

2018 Power IRP Scenario Comparison

#	Scenario	Details and Constraints
1	Base Case (“BC”)	<ul style="list-style-type: none"> • Meet SB 350 requirements. Specifically, 50% RPS by 2030 • 280 MW import limitation • All data inputs to the model are in 2017\$
2	Social Cost of Carbon (“SCC”)	<ul style="list-style-type: none"> • Includes all of the constraints from the Base Case Scenario (Scenario #1), with the following additions: • Dispatch penalty on the incremental IPP, Magnolia Power Plant and Glenarm units, priced at the higher of the California Public Utilities Commission (“CPUC”) or Siemens forecast, which increase the fuel price for these units, making them run less (overall), for planning purposes only • Higher carbon price forecast
3	BC+SB 100	<ul style="list-style-type: none"> • Includes some of the constraints from the Base Case (Scenario #1), specifically the 280 MW import limitations and all data inputs to the model are in 2017\$, with the following additions: • Meet SB 100 requirements. Specifically, 60% RPS by 2030
4	SCC+SB 100	<ul style="list-style-type: none"> • Includes all of the same constraints as the Social Cost of Carbon Scenario (Scenario #2), with the following additions: • Meet SB 100 requirements. Specifically, 60% RPS by 2030
5	SCC+SB 100+ Leave IPP in Utah	<ul style="list-style-type: none"> • Includes all of the same constraints as the SCC+SB 100 Scenario (Scenario #4), with the following additions: • Sell IPP in 2019 and replace with a geothermal resource (which may not be an option with the rules at the state and federal regulatory agencies)
6	Diversification (SCC+SB100)	<ul style="list-style-type: none"> • Includes all of the same constraints as the SCC+SB 100 Scenario (Scenario #4), with the following additions • Force in renewable resources that vary in term, resource type and location (PWP provided details on resources)
7	Diversification +Biogas	<ul style="list-style-type: none"> • Includes all of the same constraints as the Diversification Scenario (Scenario #6), with the following additions: • Force biogas for Magnolia and Glenarm units, to 100% biogas by 2038 (sufficient supply may not be available)
8	Diversification+ Biogas+Leave IPP in Utah	<ul style="list-style-type: none"> • Includes all of the same constraints as the Diversification + Biogas Scenario (Scenario #7), with the following additions: • Sell IPP in 2019 and replace with a geothermal resource

