

Total Change in Charge Costs

Case Name	CEM	PF	DLAC-p	DLAC-i	SLAC
Thermal_Base	nan	nan	nan	nan	nan
2_Hr_BESS	2.0584076856011935	0.0	13.946061946368825	6.5350512689583695	13.263350282100506
2_Hr_BESS_Fuelx2	39.995290392476434	0.0	12.503928984240599	14.230848154871945	13.465593946547394
4_Hr_BESS	28.030906036753912	0.0	5.054640271414024	2.2275846225075724	11.794164471868774
4_Hr_BESS_Fuelx2	-34.18268351392687	0.0	-0.7991649712200344	-7.204926906736953	0.5594517193131976
4_Hr_BESS_Fuelx3	29.856792244338205	0.0	0.33723818999427113	0.8996235487245485	8.665649865453041
4_Hr_BESS_Fuelx4	30.515712422443485	0.0	15.556226797696615	16.504980468188492	24.031236749896067
6_Hr_BESS	26.834378880208554	0.0	3.6178468925935015	-9.577956178459502	16.479111024924176
6_Hr_BESS_Fuelx2	-28.96676340991524	0.0	1.1992496582886591	-3.459391014686064	2.5865412104621566
8_Hr_BESS	25.724259724567933	0.0	11.818416233822104	-23.93219794908843	-26.69166642676004
8_Hr_BESS_Fuelx2	-26.0331477103541	0.0	7.192471718813898	0.4653913785269692	8.393487851058756
10_Hr_BESS	-17.26569198607548	0.0	-4.478977421127617	15.896649009234743	15.359391964838842
10_Hr_BESS_Fuelx2	22.669610453185886	0.0	12.69260144802904	5.916675999254273	16.090205626030098

Total Change in Fixed OM Costs

Case Name	CEM	PF	DLAC-p	DLAC-i	SLAC
Thermal_Base	0.0	0.0	0.0	0.0	0.0
2_Hr_BEES	0.0	0.0	0.0	0.0	0.0
2_Hr_BEES_Fuelx2 2	220446049250313e-1	0.0	0.0	0.0	0.0
4_Hr_BEES	0.0	0.0	0.0	0.0	0.0
4_Hr_BEES_Fuelx2-2	220446049250313e-1	0.0	0.0	0.0	0.0
4_Hr_BEES_Fuelx3	0.0	0.0	0.0	0.0	0.0
4_Hr_BEES_Fuelx4	0.0	0.0	0.0	0.0	0.0
6_Hr_BEES	0.0	0.0	0.0	0.0	0.0
6_Hr_BEES_Fuelx2	0.0	0.0	0.0	0.0	0.0
8_Hr_BEES	0.0	0.0	0.0	0.0	0.0
8_Hr_BEES_Fuelx2	0.0	0.0	0.0	0.0	0.0
10_Hr_BEES	0.0	0.0	0.0	0.0	0.0
10_Hr_BEES_Fuelx2	0.0	0.0	0.0	0.0	0.0

