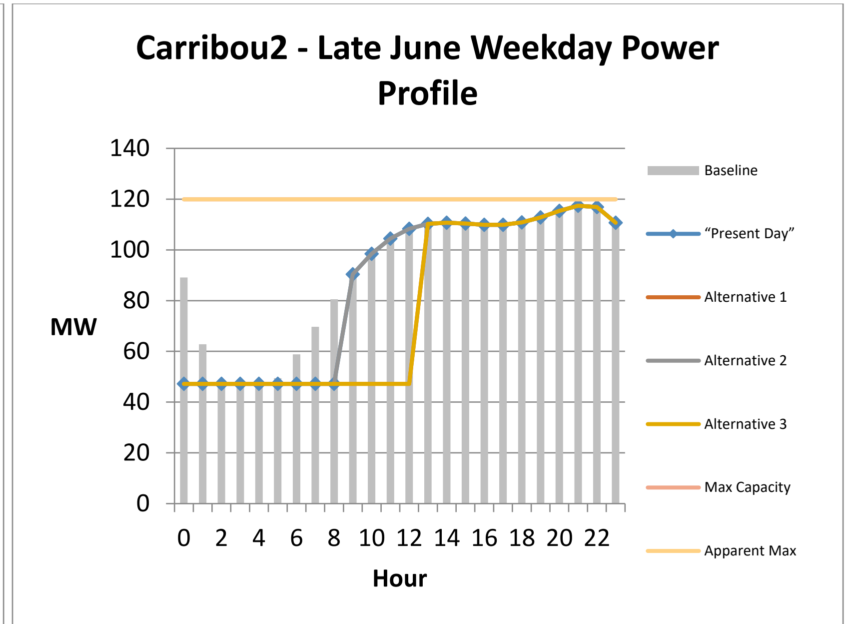

Carribou2 - Early June Weekday Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
0.0
-20.0
-40.0
-60.0
-80.0
-100.0
-120.0
MW
"Present Day"
Alternative 1
Alternative 2
Alternative 3

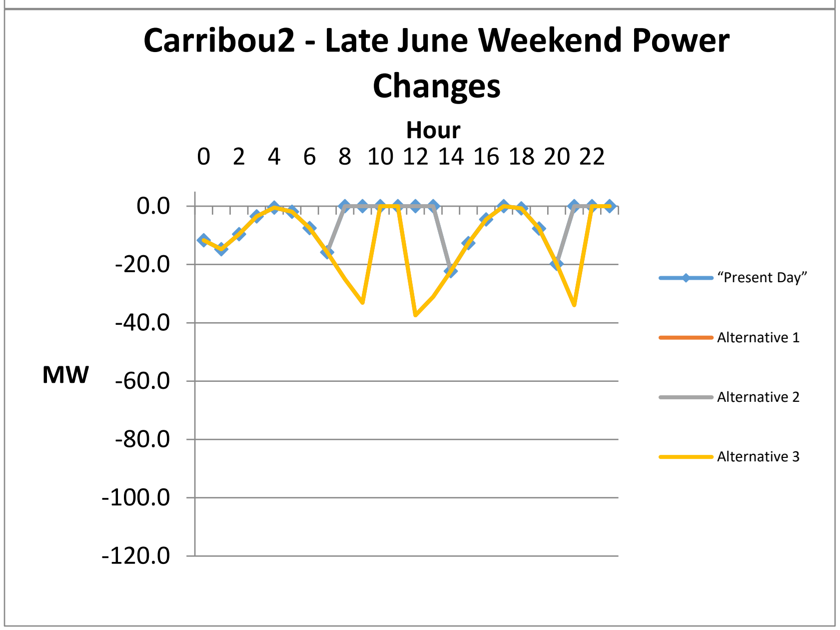

Carribou2 - Early June Weekday Power Profile
140
120
100
80
60
40
20
0
MW
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max

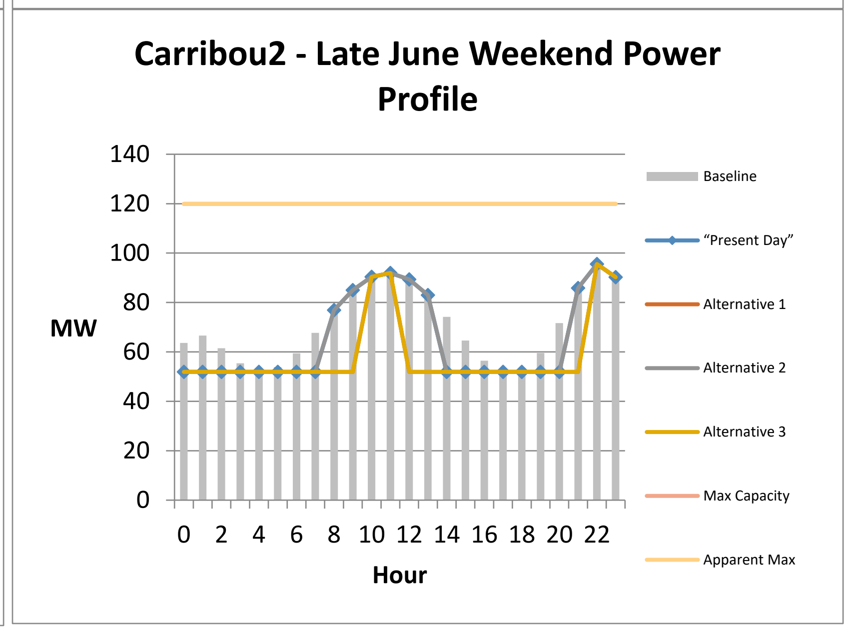

Carribou2 - Early June Weekend Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
0.0
-20.0
-40.0
-60.0
-80.0
-100.0
-120.0
MW
"Present Day"
Alternative 1
Alternative 2
Alternative 3

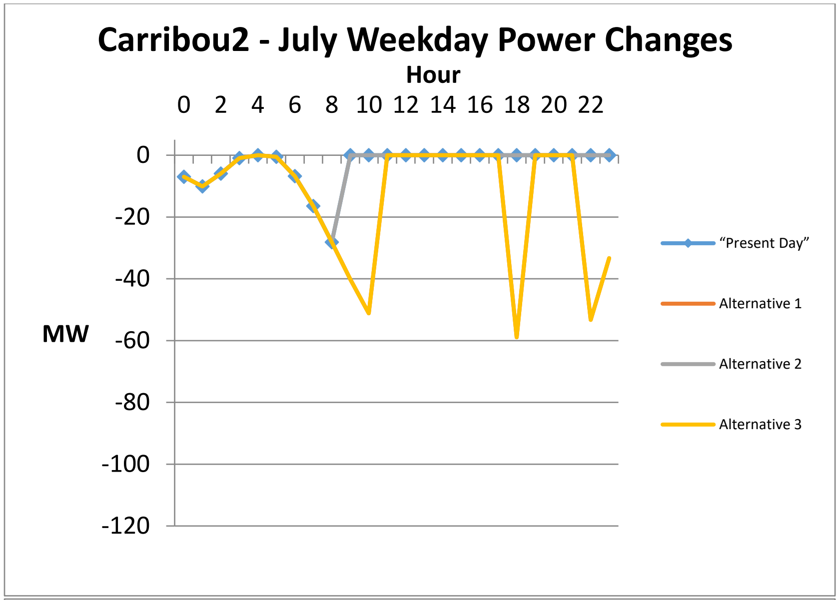

Carribou2 - Early June Weekend Power Profile
140
120
100
80
60
40
20
0
MW
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max

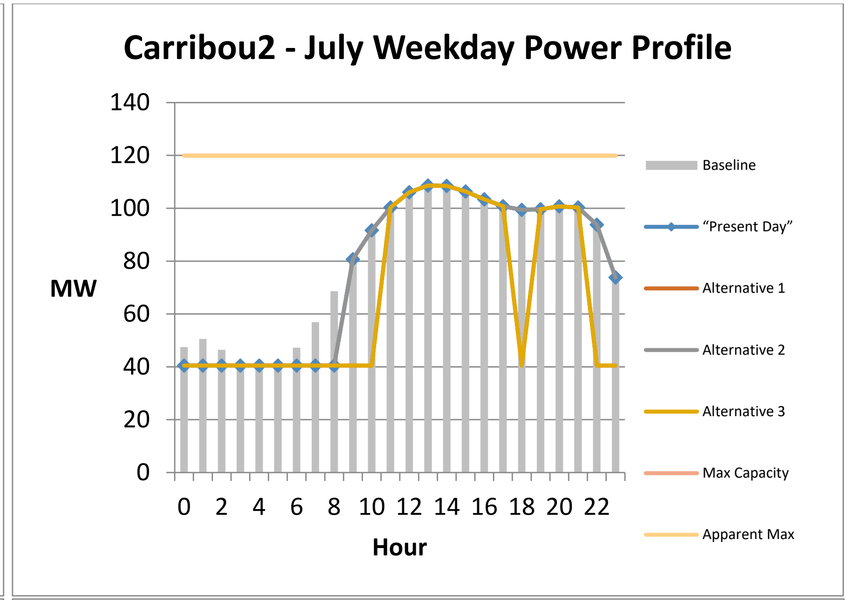

Carribou2 - Late June Weekday Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
MW
0.0
-20.0
-40.0
-60.0
-80.0
-100.0
-120.0
“Present Day”
Alternative 1
Alternative 2
Alternative 3


Carribou2 - Late June Weekday Power Profile
MW
140
120
100
80
60
40
20
0
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
“Present Day”
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Carribou2 - Late June Weekend Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
MW
0.0
-20.0
-40.0
-60.0
-80.0
-100.0
-120.0
“Present Day”
Alternative 1
Alternative 2
Alternative 3


Carribou2 - Late June Weekend Power Profile
MW
140
120
100
80
60
40
20
0
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
“Present Day”
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Carribou2 - July Weekday Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
MW
0
-20
-40
-60
-80
-100
-120
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou2 - July Weekday Power Profile
MW
140
120
100
80
60
40
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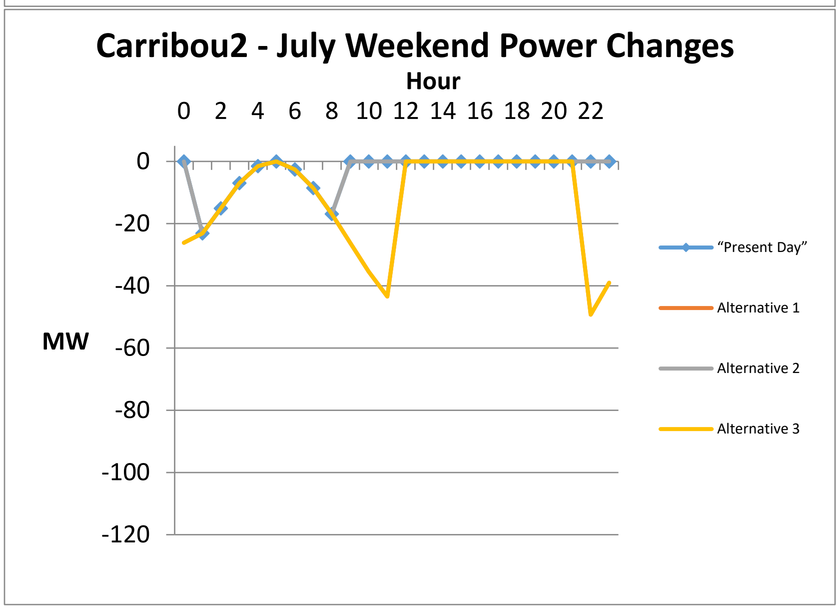
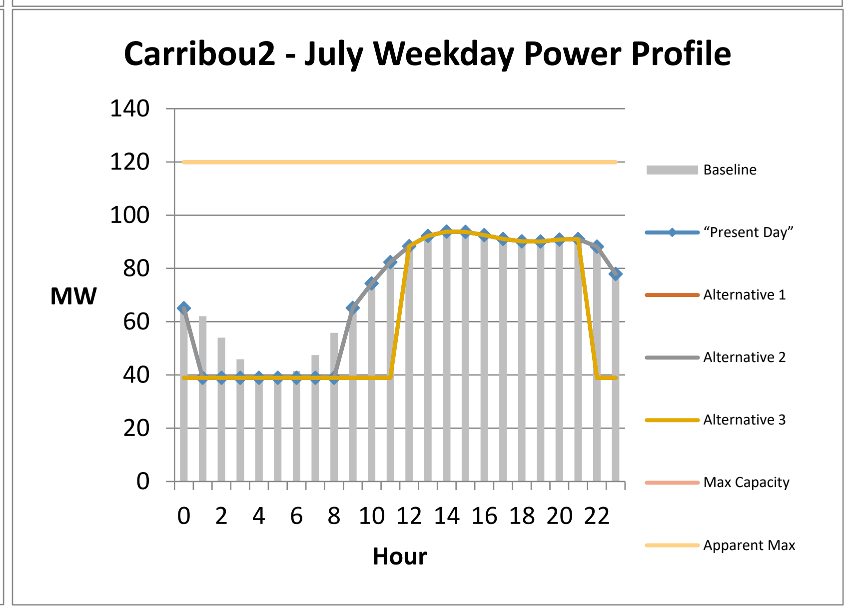
0
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Carribou2 - July Weekend Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
MW
0
-20
-40
-60
-80
-100
-120
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou2 - July Weekday Power Profile
MW
140
120
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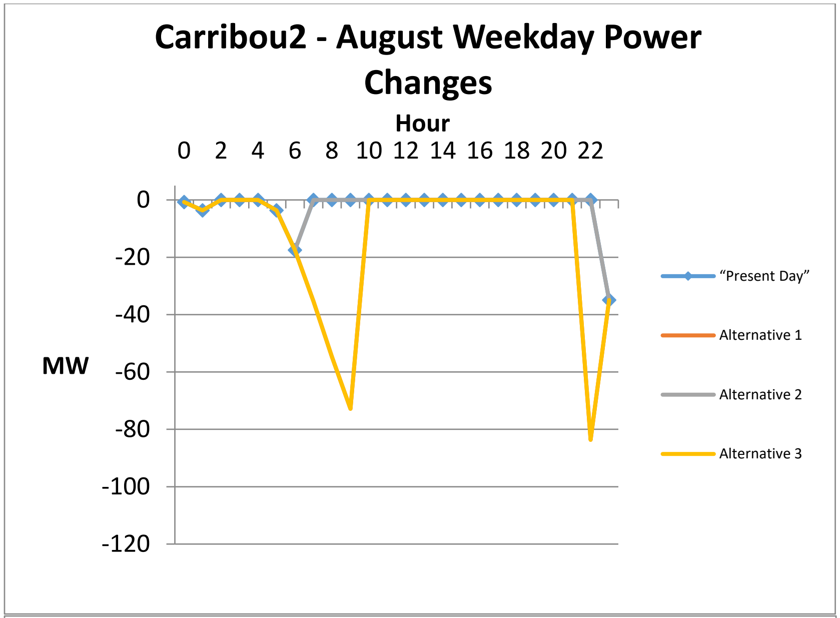
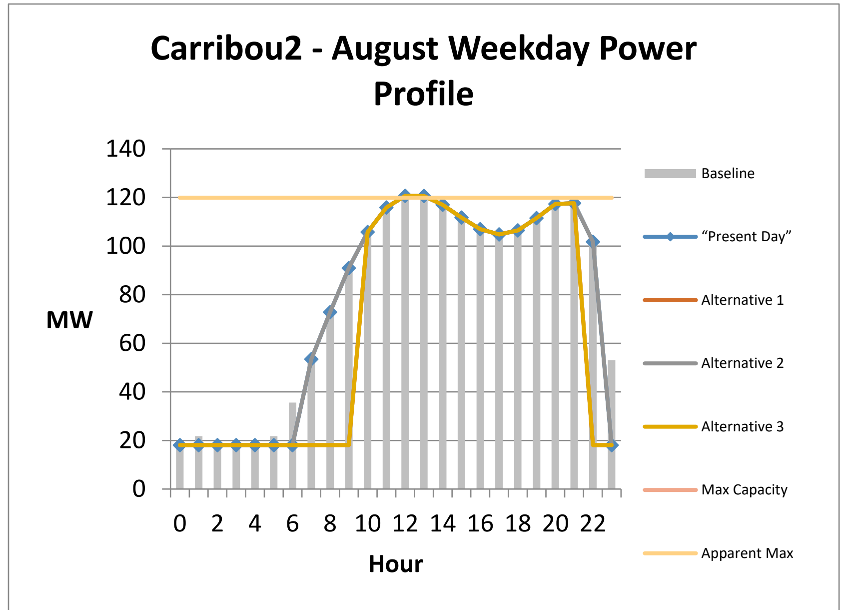
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Carribou2 - August Weekday Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
MW
0
-20
-40
-60
-80
-100
-120
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou2 - August Weekday Power Profile
MW
140
120
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0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
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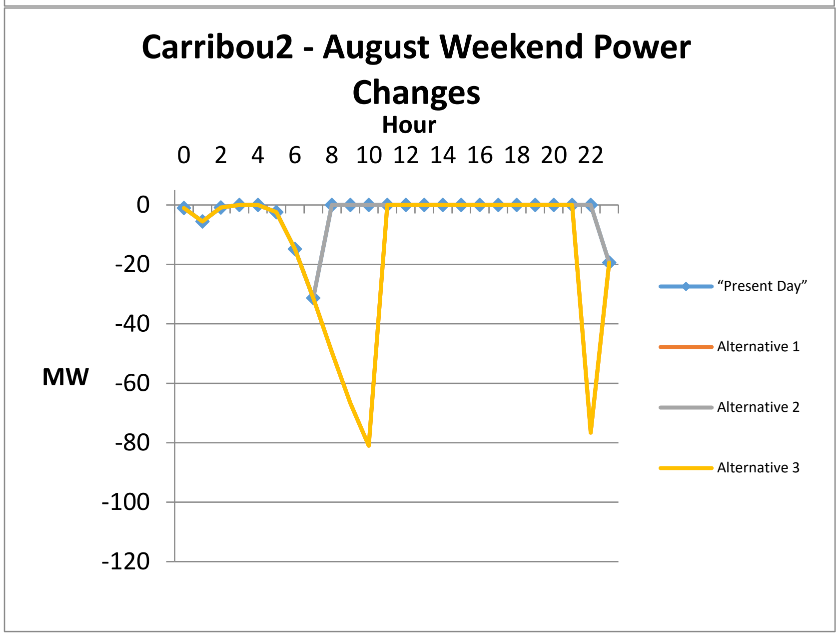
Max Capacity
Apparent Max