Figure 1: Estimated Metric Tonnes of CO2 Emissions by Scenario

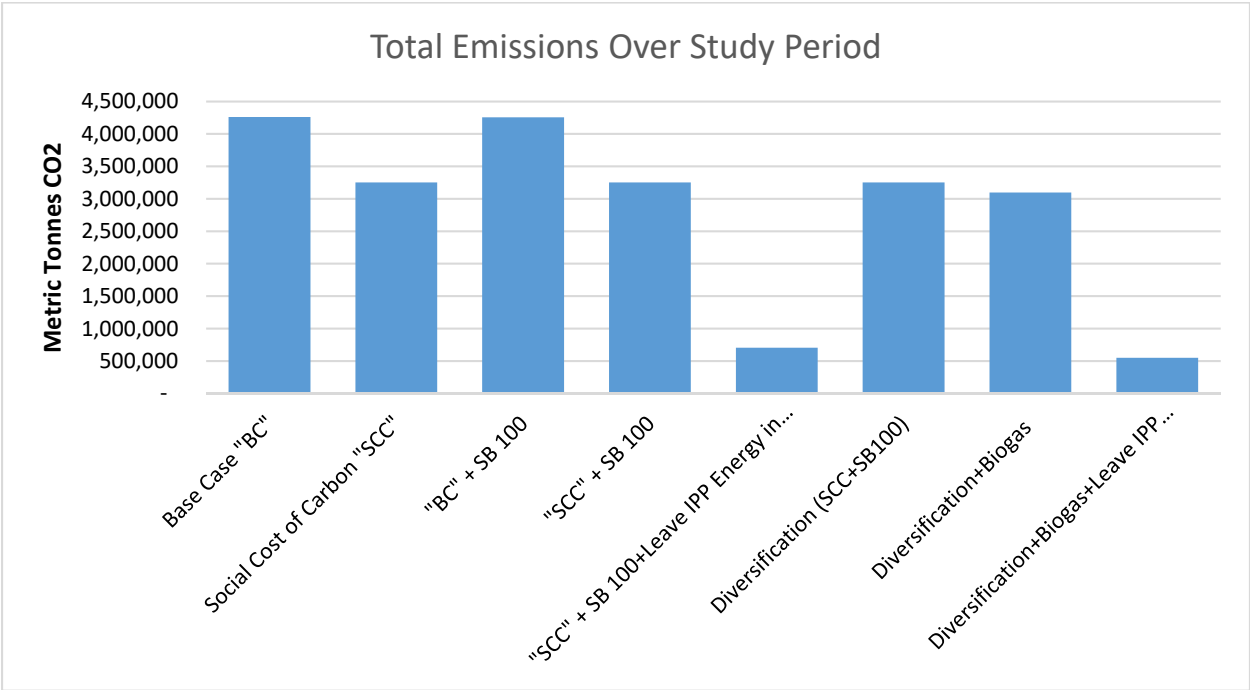


Figure 2: Potential Rate Impact by Scenario

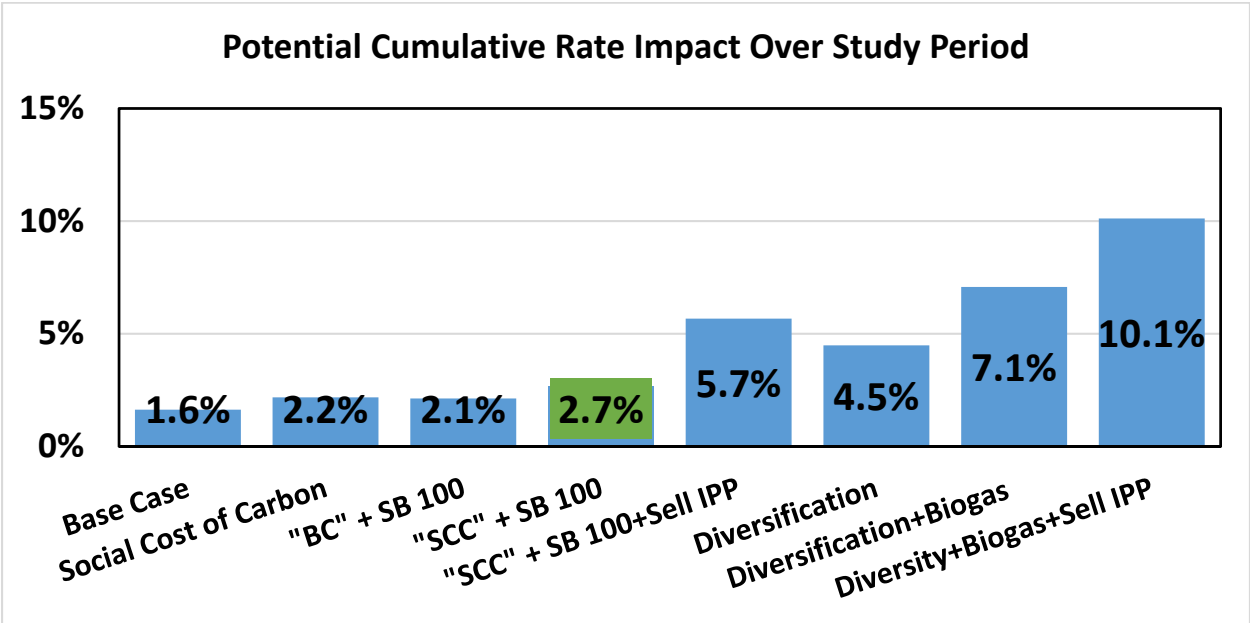


Figure 3: Potential Ratepayer Costs by Scenario

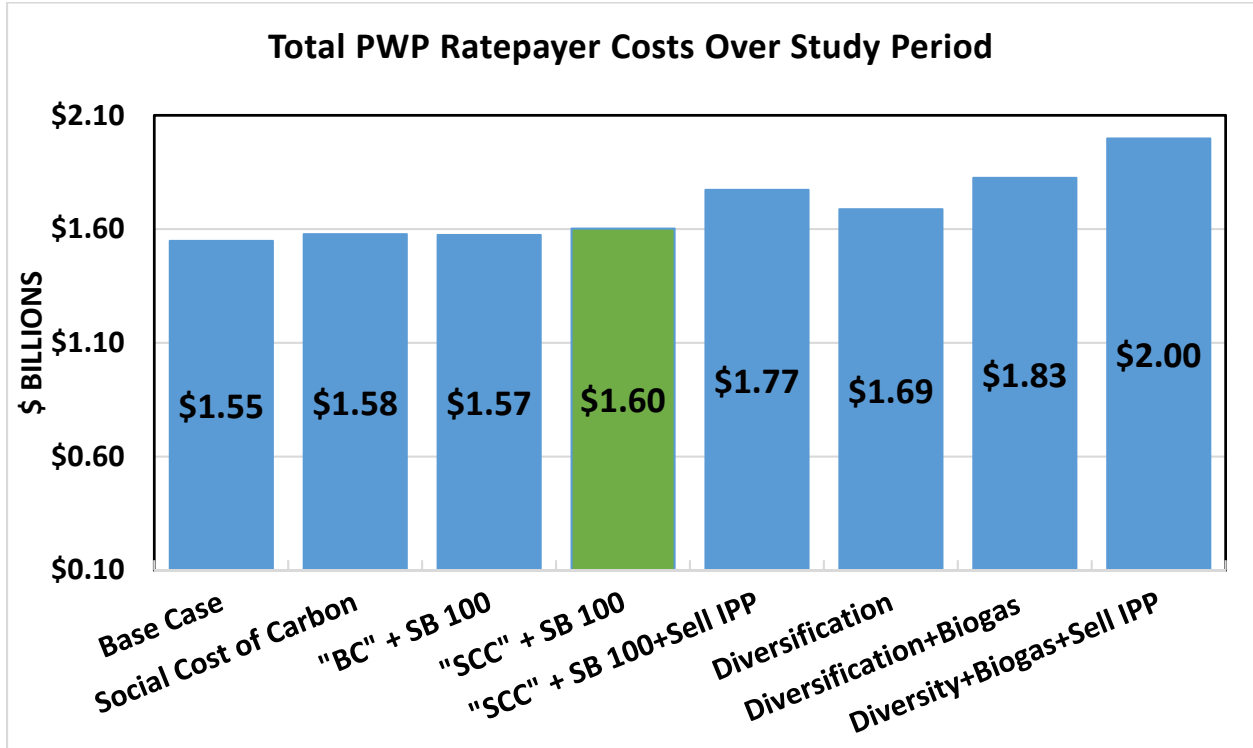


Figure 4: Total Annual Cost by Scenario

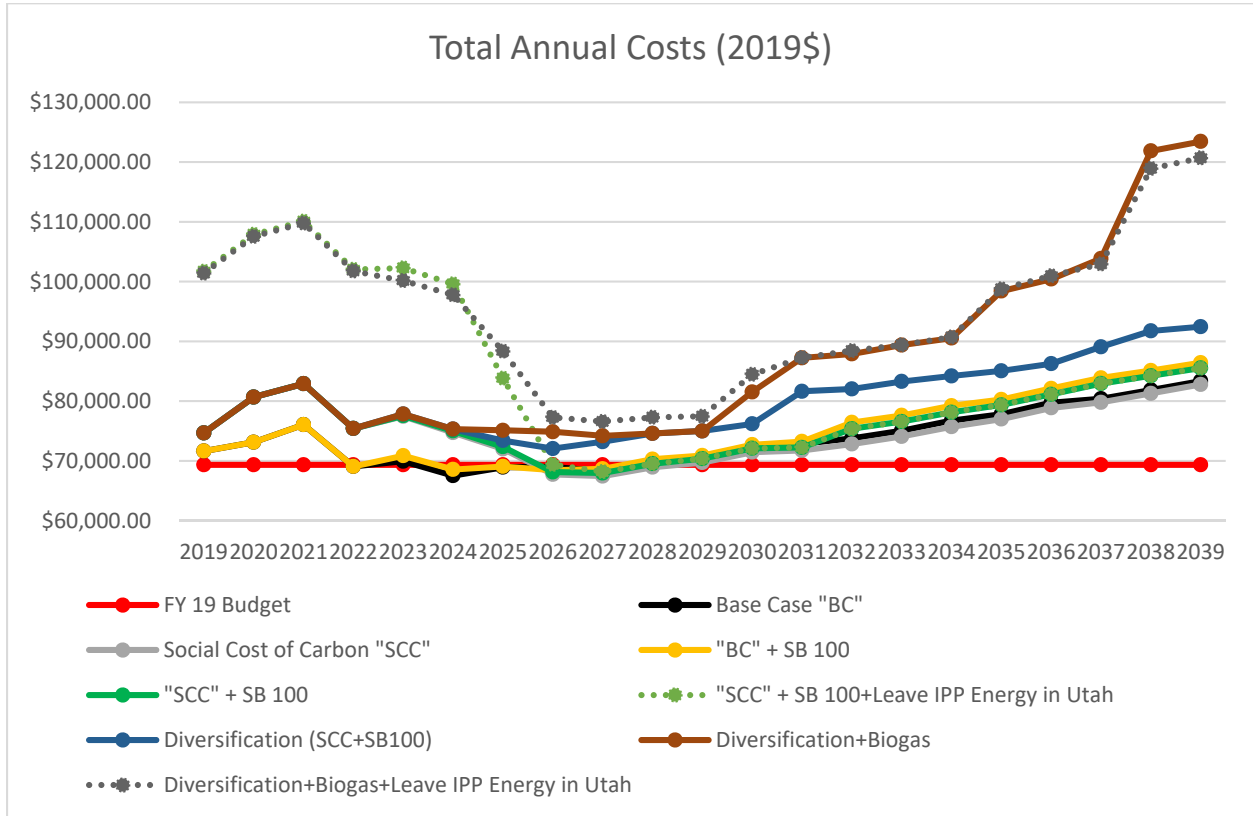


Figure 5: Scenario IRP Scorecard

Metric	Weight	"BC" + SB 100	"SCC" + SB 100	"SCC" + SB 100+Sell IPP	Diversification	Diversification +Biogas	Diversification +Biogas+Sell IPP
Model for Scenario		AURORA	AURORA	PWP	AURORA	PWP	PWP
Cost/Ratepayer Impacts	40%	● 37%	● 33%	● 11%	● 22%	● 4%	● 0%
Compliance	35%	● 35%	● 35%	● 35%	● 35%	● 35%	● 35%
Environmental Stewardship	20%	● 11%	● 13%	● 20%	● 13%	● 14%	● 20%
Diversity	5%	● 0%	● 3%	● 3%	● 5%	● 5%	● 5%
Total	100%	● 82%	● 84%	● 68%	● 75%	● 58%	● 60%
Rank		● 2	● 1	● 5	● 3	● 8	● 7