Total Change in Fuel Costs

Case Name	CEM	PF	DLAC-p	DLAC-i	SLAC
Thermal_Base	-0.1686277837368188	0.0	0.018173950006583610	0.09110651464987463	1.8129682881590448
2_Hr_BEES	-0.1318384232908420	0.0	0.013478584312931470	0.27899799105590706	0.630273123122782
2_Hr_BEES_Fuelx2	-1.5327972943790735	0.0	0.15806407898684150	0.84379111695520590	0.8907108335658886
4_Hr_BEES	-0.7882870428153388	0.0	0.038874689698342730	0.100540391402681450	0.4472928713674218
4_Hr_BEES_Fuelx2	-1.5445593477844133	0.0	0.43061521374849754	1.23014643023422470	1.316396066862291
4_Hr_BEES_Fuelx3	-2.024431492543455	0.0	0.9137557476287084	2.684428104042924	2.1785502344728647
4_Hr_BEES_Fuelx4	-2.1667612352148424	0.0	2.033326627611687	4.951584174378754	4.161263405994009
6_Hr_BEES	-0.8117912580140829	0.0	0.047388651022517480	0.040320948563099530	0.5068022521484972
6_Hr_BEES_Fuelx2	-1.4801743087959895	0.0	0.5374683070018316	1.3922841614974812	1.4702355404348832
8_Hr_BEES	-0.5293800433269991	0.0	0.05871302364814923	0.035983686009744	0.5781442551878957
8_Hr_BEES_Fuelx2	-1.308778564360702	0.0	0.9531740535858813	1.7499605406966268	1.9503814132584285
10_Hr_BEES	-0.4876221067516173	0.0	0.13037184757069830	0.129671257727914660	0.6953345350995788
10_Hr_BEES_Fuelx2	-1.0584648560775567	0.0	1.3028345174188383	2.15540102272187	2.521210630288584

Total Change in Investment Costs

Case Name	CEM	PF	DLAC-p	DLAC-i	SLAC
Thermal Base	0.0	0.0	0.0	0.0	0.0
2 Hr BESS -1	1102230246251565e-1	0.0	0.0	0.0	0.0
2 Hr BESS Fuelx2	0.0	0.0	0.0	0.0	0.0
4 Hr BESS	0.0	0.0	0.0	0.0	0.0
4 Hr BESS Fuelx2	0.0	0.0	0.0	0.0	0.0
4 Hr BESS Fuelx3	0.0	0.0	0.0	0.0	0.0
4 Hr BESS Fuelx4-1	1102230246251565e-1	0.0	0.0	0.0	0.0
6 Hr BESS 2	220446049250313e-1	0.0	0.0	0.0	0.0
6 Hr BESS Fuelx2	0.0	0.0	0.0	0.0	0.0
8 Hr BESS	0.0	0.0	0.0	0.0	0.0
8 Hr BESS Fuelx2	0.0	0.0	0.0	0.0	0.0
10 Hr BESS	0.0	0.0	0.0	0.0	0.0
10 Hr BESS Fuelx2	0.0	0.0	0.0	0.0	0.0

Total Change in Investment and Operating Costs

Case Name	CEM	PF	DLAC-p	DLAC-i	SLAC
Thermal_Base	-1.1792809598797582	0.0	0.00767972574828856	0.08646176046311904	0.349743377835221
2_Hr_BESS	-0.5010463740837579	0.0	0.1798901160034338	0.3065186166791189	0.22376548945004515
2_Hr_BESS_Fuelx2	-1.6998756578729735	0.0	-0.3445952457741708	0.0789306942643008	0.049630102822573186
4_Hr_BESS	-0.8907170370933803	0.0	0.1173713237442086	0.0963381115604455	0.026584261831219536
4_Hr_BESS_Fuelx2	-1.503696741664473	0.0	0.0752606872949535	0.16207749310481745	0.3612141317220319
4_Hr_BESS_Fuelx3	-1.6381647805490118	0.0	0.1858909381210027	0.6992173808290092	0.8364175741730095
4_Hr_BESS_Fuelx4	-1.8814520643459232	0.0	1.008894286530193	1.7698863892691818	1.8459332473761414
6_Hr_BESS	-0.9301933795929251	0.0	0.09954915637755413	0.0839378088285158	0.1539841922096441
6_Hr_BESS_Fuelx2	-1.3324359445803347	0.0	0.1601020072472758	0.3174511593581064	0.4611359428958517
8_Hr_BESS	-0.9839474218777622	0.0	-0.2108141730592927	0.3849897176960382	0.41954326843689498
8_Hr_BESS_Fuelx2	-1.216696427625552	0.0	0.41492748397724544	0.5012009533424511	0.6768669565859309
10_Hr_BESS	-0.7581678438938311	0.0	-0.0225577318031189	0.1469811156883382	0.1358822897233103
10_Hr_BESS_Fuelx2	-1.1083763837338445	0.0	0.5962361759073387	0.7066657370568219	0.8962612372429346