Carribou2 - August Weekend Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
MW
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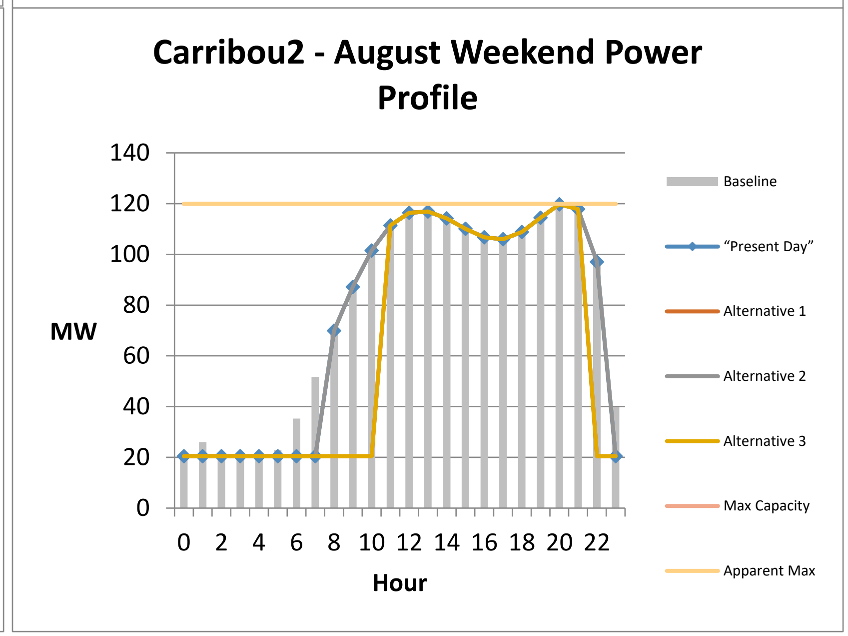
-20
-40
-60
-80
-100
-120
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou2 - August Weekend Power Profile
MW
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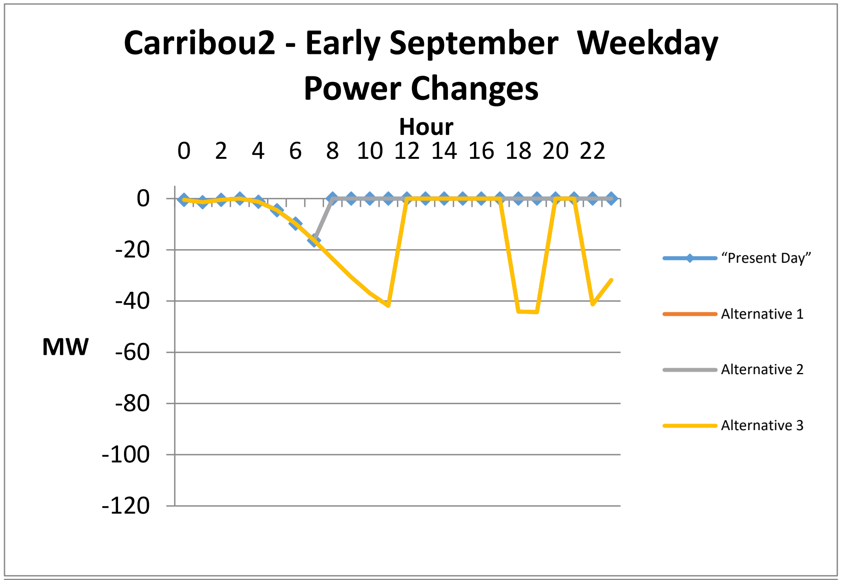
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Carribou2 - Early September Weekday
Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
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-80
-100
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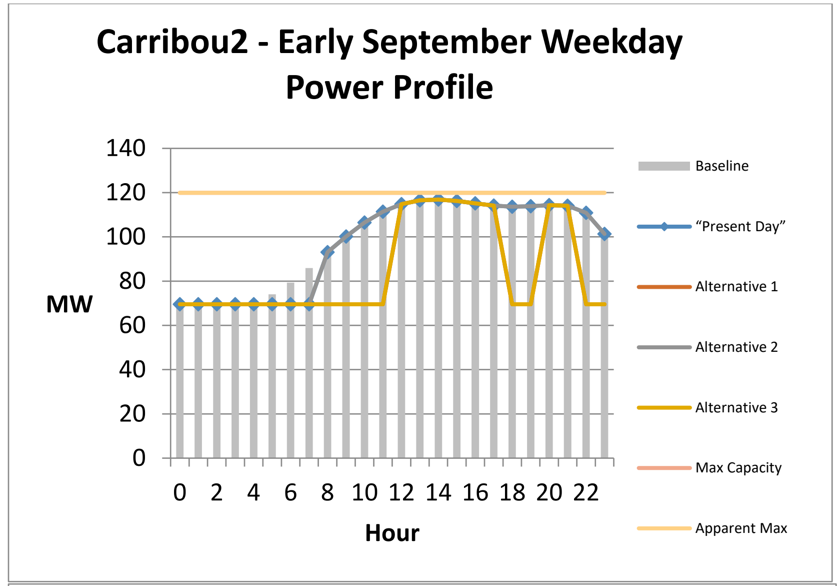
MW
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou2 - Early September Weekday
Power Profile
140
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MW
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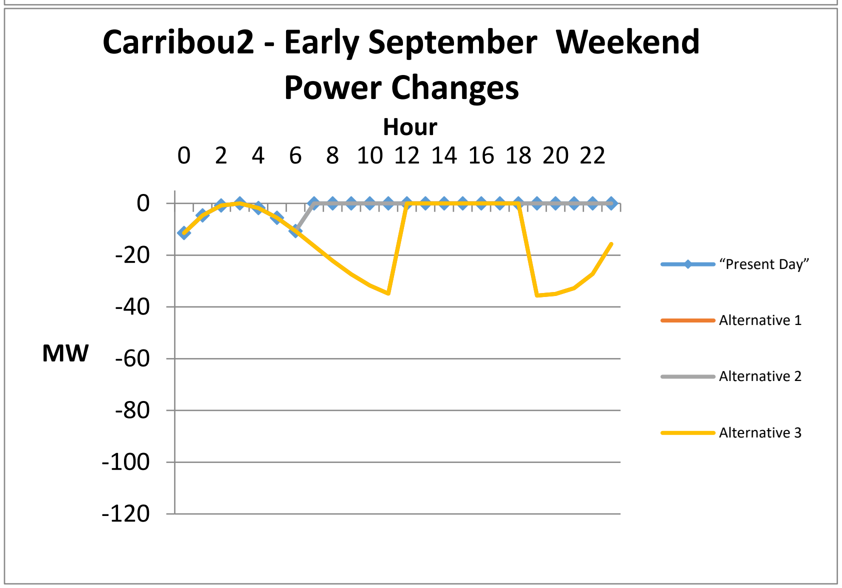
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Carribou2 - Early September Weekend
Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
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-20
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-100
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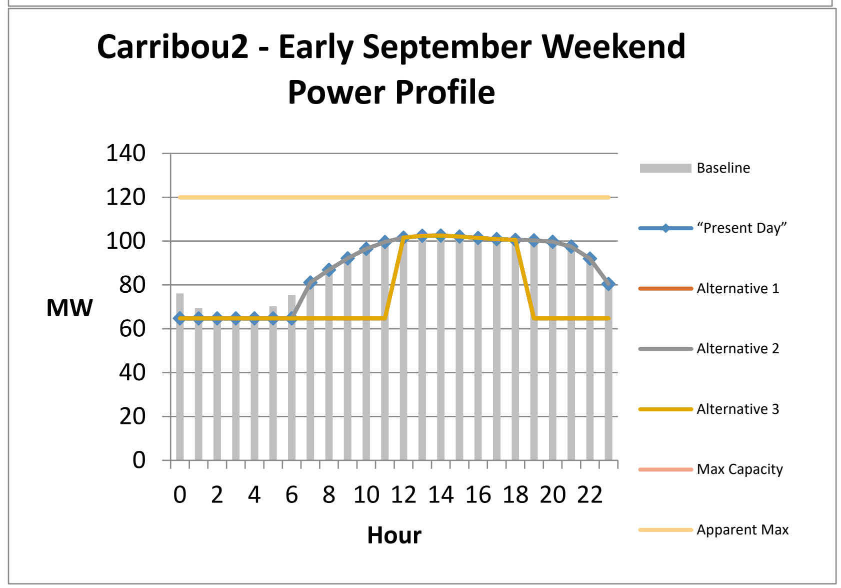
MW
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou2 - Early September Weekend
Power Profile
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MW
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Hour
Baseline
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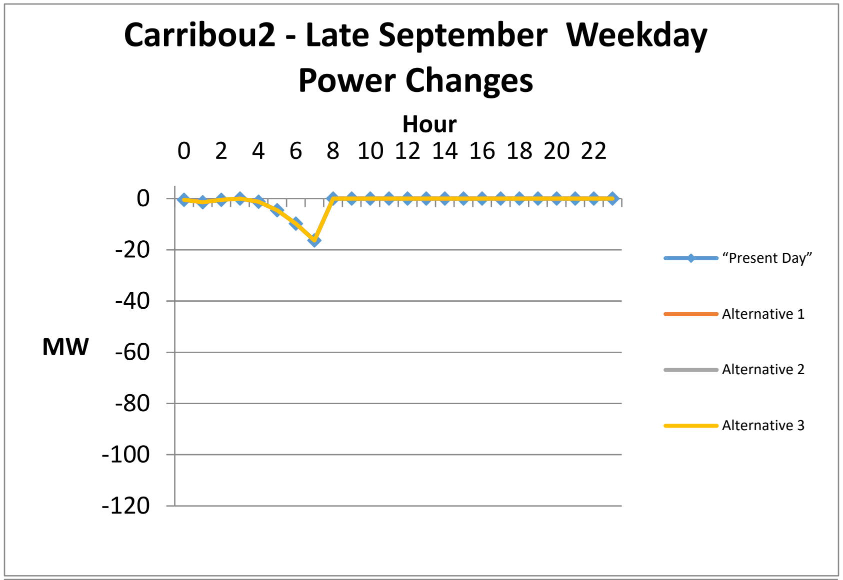
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Carribou2 - Late September Weekday Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
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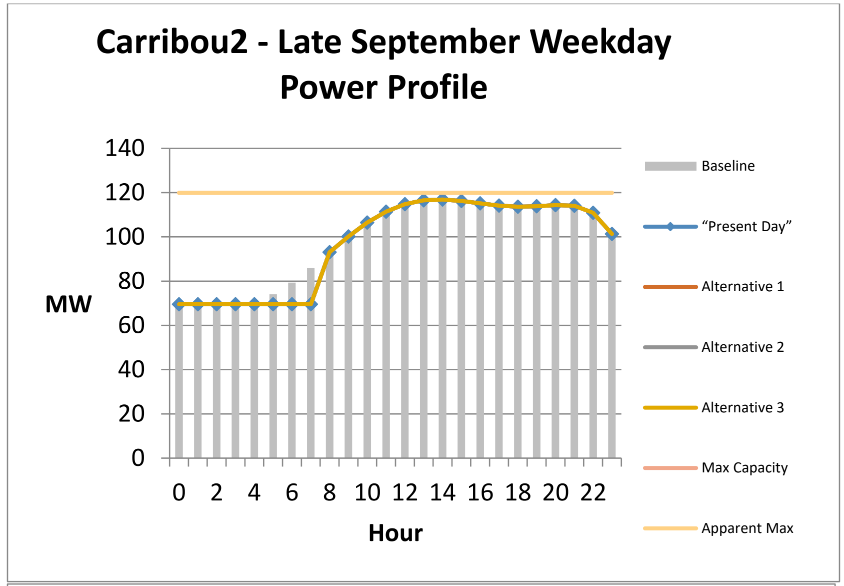
-20
-40
MW
-60
-80
-100
-120
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou2 - Late September Weekday Power Profile
140
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MW
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Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
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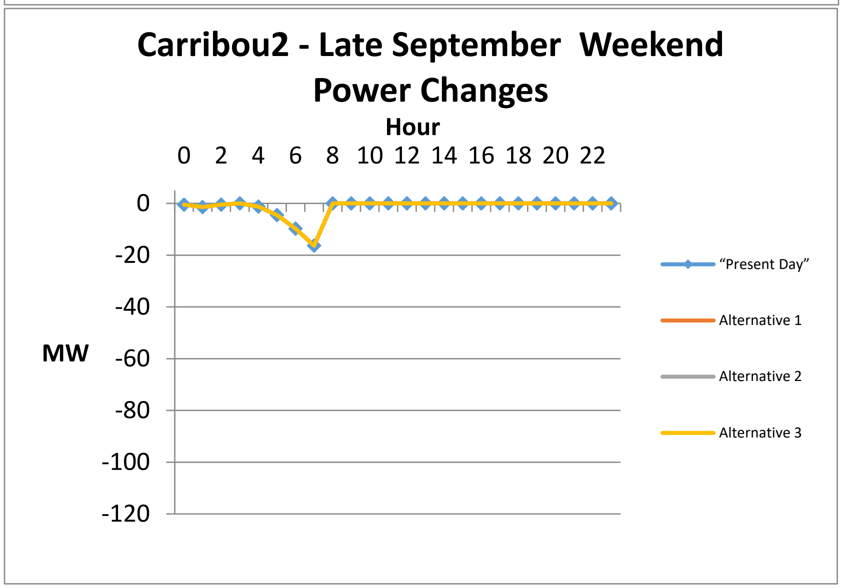
Max Capacity
Apparent Max


Carribou2 - Late September Weekend Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
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MW
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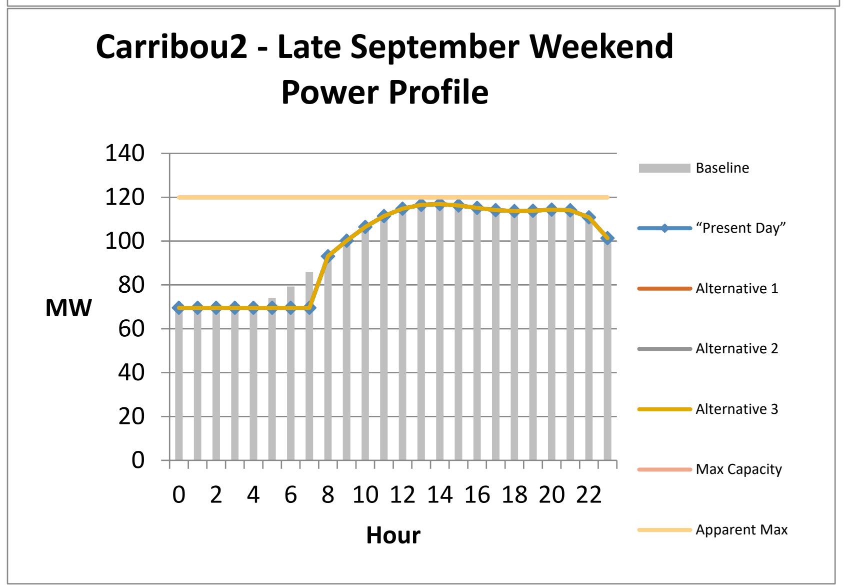
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou2 - Late September Weekend Power Profile
140
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Hour
Baseline
"Present Day"
Alternative 1
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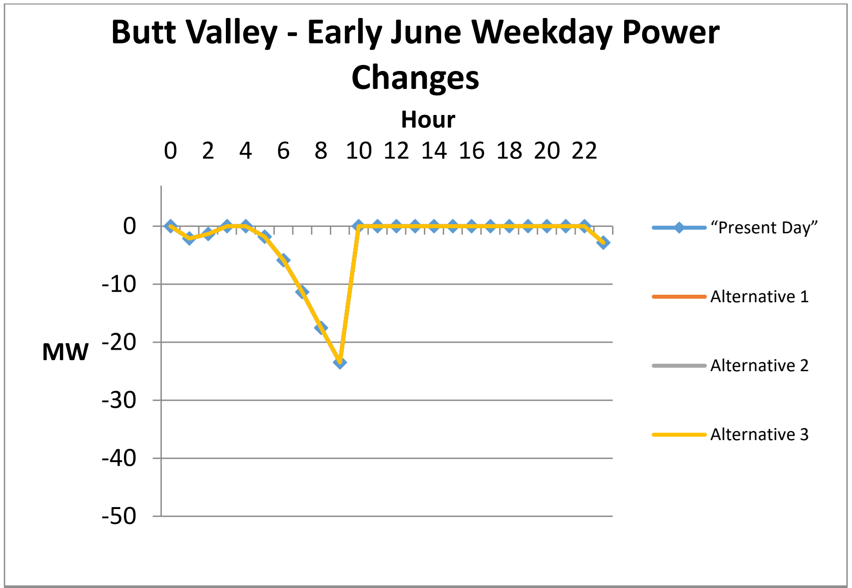
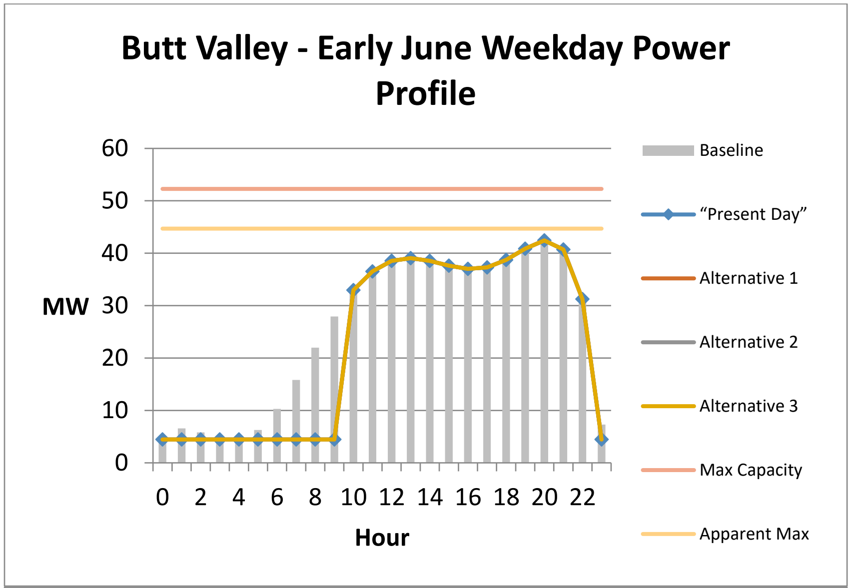
Max Capacity
Apparent Max



Butt Valley - Early June Weekday Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
0
-10
-20
-30
-40
-50
MW
"Present Day"
Alternative 1
Alternative 2
Alternative 3



Butt Valley - Early June Weekday Power Profile
60
50
40
30
20
10
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MW
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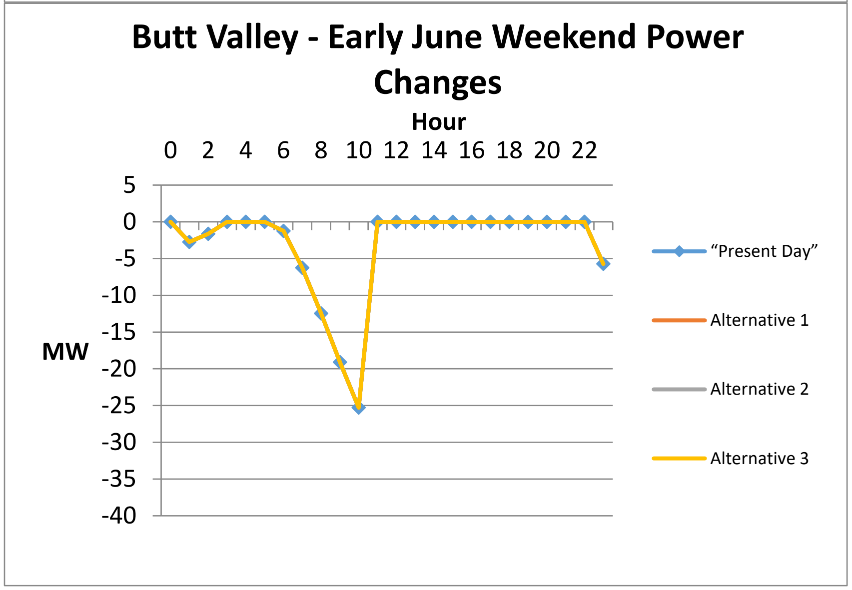
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max



Butt Valley - Early June Weekend Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
5
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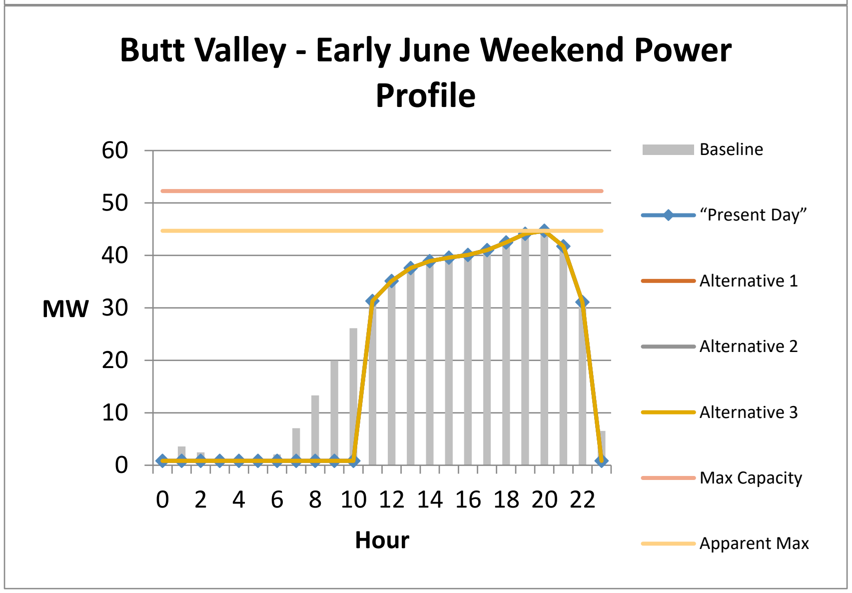
-30
-35
-40
MW
"Present Day"
Alternative 1
Alternative 2
Alternative 3



Butt Valley - Early June Weekend Power Profile
60
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40
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20
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MW
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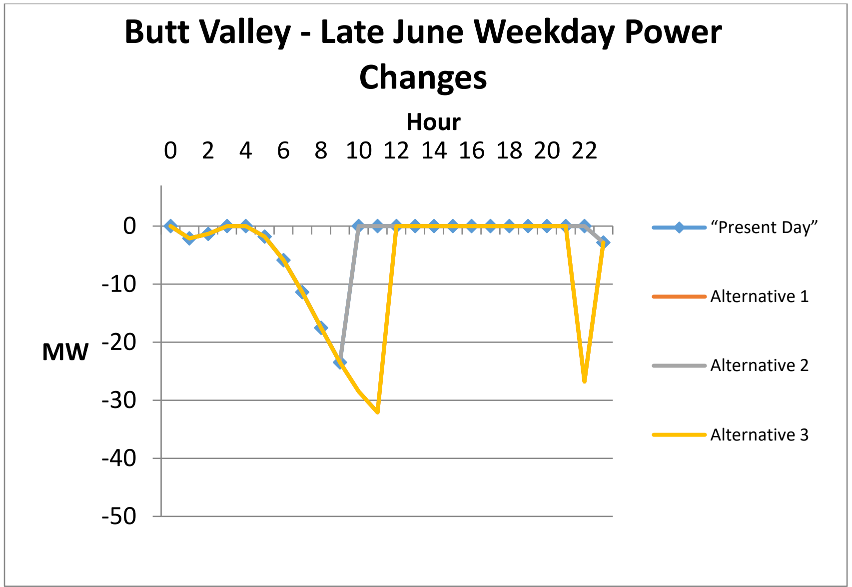
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Butt Valley - Late June Weekday Power Changes
Hour
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MW
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-20
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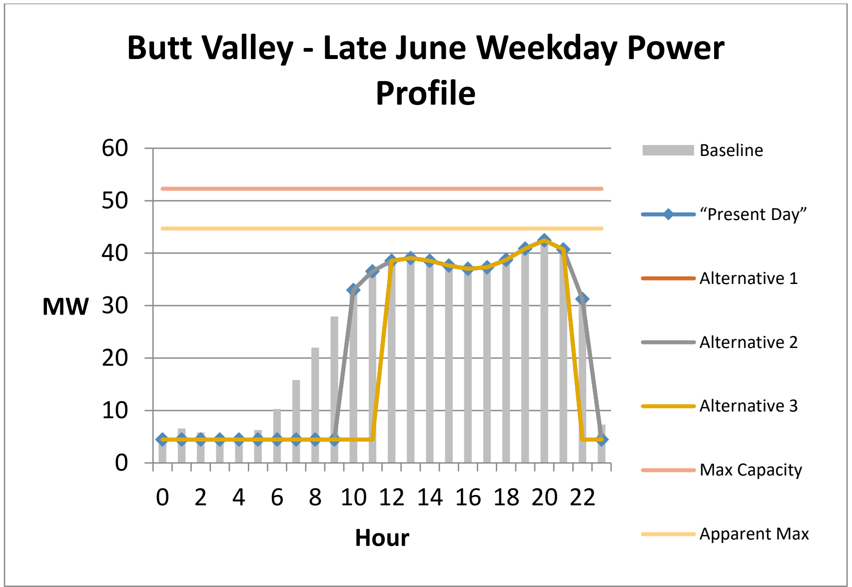
-40
-50
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Butt Valley - Late June Weekday Power Profile
MW
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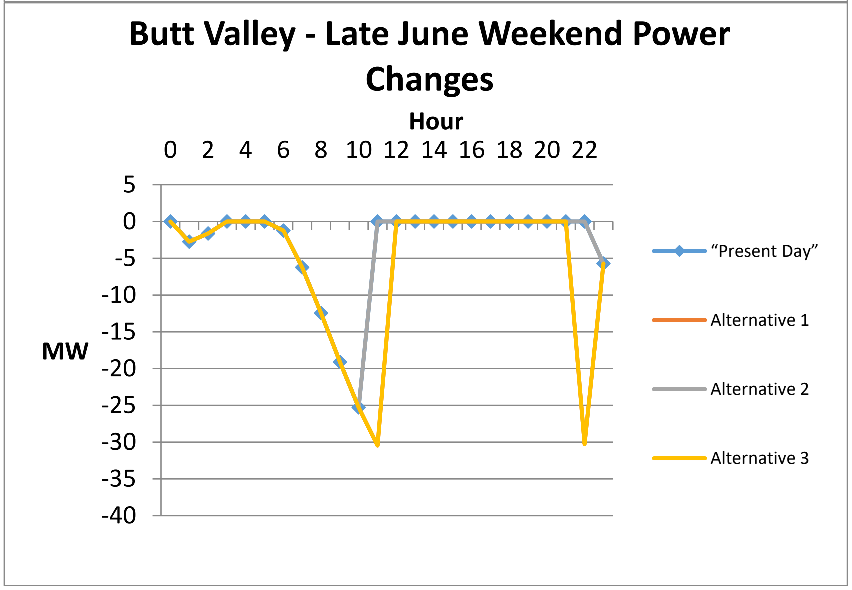
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Butt Valley - Late June Weekend Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
MW
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-25
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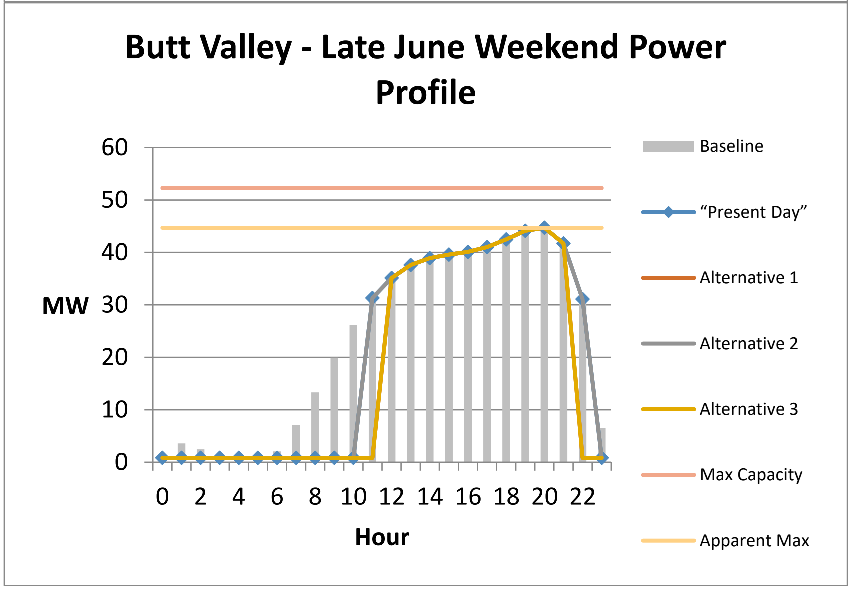
-40
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Butt Valley - Late June Weekend Power Profile
MW
60
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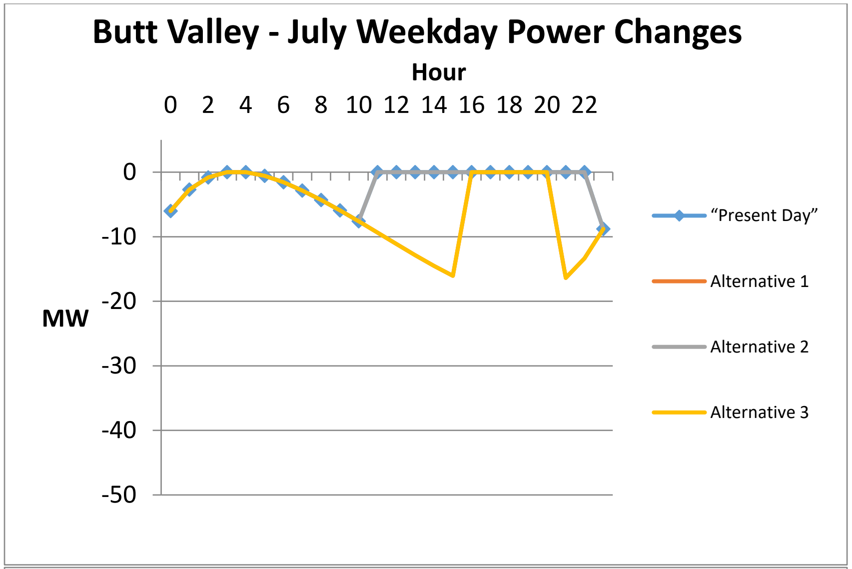
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Butt Valley - July Weekday Power Changes
Hour
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-10
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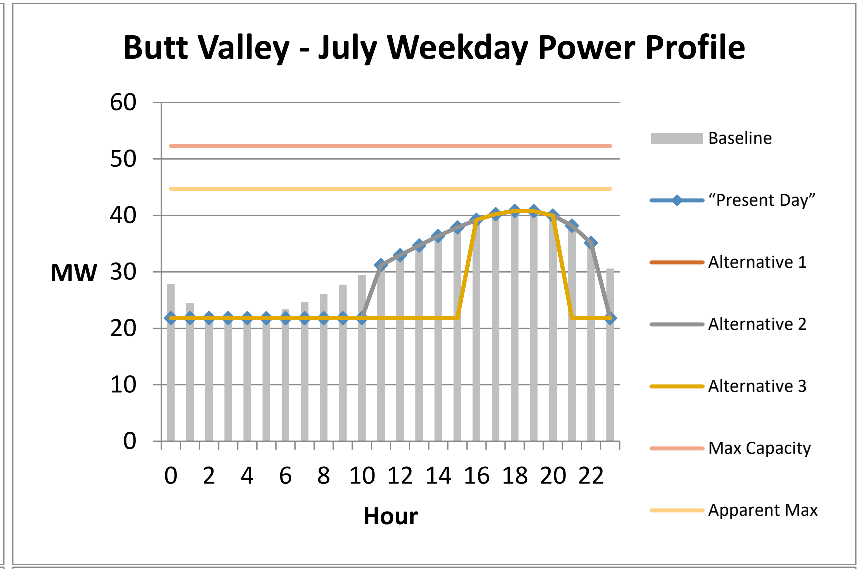
-30
-40
-50
MW
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Butt Valley - July Weekday Power Profile
60
50
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MW
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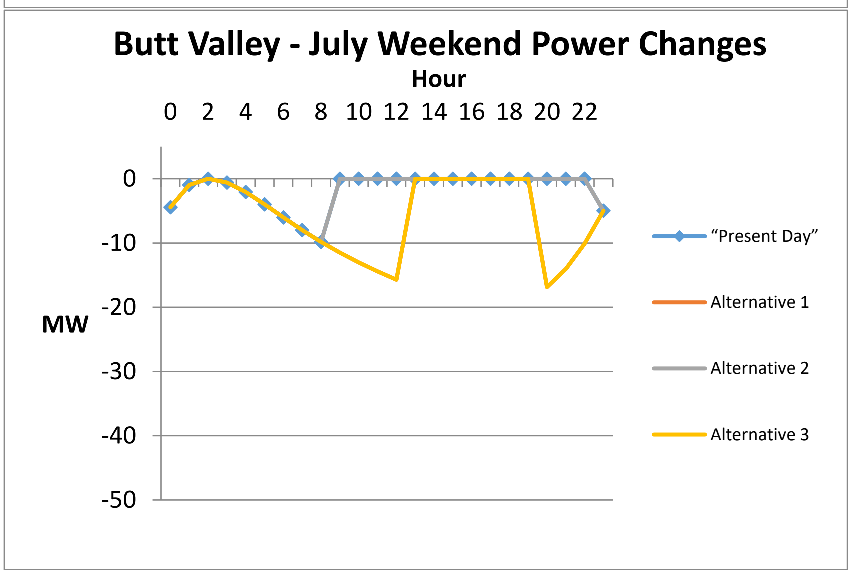
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Butt Valley - July Weekend Power Changes
Hour
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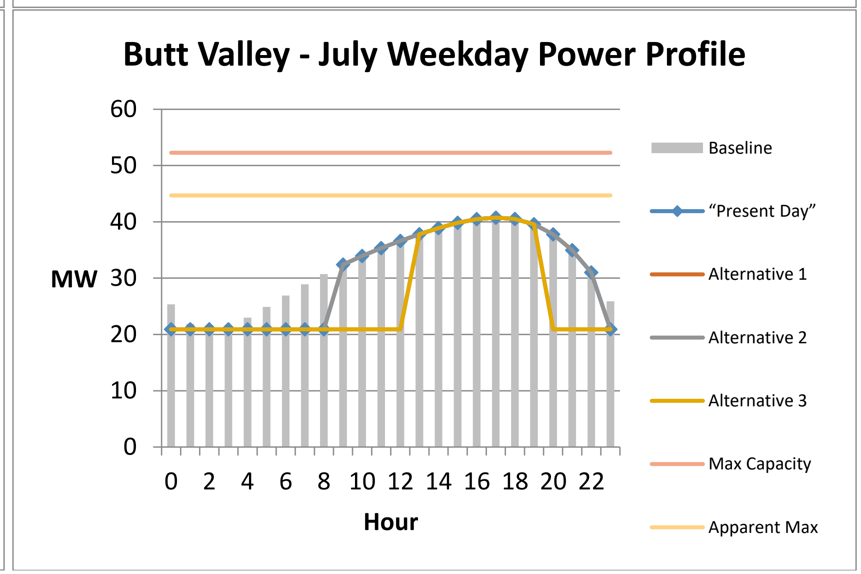
0
-10
-20
-30
-40
-50
MW
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Butt Valley - July Weekday Power Profile
60
50
40
30
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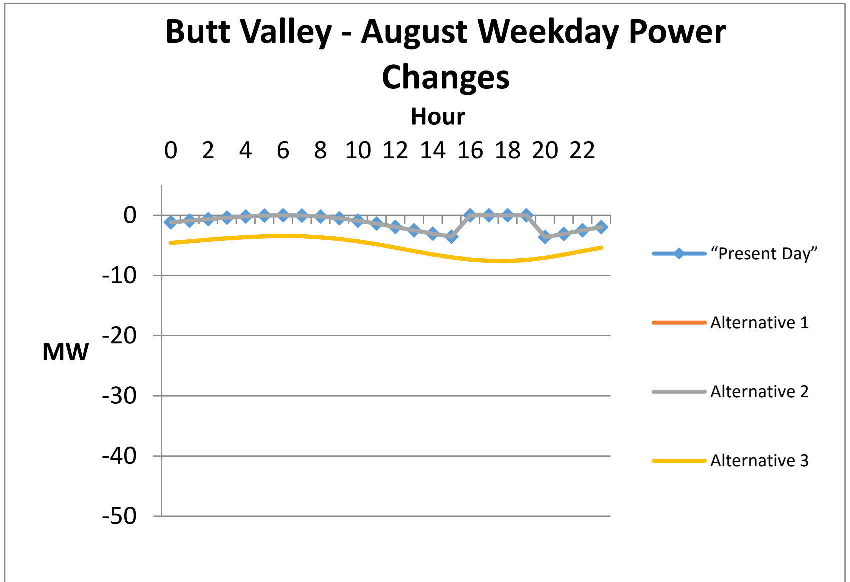
10
0
MW
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Butt Valley - August Weekday Power Changes
Hour
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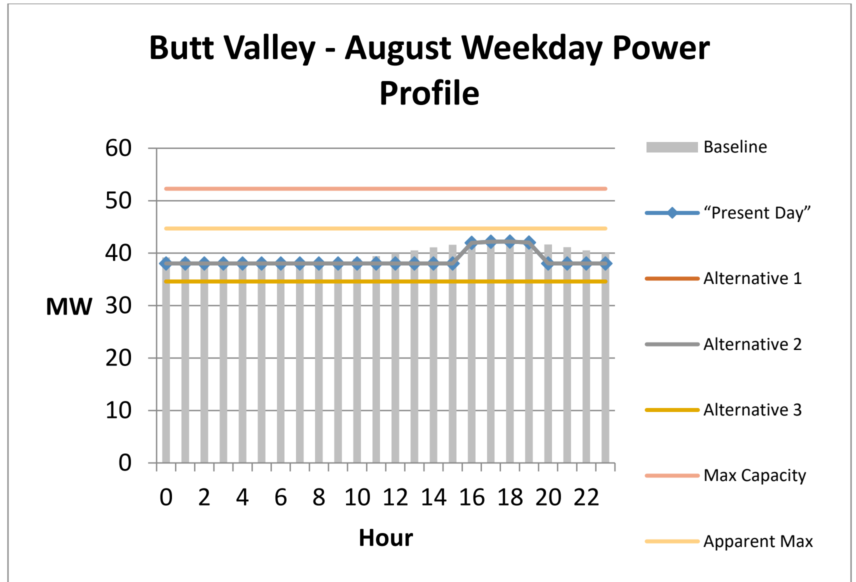
0
-10
-20
-30
-40
-50
MW
“Present Day”
Alternative 1
Alternative 2
Alternative 3