Total Change in Start Costs

Case Name	CEM	PF	DLAC-p	DLAC-i	SLAC
Thermal_Base	48.532594758992566	0.0	-0.03334502749049450	2.0710597934211483	18.226216467907207
2_Hr_BEES	-48.00737980416508	0.0	0.31615100305057986	16.53648303170123	24.92949441259018
2_Hr_BEES_Fuelx2	-33.93513921639955	0.0	1.960430506606814	36.798707020292554	36.2670200100774
4_Hr_BEES	-24.69860220354414	0.0	1.1975796232450042	20.38406074201604	27.304900095091966
4_Hr_BEES_Fuelx2	27.745934569756336	0.0	4.8313669739114	37.96414867185665	23.102845145860563
4_Hr_BEES_Fuelx3	-35.89264394683798	0.0	4.958559102933435	49.720874936656536	32.314922195038285
4_Hr_BEES_Fuelx4	-49.0173378771267	0.0	3.688380969668237	49.59173401754198	28.594171103478374
6_Hr_BEES	25.533892413127546	0.0	1.6823228564356807	18.13144413038559	12.416037397087877
6_Hr_BEES_Fuelx2	-30.37464252743767	0.0	4.899556610776545	37.106812677062685	23.51506157274008
8_Hr_BEES	37.901981686765374	0.0	3.1057412548878283	13.817109389830984	40.5776408988020787
8_Hr_BEES_Fuelx2	-38.71306701940414	0.0	5.152732084318146	31.75384123778324	13.842757016114081
10_Hr_BEES	-38.569957814778	0.0	3.72134155058661	15.103012428106144	1.5029617186602895
10_Hr_BEES_Fuelx2	-47.84637706193781	0.0	4.0789308455000395	23.649579279381562	2.9938591064943676

Total Change in Variable OM In Costs

Case Name	CEM	PF	DLAC-p	DLAC-i	SLAC
Thermal_Base	nan	nan	nan	nan	nan
2_Hr_BEES	nan	nan	nan	nan	nan
2_Hr_BEES_Fuelx2	nan	nan	nan	nan	nan
4_Hr_BEES	nan	nan	nan	nan	nan
4_Hr_BEES_Fuelx2	nan	nan	nan	nan	nan
4_Hr_BEES_Fuelx3	nan	nan	nan	nan	nan
4_Hr_BEES_Fuelx4	nan	nan	nan	nan	nan
6_Hr_BEES	nan	nan	nan	nan	nan
6_Hr_BEES_Fuelx2	nan	nan	nan	nan	nan
8_Hr_BEES	nan	nan	nan	nan	nan
8_Hr_BEES_Fuelx2	nan	nan	nan	nan	nan
10_Hr_BEES	nan	nan	nan	nan	nan
10_Hr_BEES_Fuelx2	nan	nan	nan	nan	nan

Total Change in Variable OM Out Costs

Case Name	CEM	PF	DLAC-p	DLAC-i	SLAC
Thermal_Base	0.13786578030781094	0.0	0.05172322394524364	0.09528613848652778	1.5690066464419061
2_Hr_BESS	-0.1004903720886907	0.0	0.01247032284010796	0.38481885638954605	0.6540919888633034
2_Hr_BESS_Fuelx2	-1.3094339776655306	0.0	0.16006321454089534	0.9126179655166045	0.9493980669504021
4_Hr_BESS	-0.7450084533976997	0.0	0.03568792837795875	0.14940838456571903	0.4585574267430337
4_Hr_BESS_Fuelx2	-1.318790275124393	0.0	0.5438763748364606	1.404642745273188	1.4026849495698546
4_Hr_BESS_Fuelx3	-1.5809097264439465	0.0	0.7487403384671243	2.223949791444735	1.8814889249959776
4_Hr_BESS_Fuelx4	-1.6207464647190473	0.0	1.5038702107411872	3.7376834263644687	3.2771691638739497
6_Hr_BESS	-0.7698620140245915	0.0	0.04525878636867375	0.08253399412661013	0.5134118928120213
6_Hr_BESS_Fuelx2	-1.2618834730872552	0.0	0.6482747394154442	1.6039153217863866	1.6265277347546458
8_Hr_BESS	-0.4667593932533465	0.0	0.0663264367169569	0.08494052008667374	0.5850979937631839
8_Hr_BESS_Fuelx2	-1.1061484886594752	0.0	1.1216833213688826	2.0784845267494356	2.1742466818409856
10_Hr_BESS	-0.4054830866523473	0.0	0.1819764991733308	0.2545322704638586	0.7197557480086214
10_Hr_BESS_Fuelx2	-0.8769770719738612	0.0	1.4901980869321374	2.4404381279518272	2.6389134495581557