Butt Valley - August Weekday Power Profile
60
50
40
30
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10
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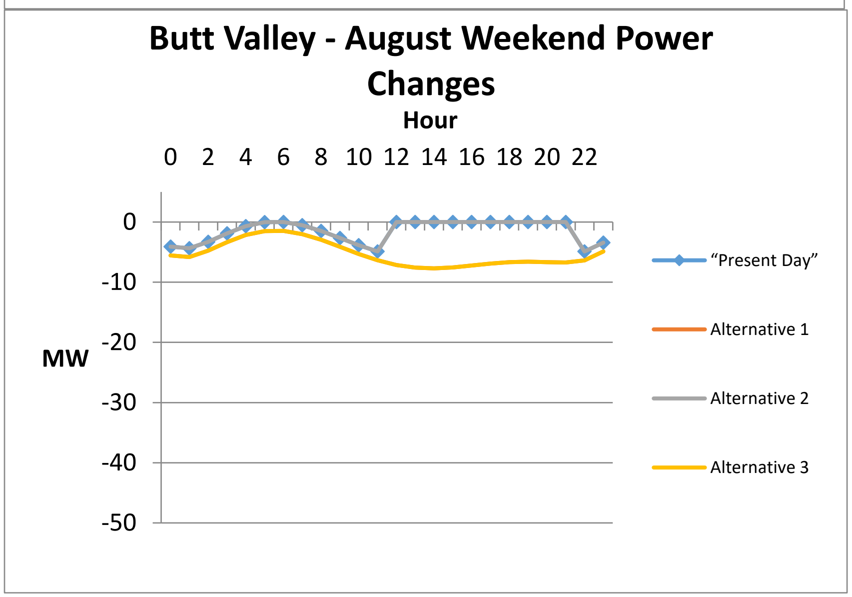
MW
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
“Present Day”
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Butt Valley - August Weekend Power Changes
Hour
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0
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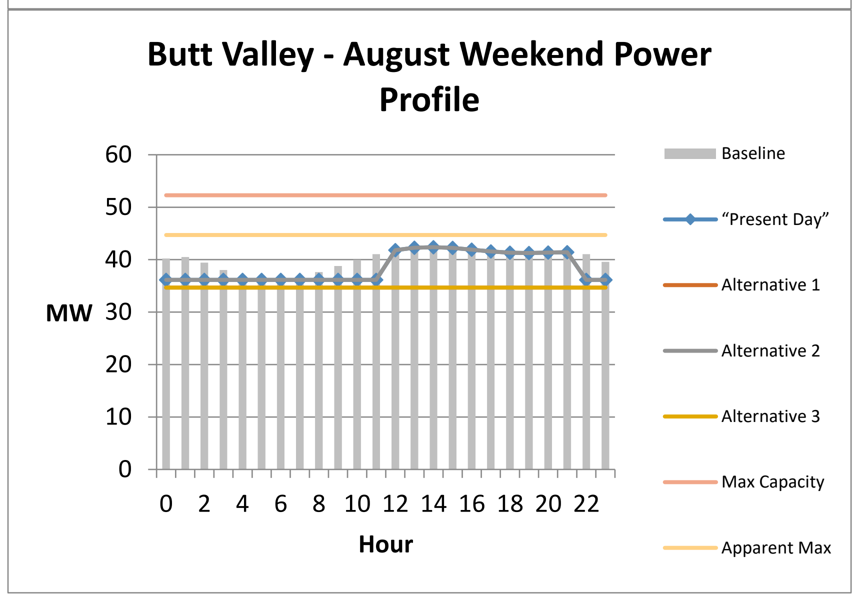
MW
“Present Day”
Alternative 1
Alternative 2
Alternative 3


Butt Valley - August Weekend Power Profile
60
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40
30
20
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MW
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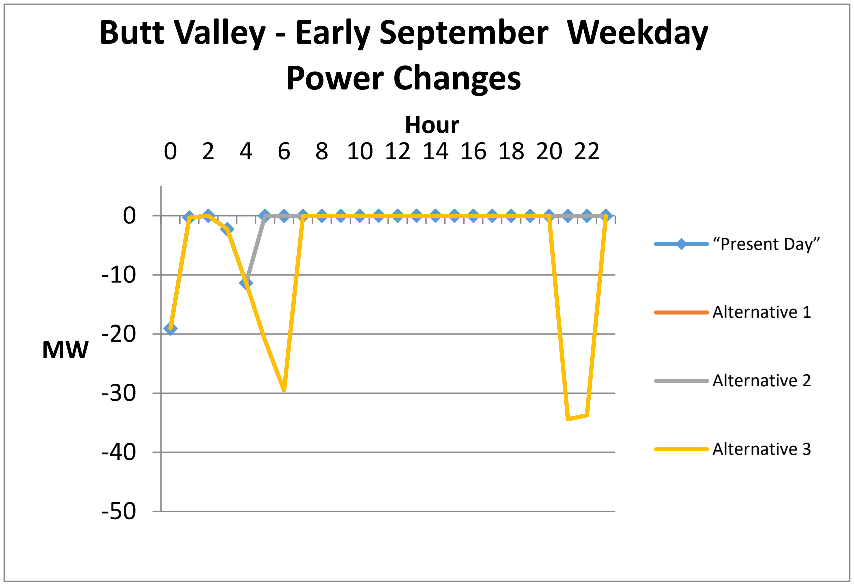
Hour
Baseline
“Present Day”
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Butt Valley - Early September Weekday Power Changes
Hour
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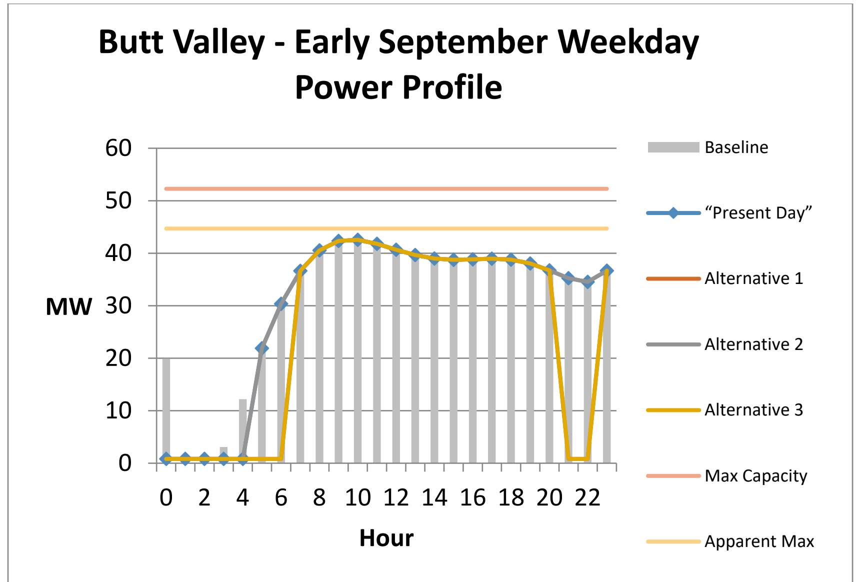
-50
MW
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Butt Valley - Early September Weekday Power Profile
60
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40
30
20
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MW
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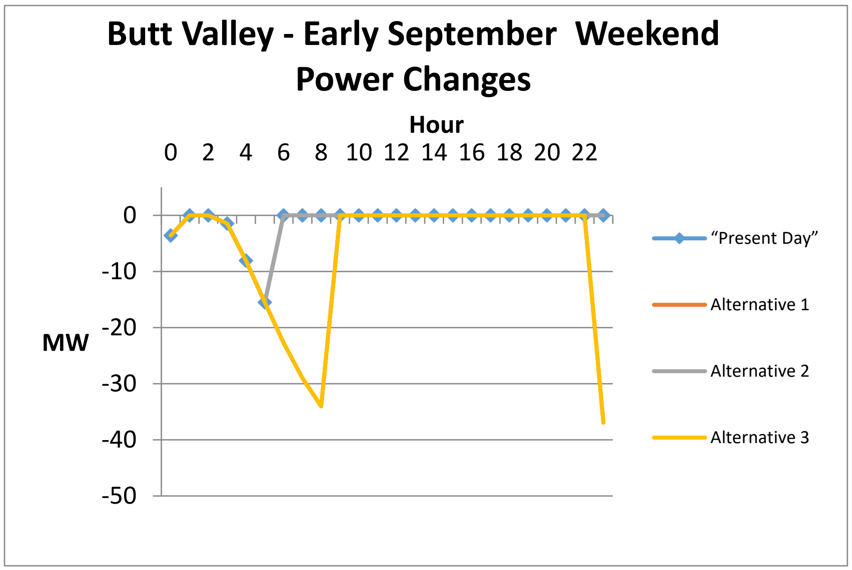
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Butt Valley - Early September Weekend Power Changes
Hour
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0
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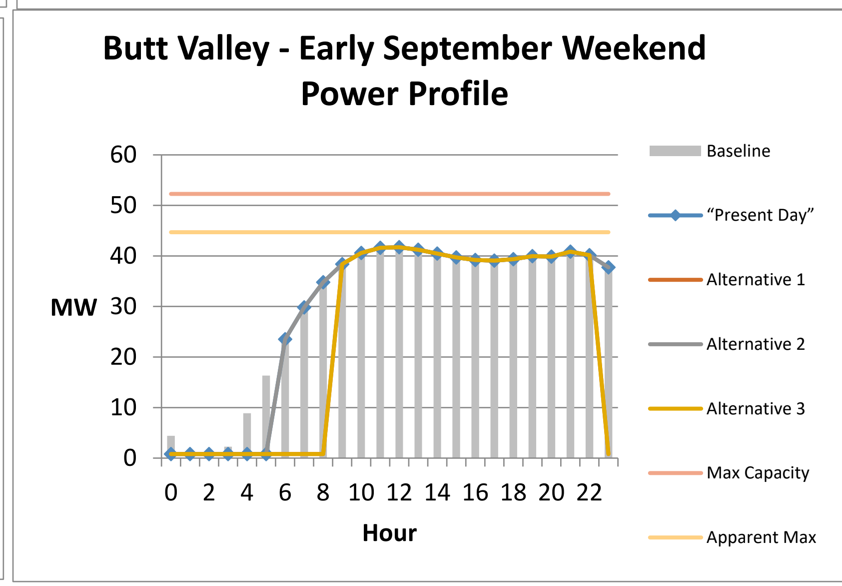
MW
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Butt Valley - Early September Weekend Power Profile
60
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MW
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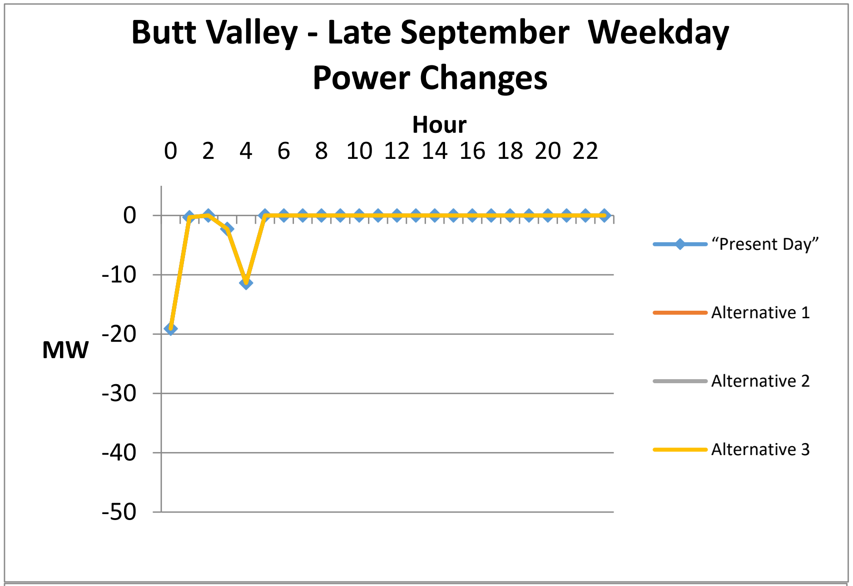
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Butt Valley - Late September Weekday
Power Changes
Hour
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MW
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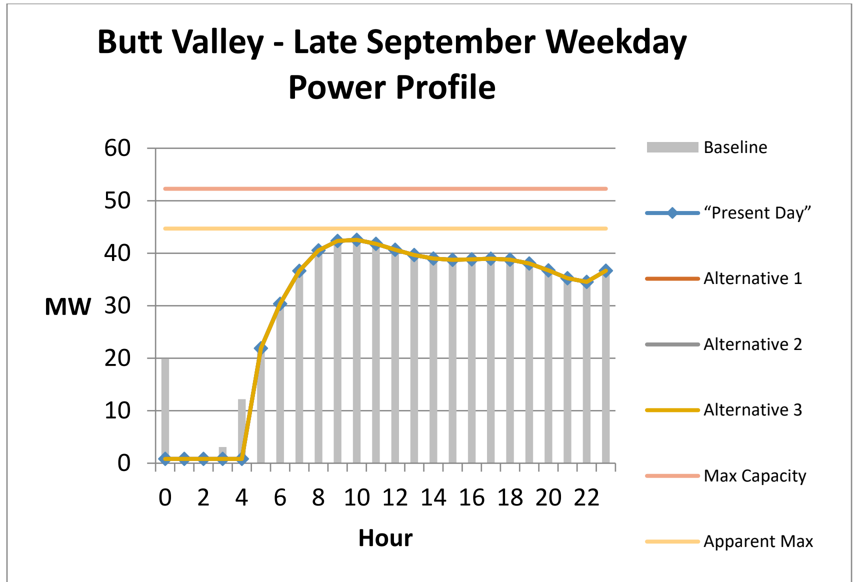
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Butt Valley - Late September Weekday
Power Profile
60
50
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MW 30
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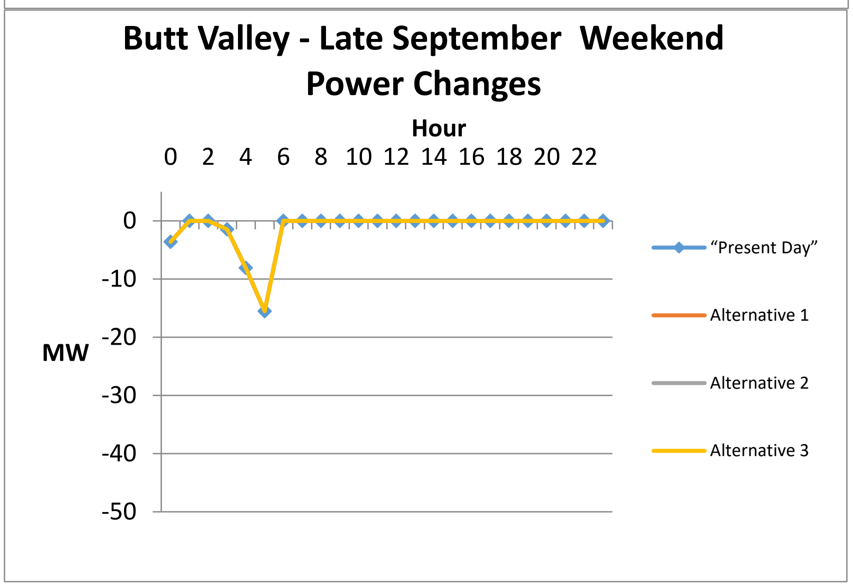
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Butt Valley - Late September Weekend
Power Changes
Hour
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MW
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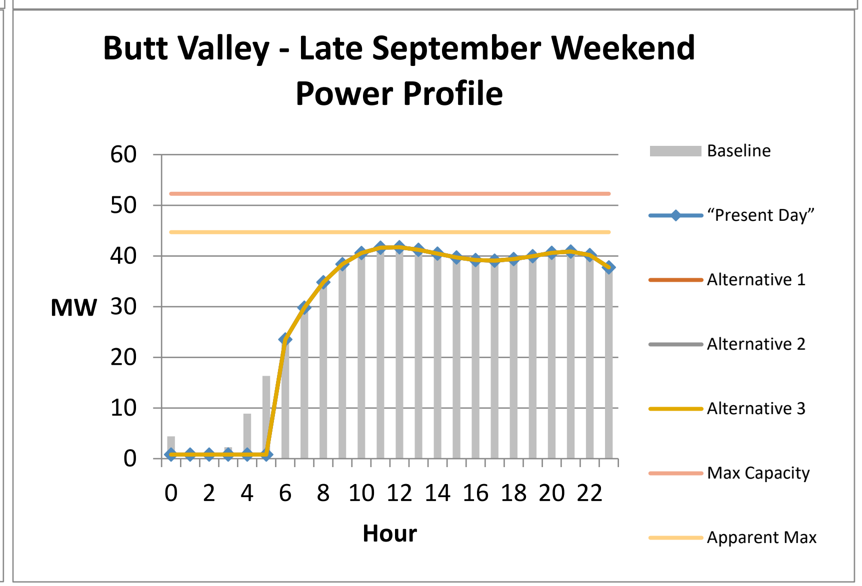
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Butt Valley - Late September Weekend
Power Profile
60
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40
MW 30
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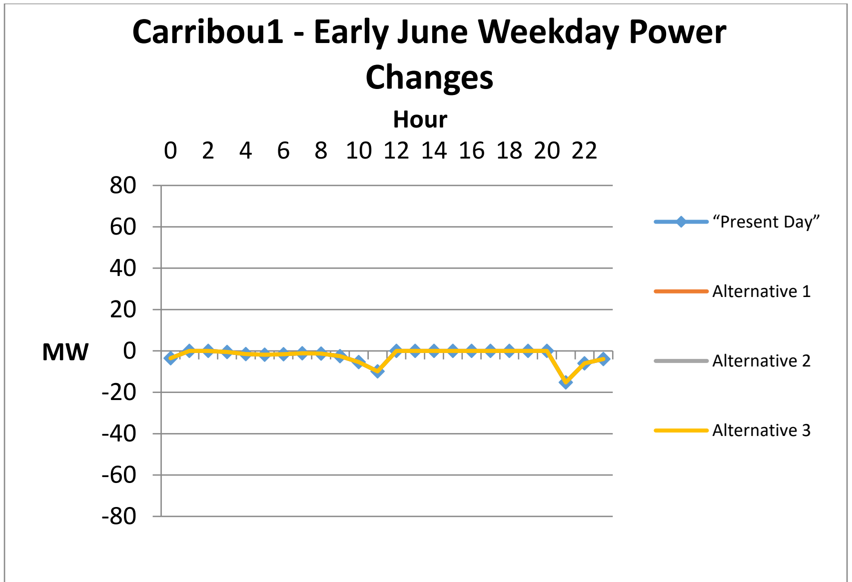
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Carribou1 - Early June Weekday Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
80
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40
20
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-20
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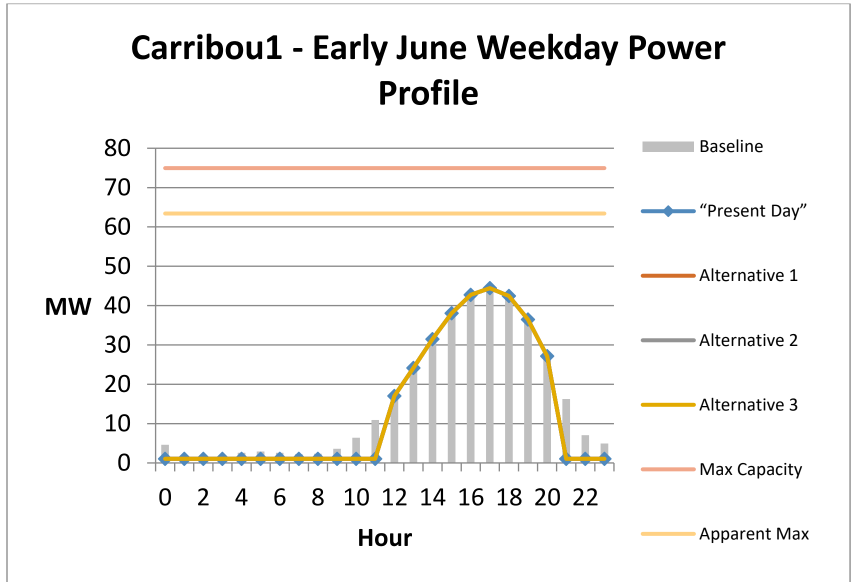
-80
MW
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou1 - Early June Weekday Power Profile
80
70
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30
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MW
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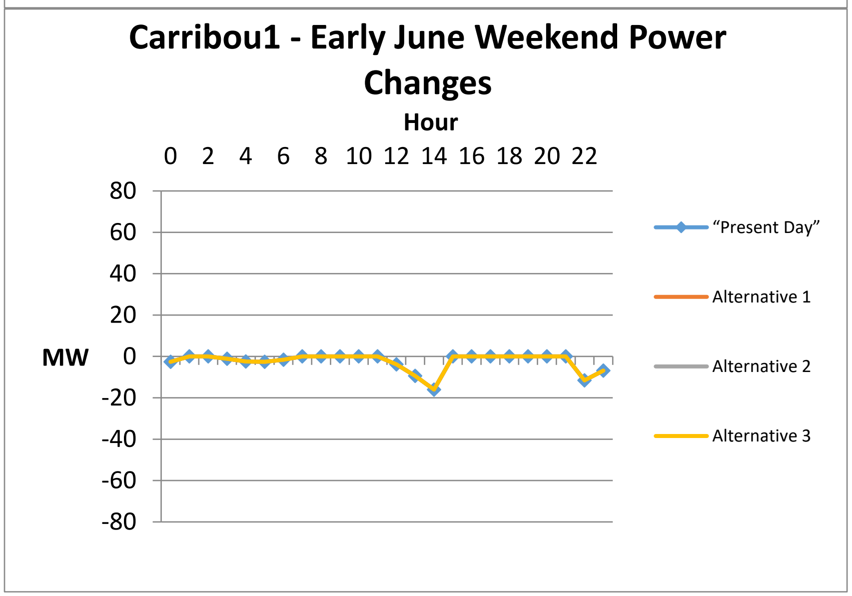
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Carribou1 - Early June Weekend Power Changes
Hour
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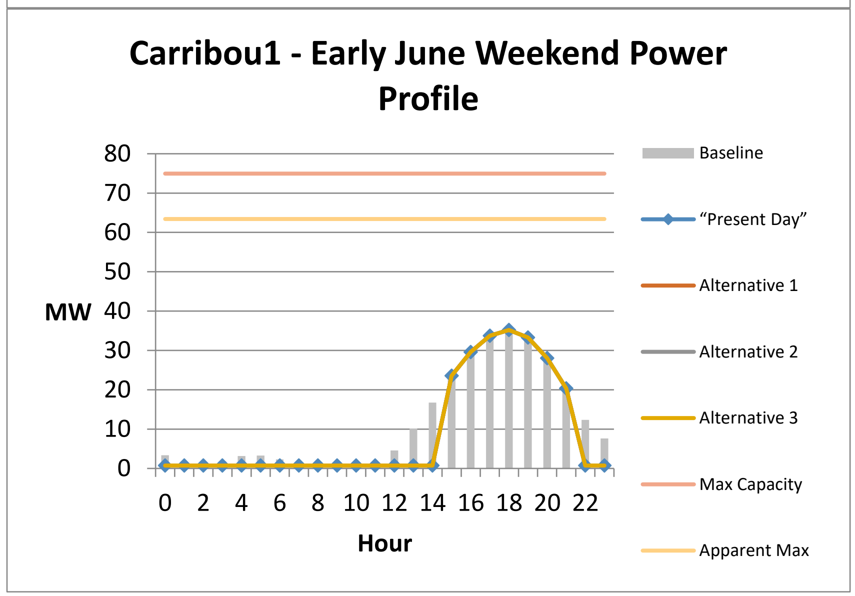
-80
MW
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou1 - Early June Weekend Power Profile
80
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MW
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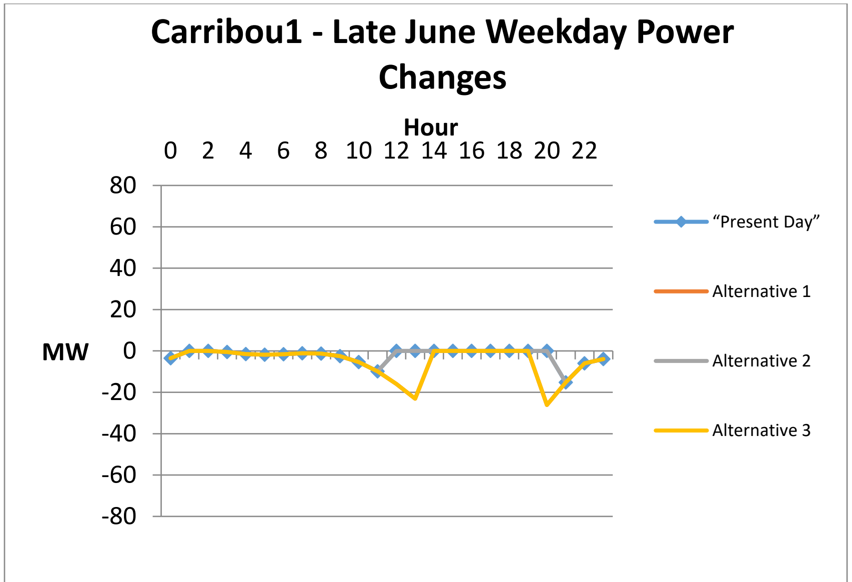
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Carribou1 - Late June Weekday Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
80
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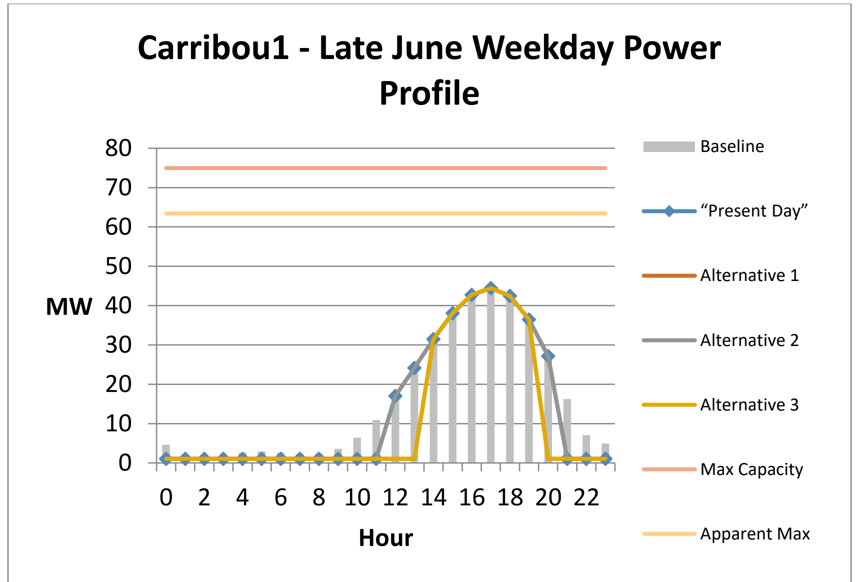
MW
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou1 - Late June Weekday Power Profile
80
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MW
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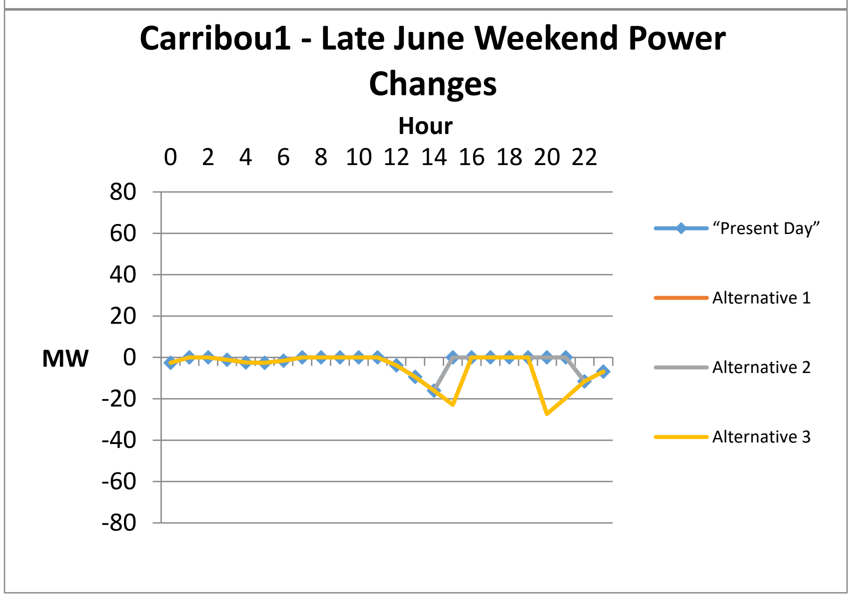
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Carribou1 - Late June Weekend Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