Total Change in System Costs

Case Name	CEM	PF	DLAC-p	DLAC-i	SLAC
Thermal_Base	-1.1754835916097939	0.0	0.00765499619566067	0.1425134927737437	0.3486171213414657
2_Hr_BESS	-0.4791691182763236	0.0	0.006325894726844083	0.3025868525079911	0.5570681088163942
2_Hr_BESS_Fuelx2	-0.4831796436410407	0.0	0.04138884664670606	0.7906717796838159	0.7261003627220708
4_Hr_BESS	-0.3351306469124182	0.0	0.01636638077573415	0.537286360307121	0.5410756699312458
4_Hr_BESS_Fuelx2	-0.4161853506317148	0.0	0.10437316478983938	0.7387127869817212	0.6213001662336293
4_Hr_BESS_Fuelx3	-0.5138781538436055	0.0	0.1798561436666679	0.9076220885598341	0.6329078511728481
4_Hr_BESS_Fuelx4	-0.6376896898511508	0.0	0.37541202532251905	1.2268977592136743	0.95484142098885
6_Hr_BESS	-0.3651431667066274	0.0	0.02227429642043255	0.5458209829912741	0.5435683903624478
6_Hr_BESS_Fuelx2	-0.4224052638929665	0.0	0.12586365674089883	0.7467509548858331	0.6353413430296939
8_Hr_BESS	-0.4474543340316717	0.0	0.04079231437486008	0.5379161056093595	0.45209558222498725
8_Hr_BESS_Fuelx2	-0.4532011329792418	0.0	0.20610766217858956	0.6738861101377669	0.5213108508383302
10_Hr_BESS	-0.4370865892316389	0.0	0.0641722820432288	0.5533206239430433	0.4975370342505725
10_Hr_BESS_Fuelx2	-0.5269412483697611	0.0	0.26990099680970214	0.6999866358714746	0.5673546438012211

Total Change in Unmet Reserves Costs

Case Name	CEM	PF	DLAC-p	DLAC-i	SLAC
Thermal_Base	0.0	0.0	0.0	16.899392302498306	4.2538825118163315
2_Hr_BESS	0.0	0.0	0.0	0.0	-20.790478692234636
2_Hr_BESS_Fuelx2	0.0	0.0	0.0	-45.27183780512407	-45.27940286463586
4_Hr_BESS	0.0	0.0	0.0	-18.361363987039038	18.415367998765618
4_Hr_BESS_Fuelx2	0.0	0.0	0.0	-46.64867863627193	-46.54024611660278
4_Hr_BESS_Fuelx3	-0.8407570391041452	0.0	0.0	-0.9623984830596455	-0.898000071553795
4_Hr_BESS_Fuelx4	-2.204301075268822	0.0	0.0	21.26137303556659	69.97518610421835
6_Hr_BESS	0.0	0.0	0.0	-17.631546417240095	-17.59034158803412
6_Hr_BESS_Fuelx2	-0.1383508577753156	0.0	0.0	-47.776324395029434	-47.67822105951603
8_Hr_BESS	0.0	0.0	0.0	-17.138341586766416	-17.1847012959646
8_Hr_BESS_Fuelx2	-0.1912865670657293	0.0	0.0	-0.1583061244681882	0.06925892945482959
10_Hr_BESS	0.08143322475568926	0.0	0.0	-20.951954397394136	31.840390879478832
10_Hr_BESS_Fuelx2	-0.1367203521916327	0.0	0.0	-0.10117306062180640	0.07929780427113897