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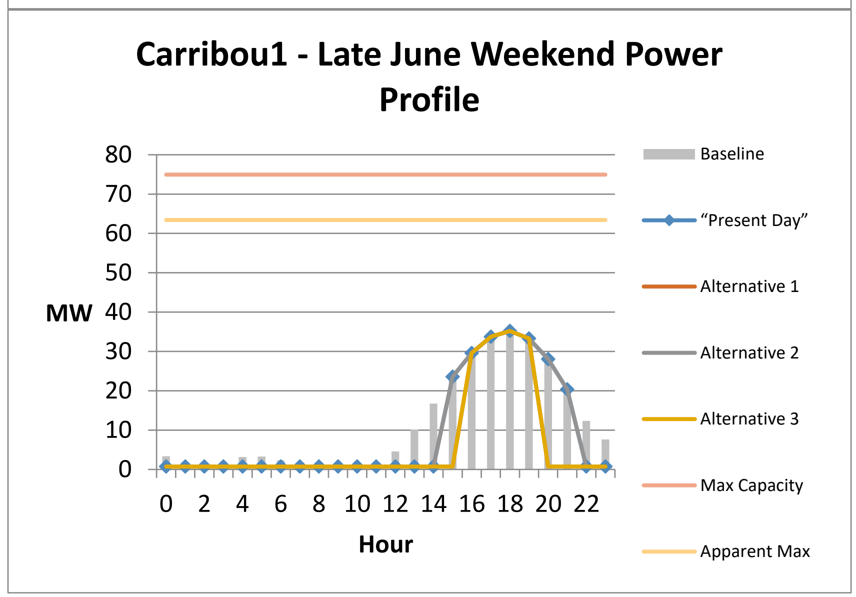
MW
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou1 - Late June Weekend Power Profile
80
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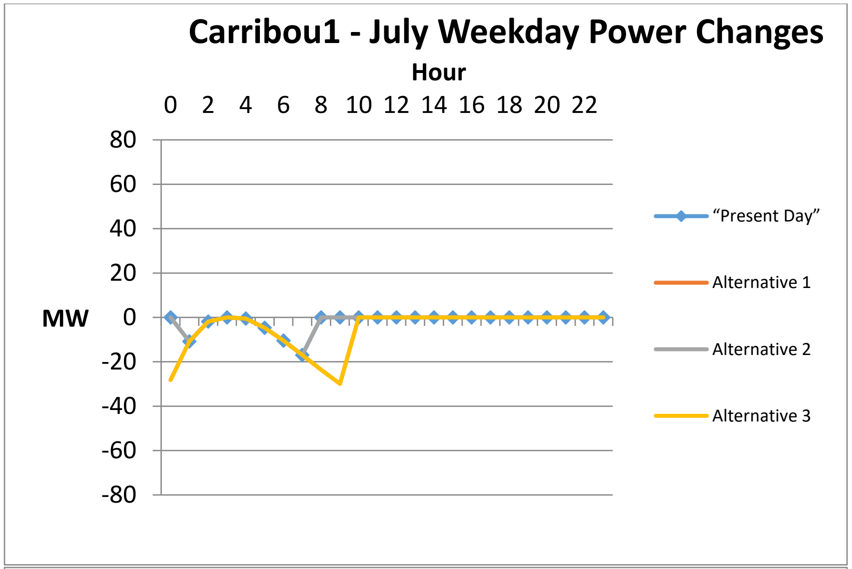
MW
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Carribou1 - July Weekday Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
80
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MW 0
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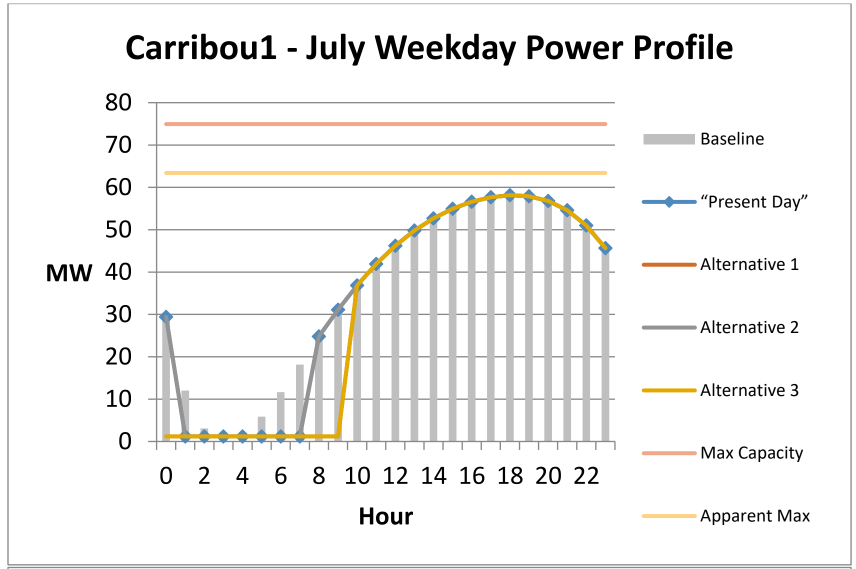
-60
-80
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou1 - July Weekday Power Profile
80
70
60
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MW 40
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20
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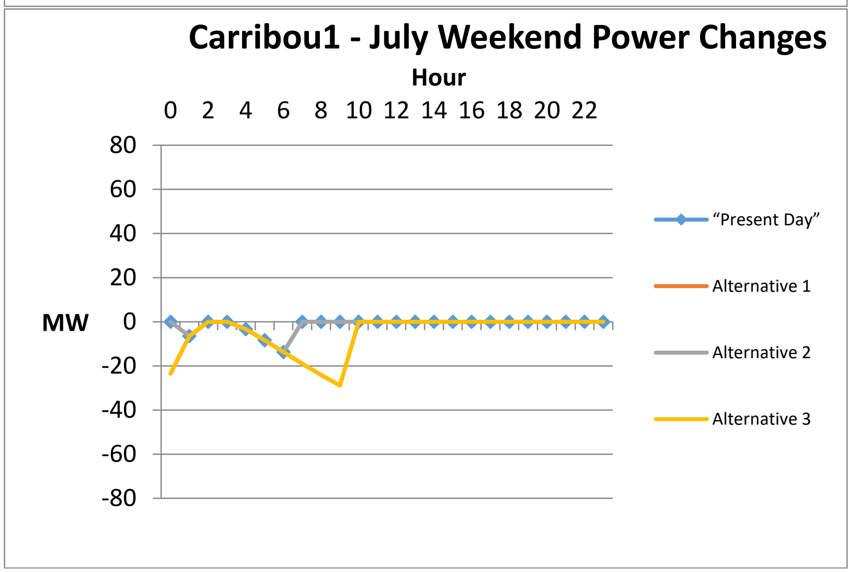
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Carribou1 - July Weekend Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
80
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MW 0
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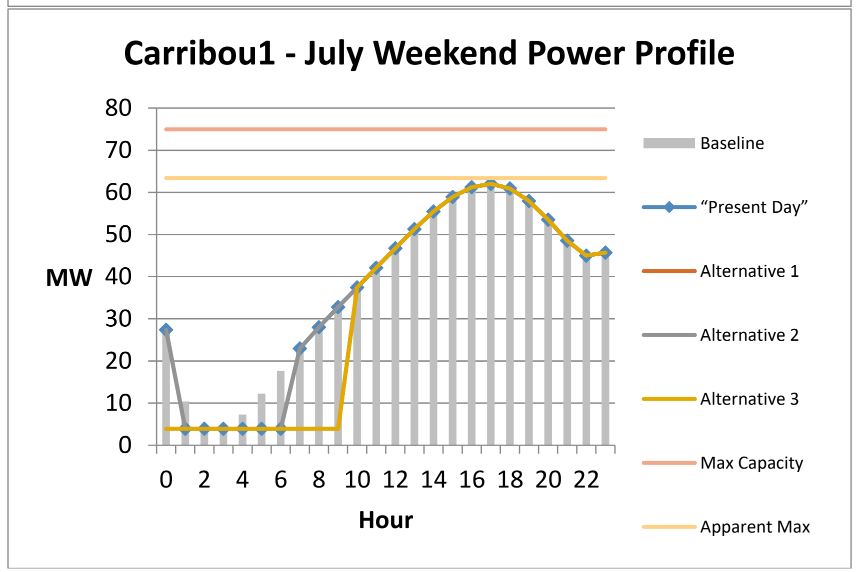
-80
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou1 - July Weekend Power Profile
80
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MW 40
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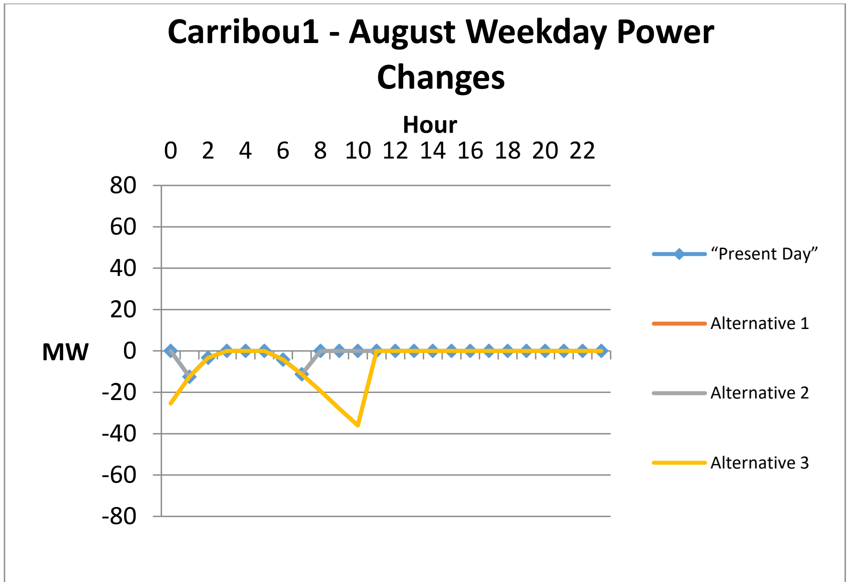
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Carribou1 - August Weekday Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
MW
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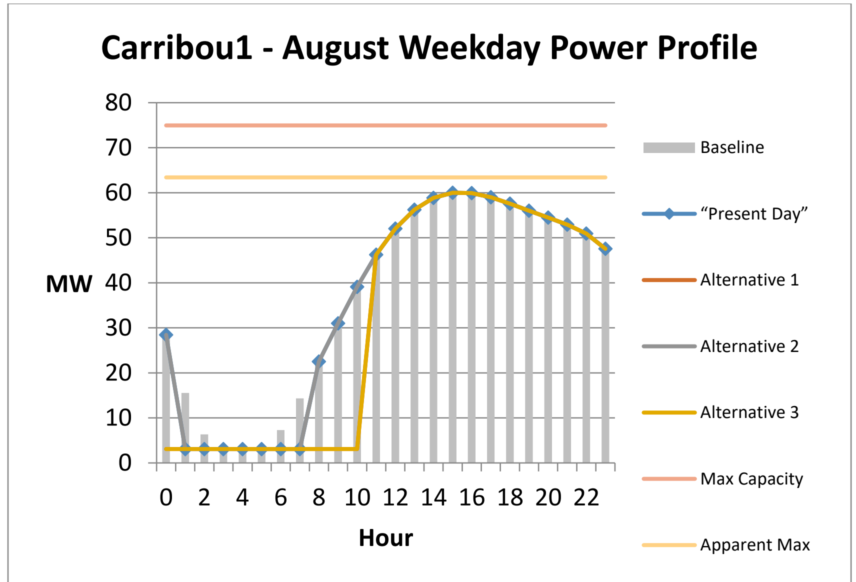
-80
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou1 - August Weekday Power Profile
MW
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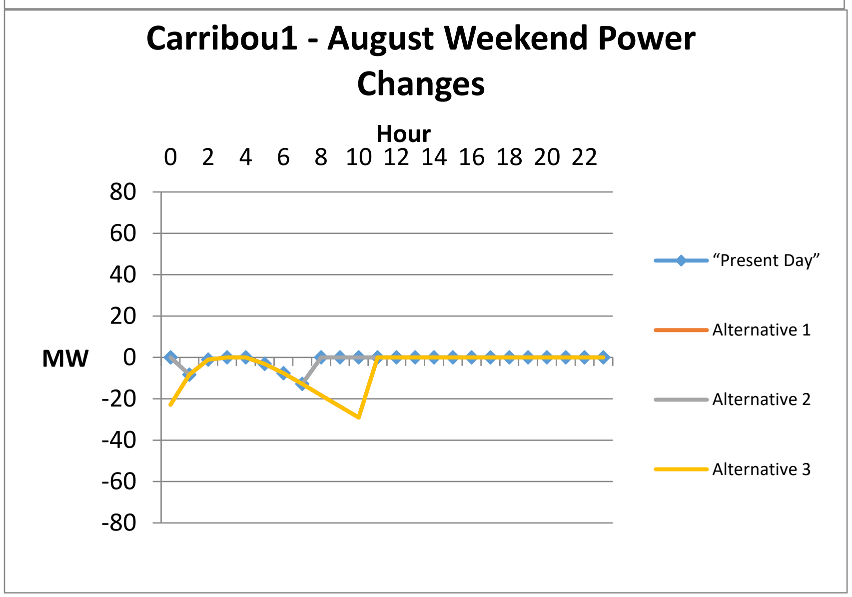
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Carribou1 - August Weekend Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
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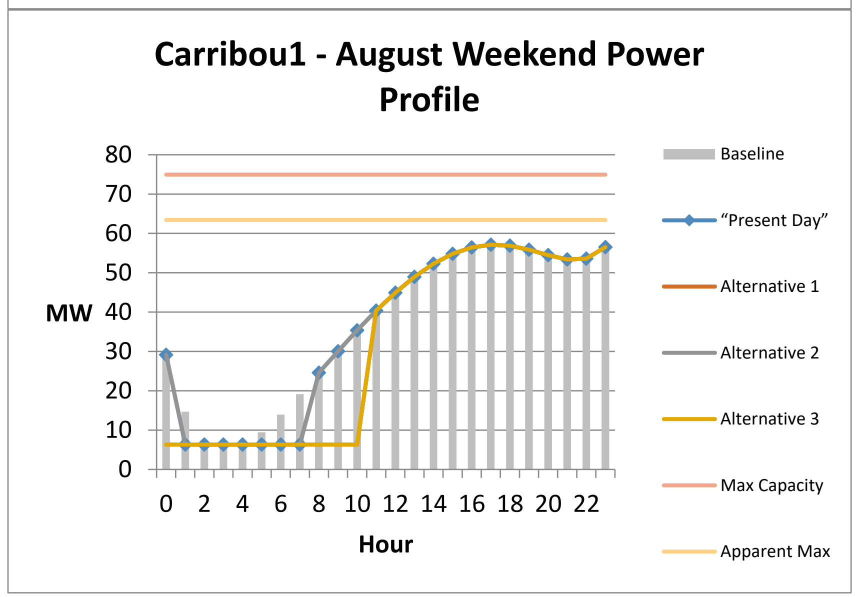
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou1 - August Weekend Power Profile
MW
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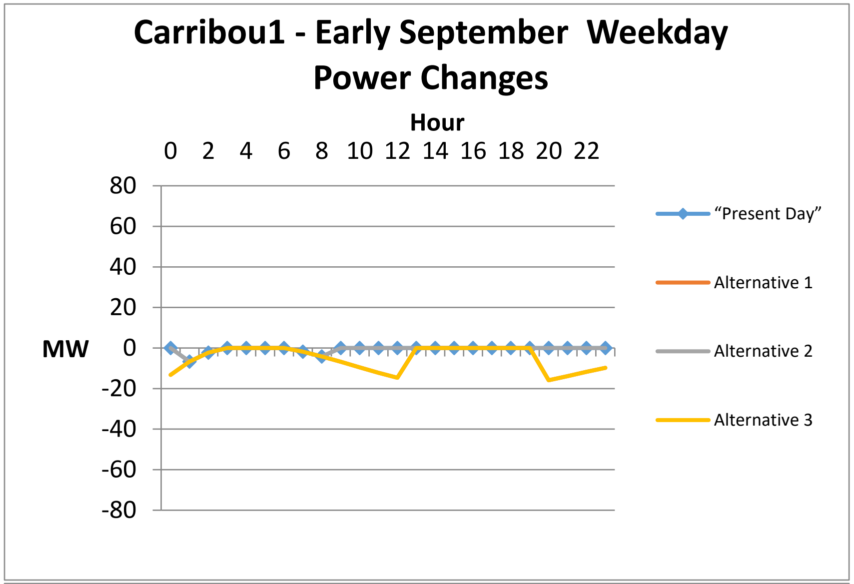
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Carribou1 - Early September Weekday Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
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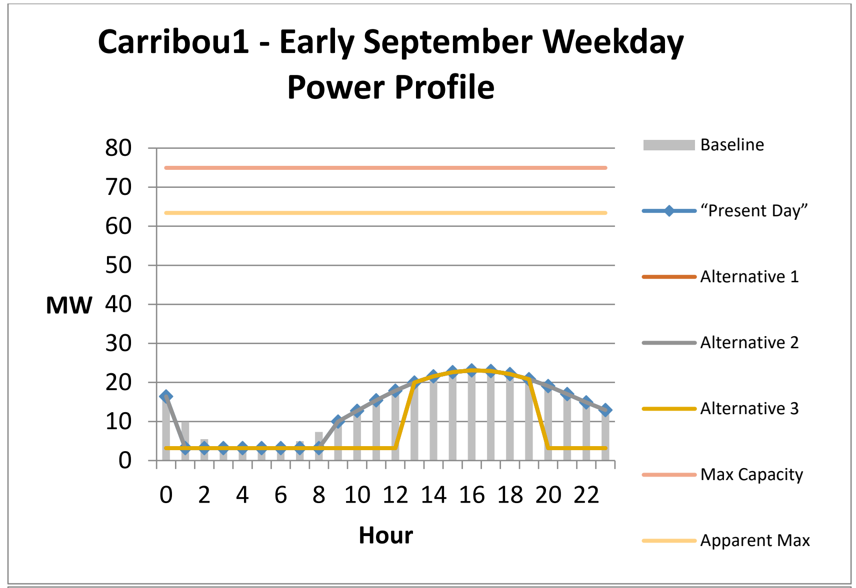
MW
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou1 - Early September Weekday Power Profile
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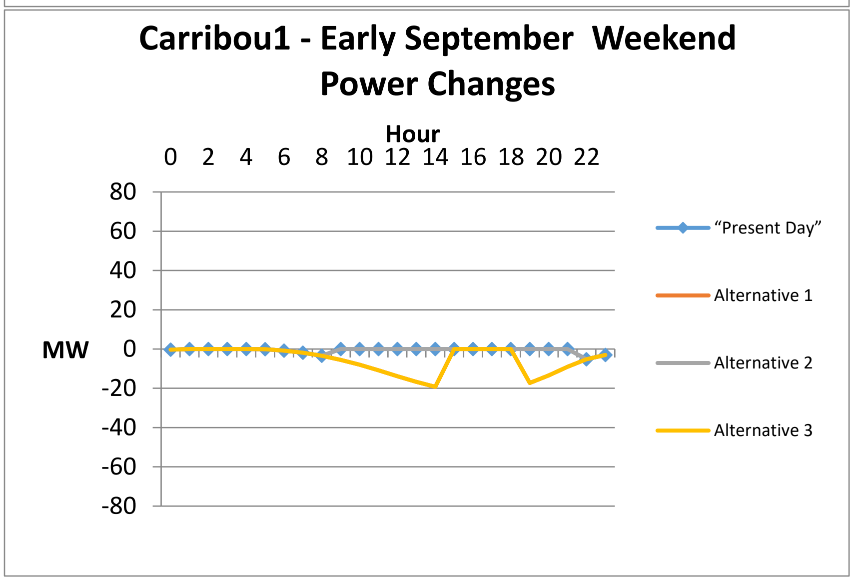
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Carribou1 - Early September Weekend Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
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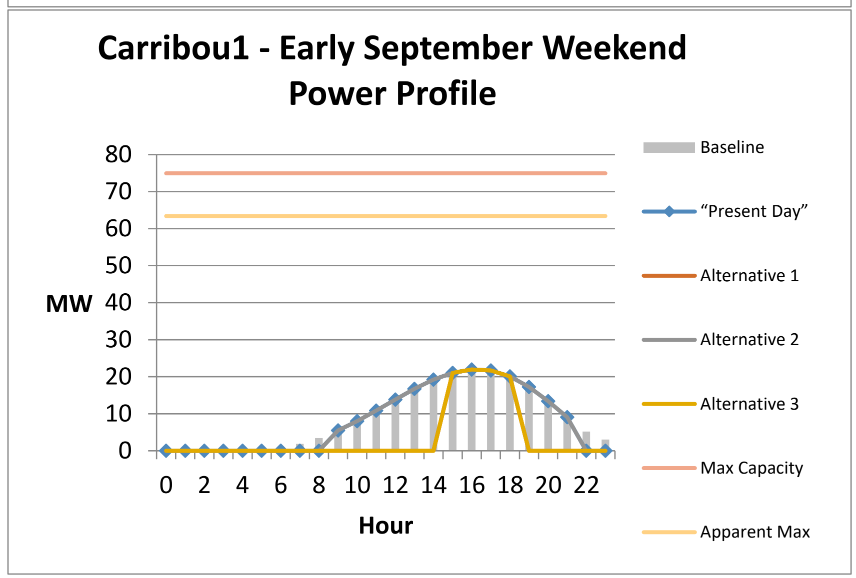
MW
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou1 - Early September Weekend Power Profile
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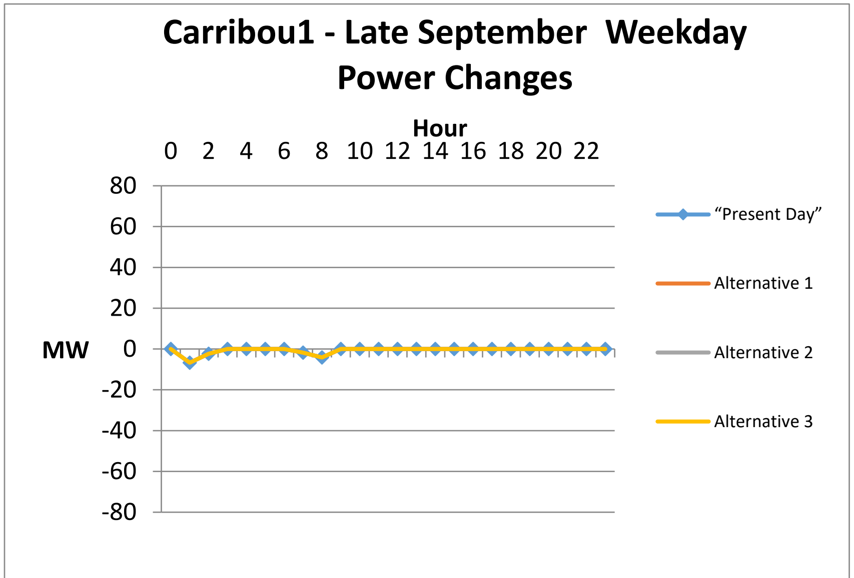
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Carribou1 - Late September Weekday Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
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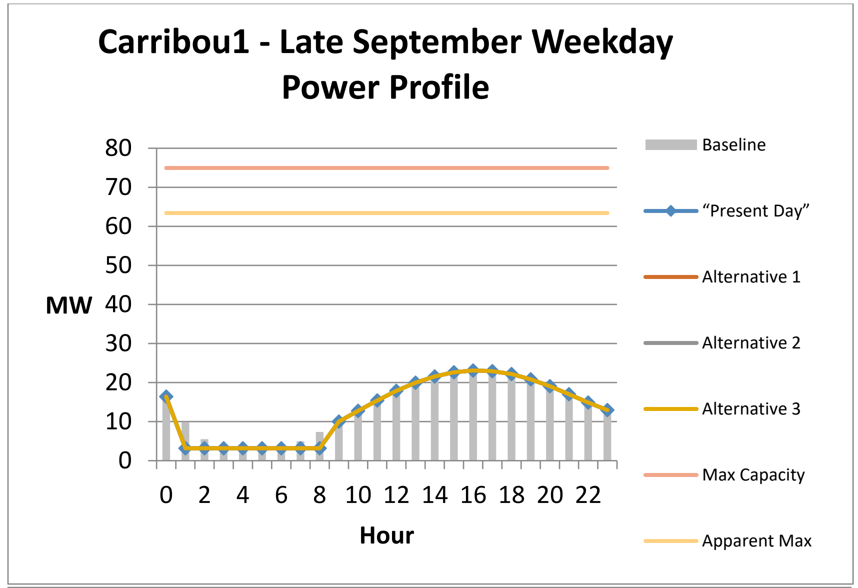
MW
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou1 - Late September Weekday Power Profile
80
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MW
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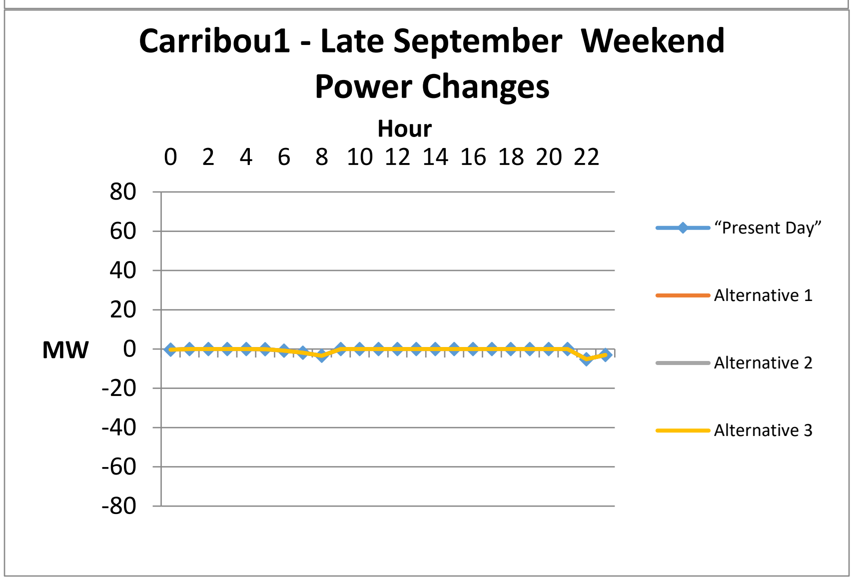
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Carribou1 - Late September Weekend Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
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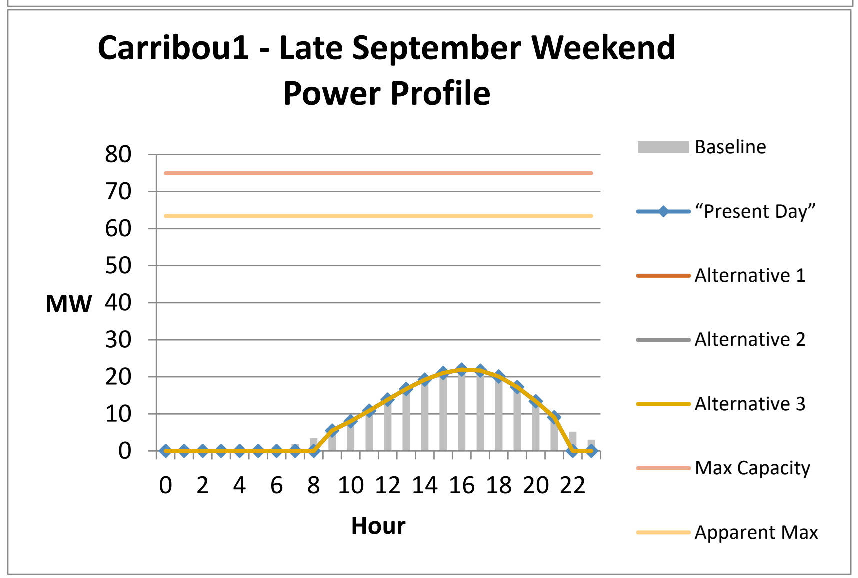
MW
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou1 - Late September Weekend Power Profile
80
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30
20
10
0
MW
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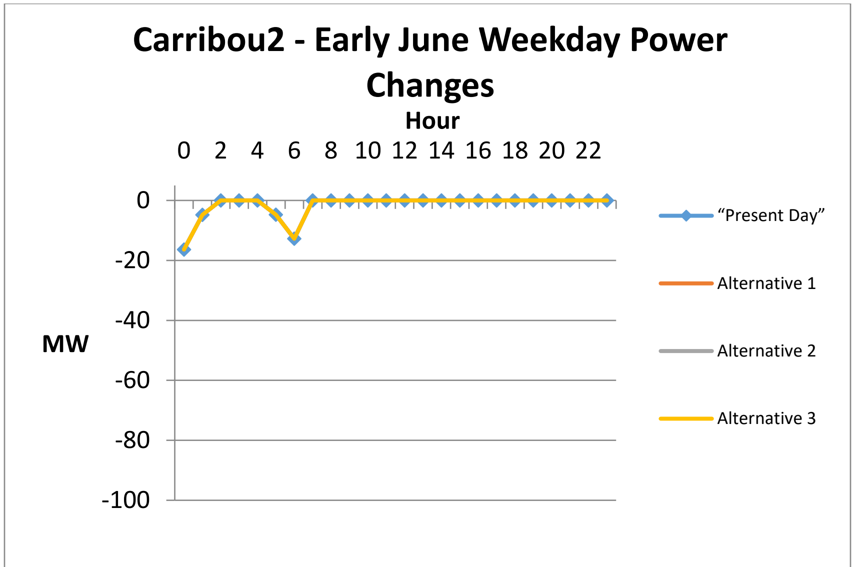
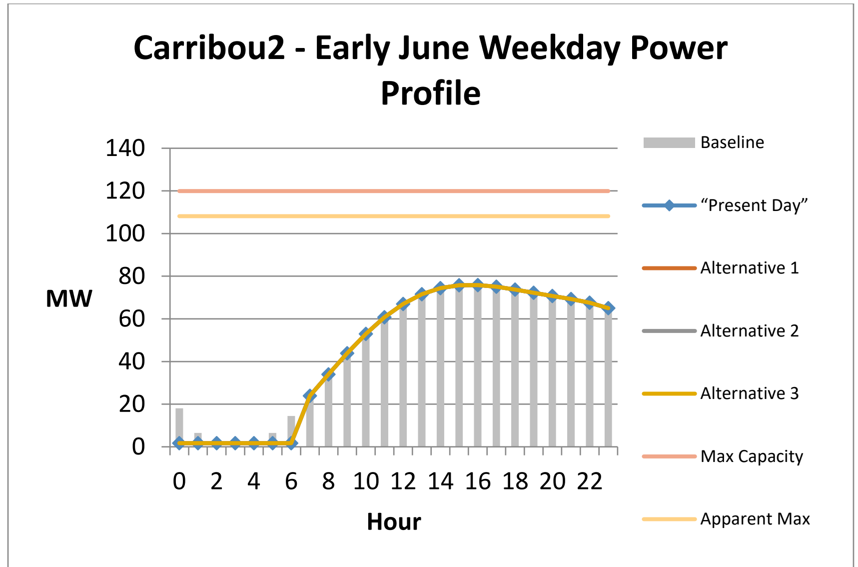
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max



Carribou2 - Early June Weekday Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
MW
0
-20
-40
-60
-80
-100
"Present Day"
Alternative 1
Alternative 2
Alternative 3



Carribou2 - Early June Weekday Power Profile
MW
140
120
100
80
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40
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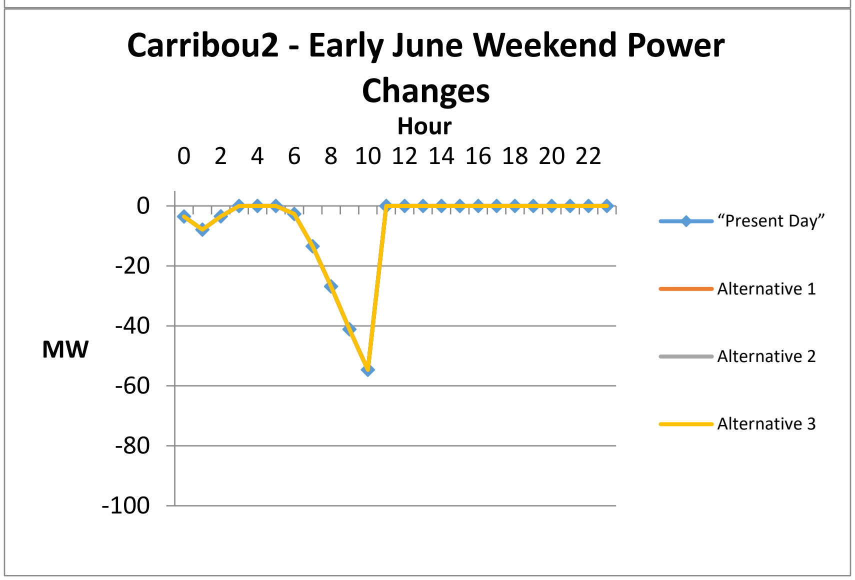
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max



Carribou2 - Early June Weekend Power Changes
Hour
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MW
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-40
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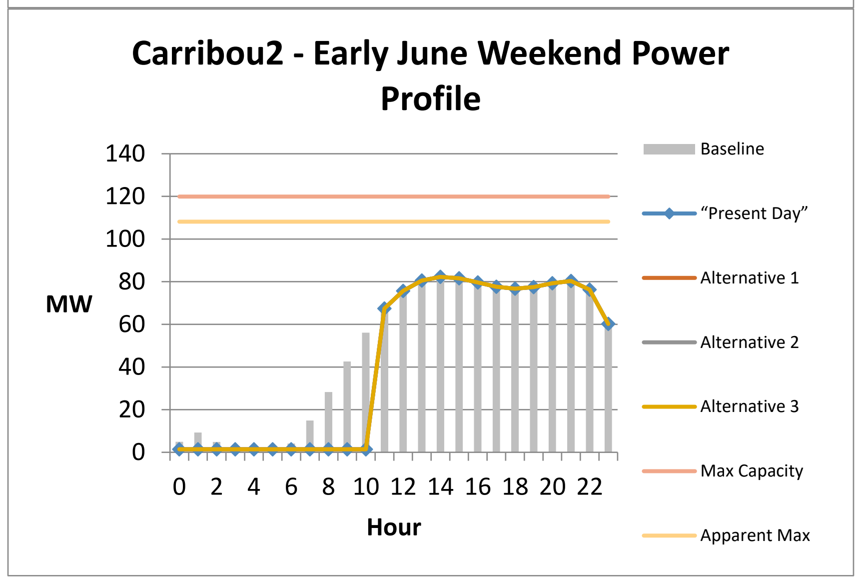
-100
"Present Day"
Alternative 1
Alternative 2
Alternative 3



Carribou2 - Early June Weekend Power Profile
MW
140
120
100
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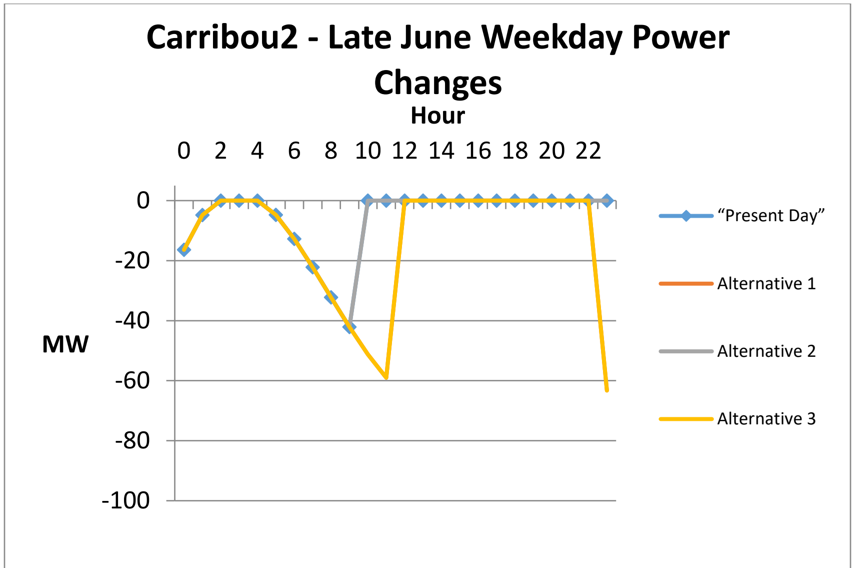
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Carribou2 - Late June Weekday Power Changes
Hour
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0
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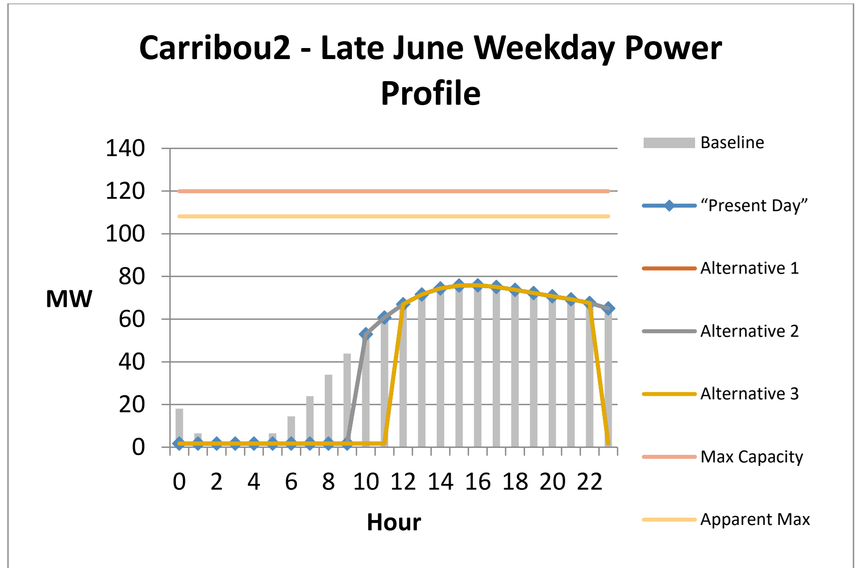
-80
-100
MW
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou2 - Late June Weekday Power Profile
140
120
100
80
60
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20
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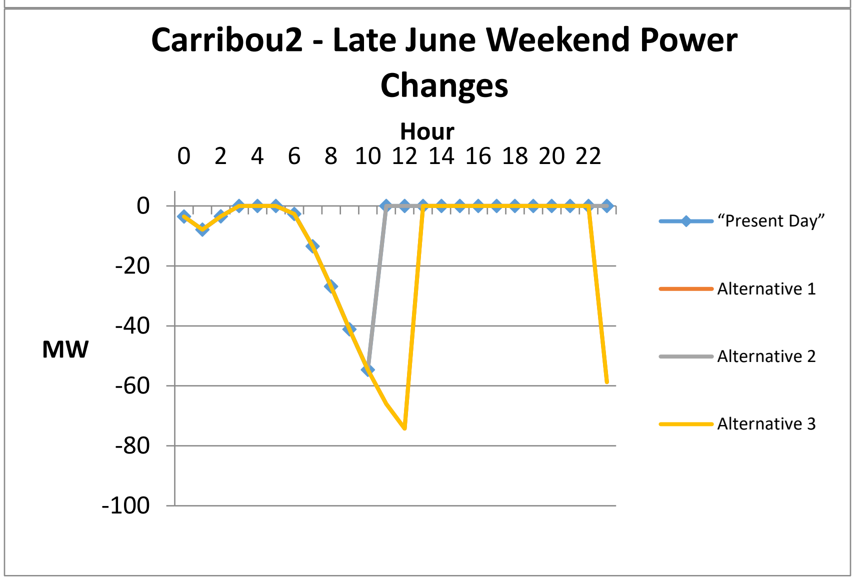
MW
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Carribou2 - Late June Weekend Power Changes
Hour
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0
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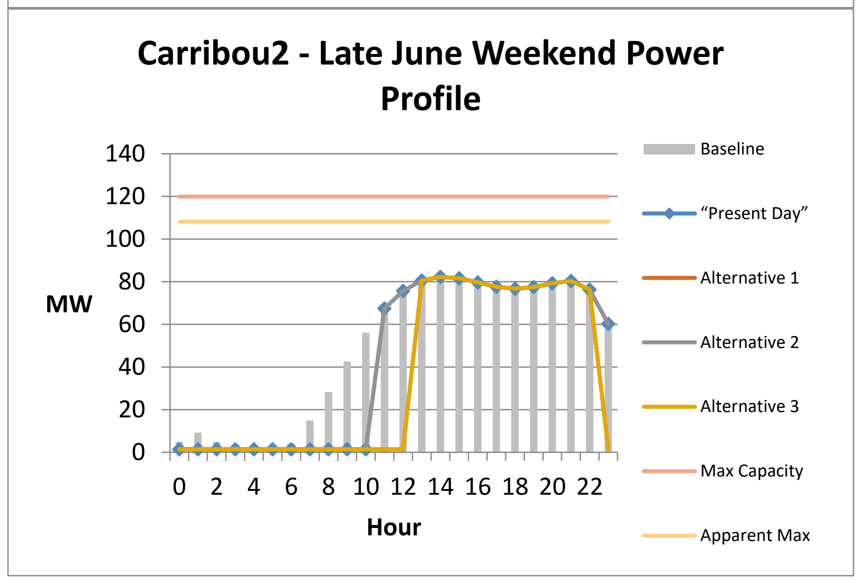
MW
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou2 - Late June Weekend Power Profile
140
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60
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MW
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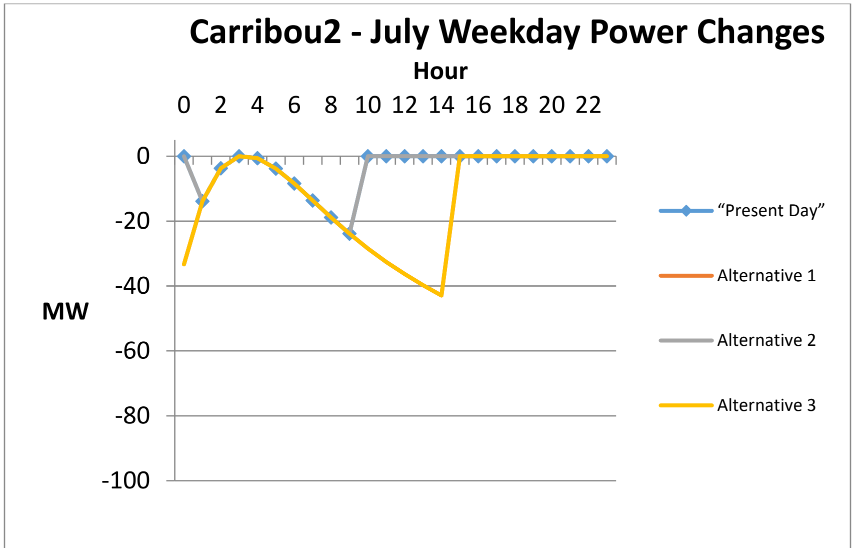
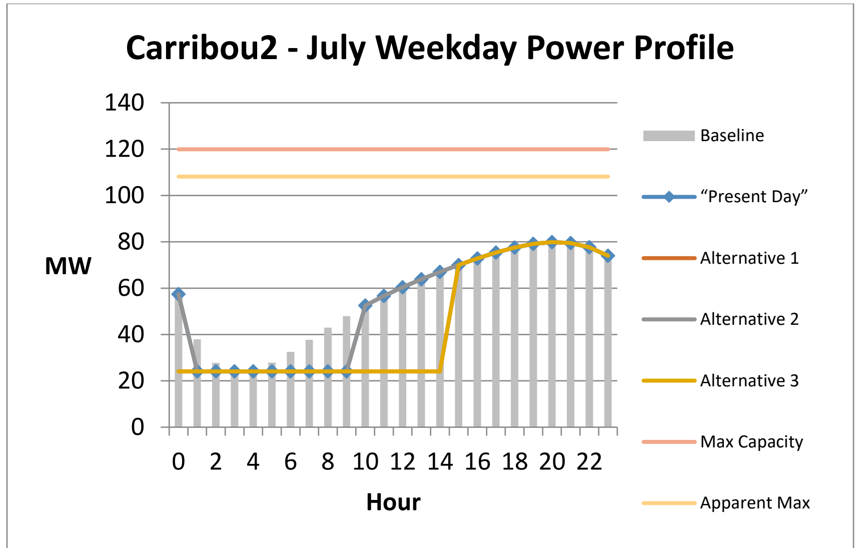
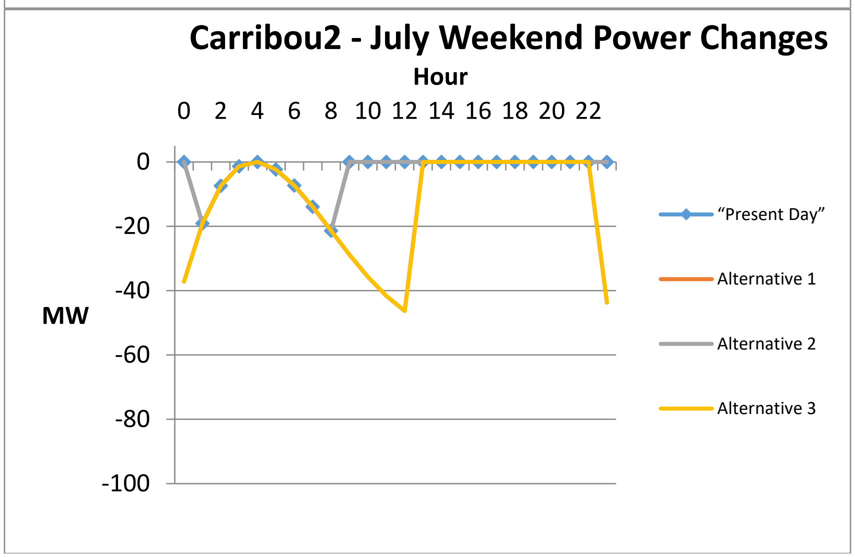
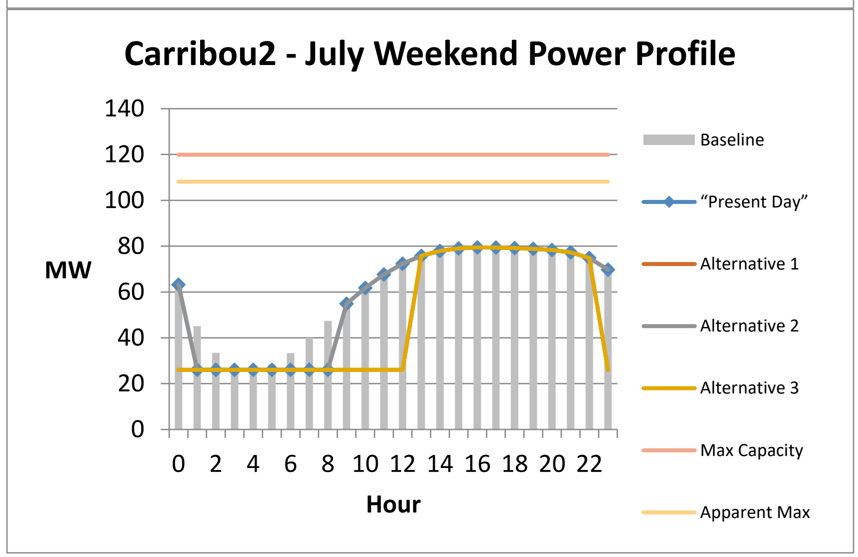
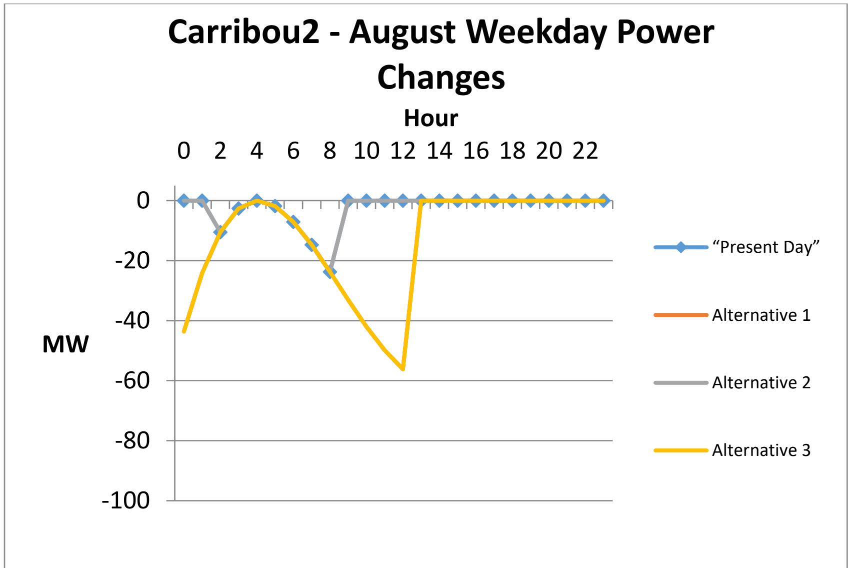
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max