Total Change in NSE Costs

Case Name	CEM	PF	DLAC-p	DLAC-i	SLAC
Thermal_Base	0.0	0.0	0.0	17.492810590977935	0.0
2_Hr_BEES	-0.01852023335493502	0.0	0.0	15.436614501342728	33.67904435595888
2_Hr_BEES_Fuelx2	-0.1876684203772627	0.0	0.0	170.9643269600924	142.34890286154243
4_Hr_BEES	-0.1235792203829411	0.0	0.0	131.59661301395985	91.41048134869175
4_Hr_BEES_Fuelx2	-100.0	0.0	0.0	66263.85407519757	53330.989063622575
4_Hr_BEES_Fuelx3	-100.0	0.0	0.0	32051.989419155732	16087.038465777581
4_Hr_BEES_Fuelx4	-0.9613772956923561	0.0	0.0	34.07801163709503	25.637526039795986
6_Hr_BEES	-2.6246943070010853	0.0	0.0	262.0258203946994	211.0106352727066
6_Hr_BEES_Fuelx2	-100.0	0.0	0.0	65522.79418094172	52491.89119393992
8_Hr_BEES	-0.2549246813441486	0.0	0.0	522.4797219003476	382.76361529548086
8_Hr_BEES_Fuelx2	-0.2235949520597246	0.0	0.0	81.62352673665063	39.06469094629932
10_Hr_BEES	-3.5364989369241706	0.0	0.0	6100.283486888731	5222.820694542877
10_Hr_BEES_Fuelx2	-0.1092199872576693	0.0	0.0	30.872849731500864	18.54919450259398

Total Change in Objective Costs

Case Name	CEM	PF	DLAC-p	DLAC-i	SLAC
Thermal_Base	1.1731036045555032	0.0	0.007639497257549970	0.17644008539310360	0.35634361705227935
2_Hr_BESS	0.4790614161051643	0.0	0.006324472878072020	0.30251884217940000	0.5522548611611722
2_Hr_BESS_Fuelx2	0.4831039418165872	0.0	0.04138236206518986	0.7834551663840505	0.7188938661240485
4_Hr_BESS	0.3350513262772248	0.0	0.01636250699319497	0.5328128525603715	0.5366012652872953
4_Hr_BESS_Fuelx2	0.4161194787385969	0.0	0.10435664504755415	0.7312126830061549	0.6138186458301886
4_Hr_BESS_Fuelx3	0.5139123176423288	0.0	0.17983744112817224	0.90742759435396	0.6327544375727134
4_Hr_BESS_Fuelx4	0.6378240920880685	0.0	0.375379852419222	1.2286146378370777	0.9607505561367136
6_Hr_BESS	0.3650621049149039	0.0	0.02226935140836605	0.5417856055314196	0.5395335129901202
6_Hr_BESS_Fuelx2	0.4223601648049135	0.0	0.1258436183899203	0.7390261982167301	0.627634322255232
8_Hr_BESS	0.4473572230451639	0.0	0.04078346104543495	0.5340796314635243	0.44827773407221105
8_Hr_BESS_Fuelx2	0.4531694975896005	0.0	0.2060826177794794	0.6737847921911122	0.5212412724692861
10_Hr_BESS	0.4367954839624266	0.0	0.06413624960004416	0.5412448988084906	0.47936166992861295
10_Hr_BESS_Fuelx2	0.5268840120337792	0.0	0.2698614710505254	0.6998693920206023	0.5672643040581571