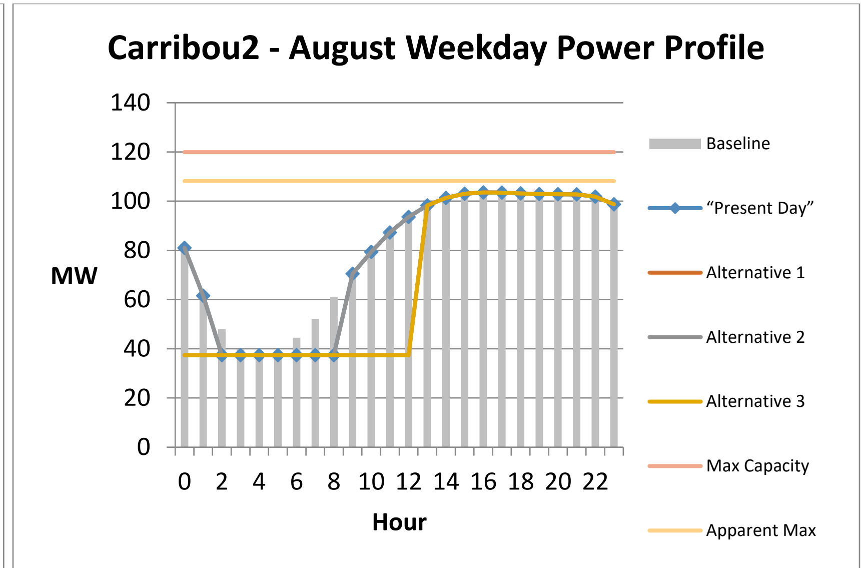

Carribou2 - July Weekday Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
0
-20
-40
-60
-80
-100
MW
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou2 - July Weekday Power Profile
140
120
100
80
60
40
20
0
MW
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Carribou2 - July Weekend Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
0
-20
-40
-60
-80
-100
MW
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou2 - July Weekend Power Profile
140
120
100
80
60
40
20
0
MW
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
Alternative 3
Max Capacity
Apparent Max


Carribou2 - August Weekday Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
0
-20
-40
-60
-80
-100
MW
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou2 - August Weekday Power Profile
140
120
100
80
60
40
20
0
MW
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
"Present Day"
Alternative 1
Alternative 2
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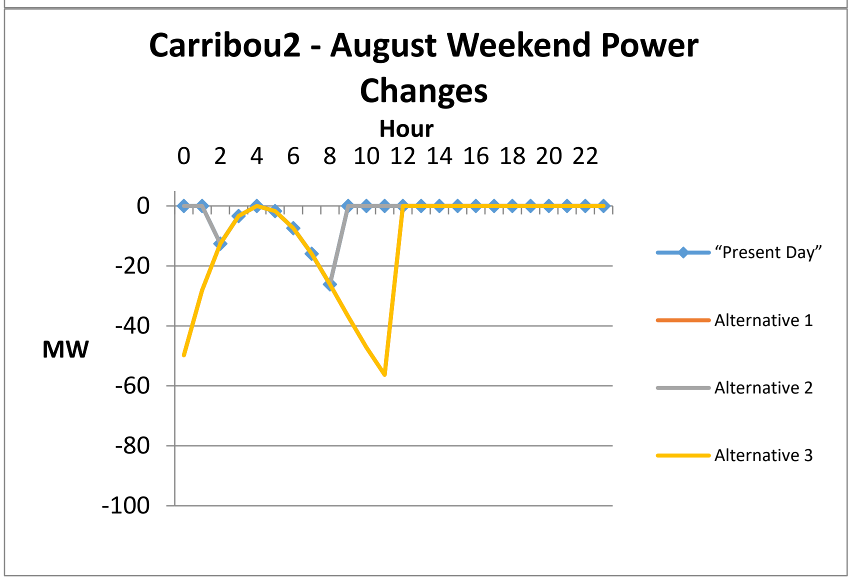
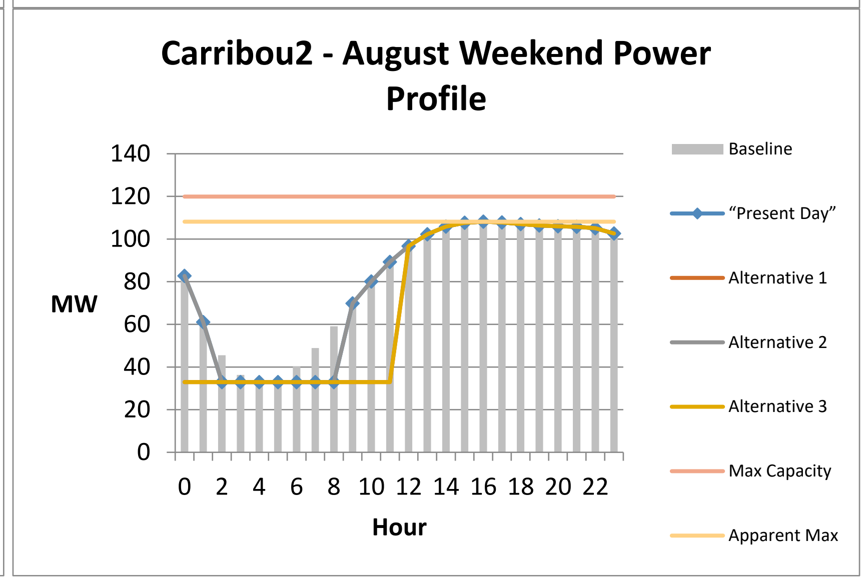
Apparent Max


Carribou2 - August Weekend Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
0
-20
-40
-60
-80
-100
MW
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou2 - August Weekend Power Profile
140
120
100
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20
0
MW
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
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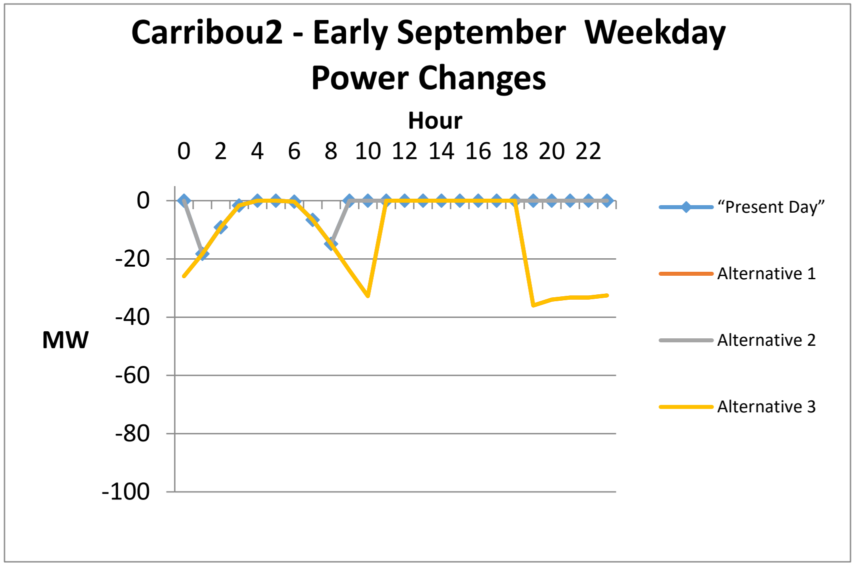
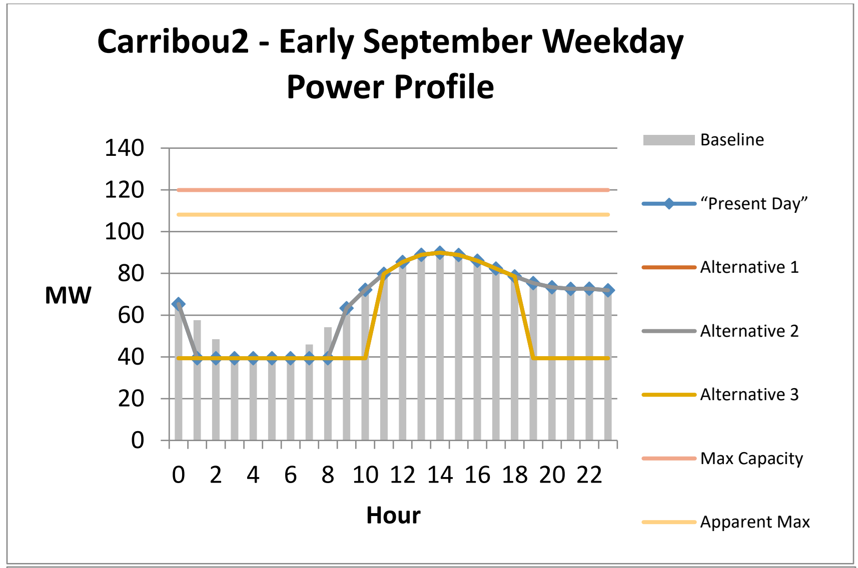

Carribou2 - Early September Weekday
Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
0
-20
-40
-60
-80
-100
MW
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou2 - Early September Weekday
Power Profile
140
120
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MW
0 2 4 6 8 10 12 14 16 18 20 22
Hour
Baseline
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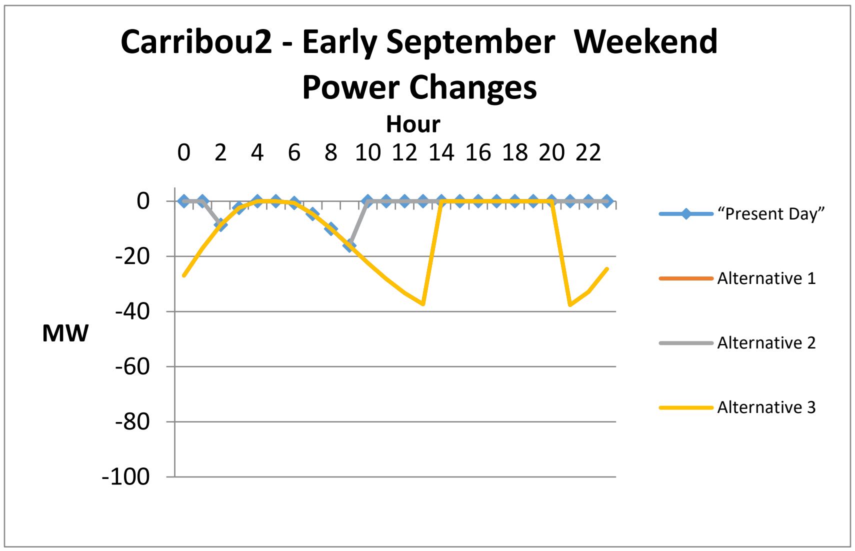
Apparent Max


Carribou2 - Early September Weekend
Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
0
-20
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-60
-80
-100
MW
"Present Day"
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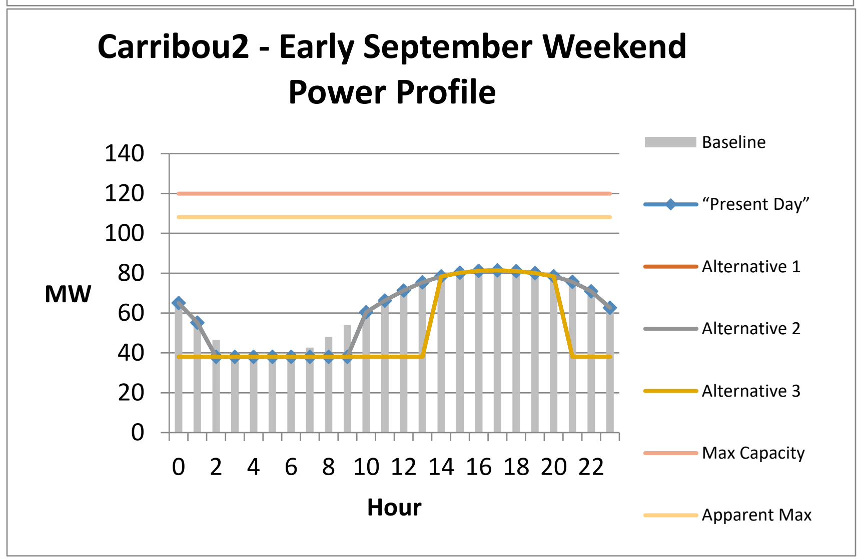
Alternative 2
Alternative 3


Carribou2 - Early September Weekend
Power Profile
140
120
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MW
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Hour
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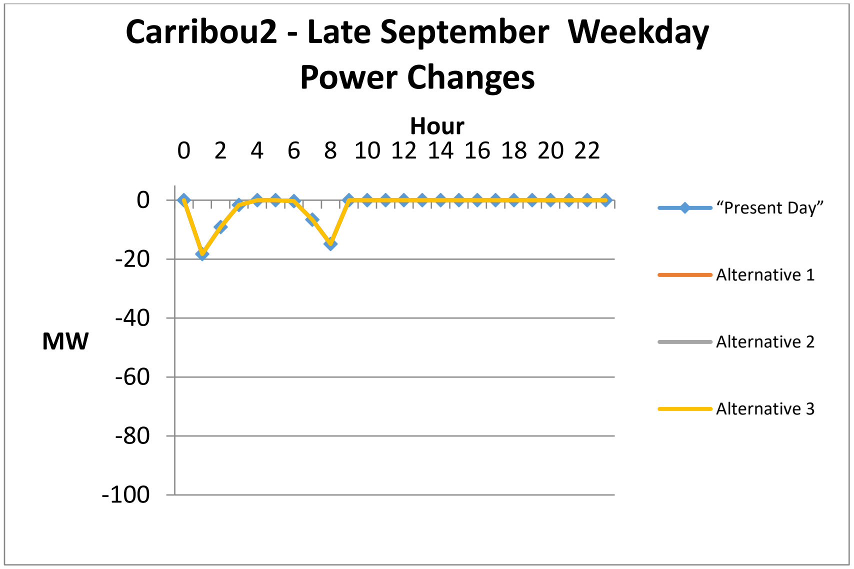
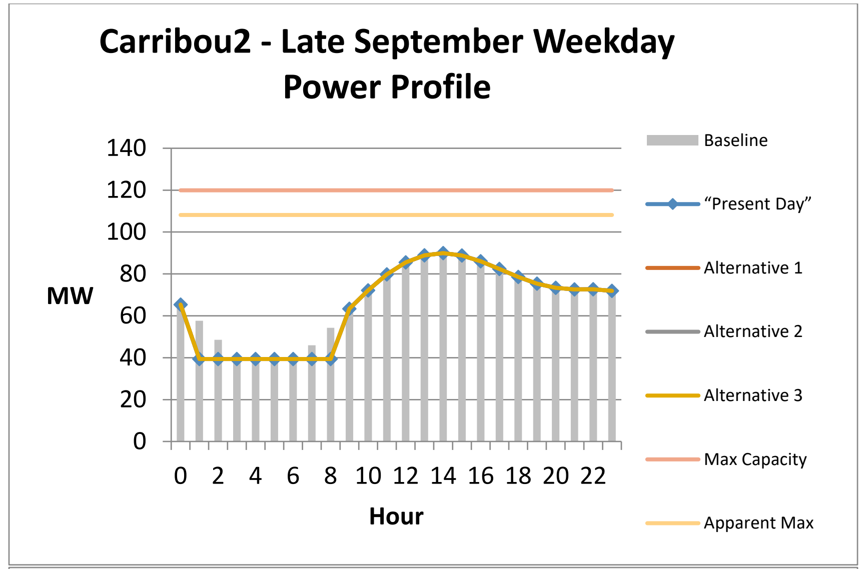
Apparent Max


Carribou2 - Late September Weekday Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
0
-20
-40
-60
-80
-100
MW
"Present Day"
Alternative 1
Alternative 2
Alternative 3


Carribou2 - Late September Weekday Power Profile
140
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MW
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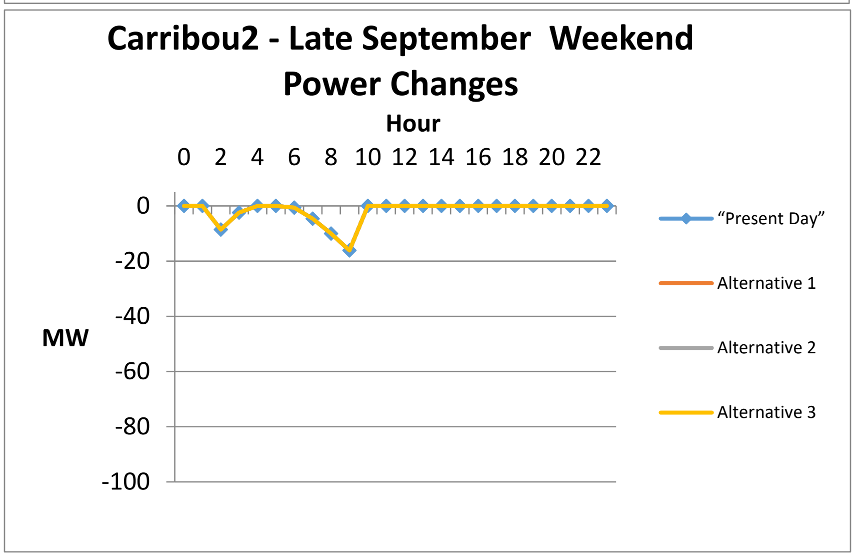
Carribou2 - Late September Weekend Power Changes
Hour
0 2 4 6 8 10 12 14 16 18 20 22
0
-20
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MW
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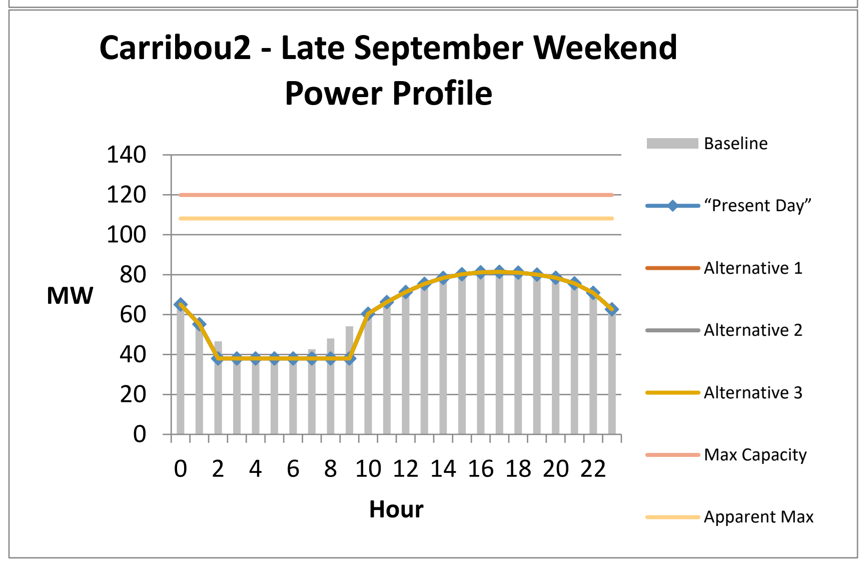
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