

**FAC 8116 Battery Energy Storage System**

FY25 SUC: \$46,386.92 / MW  
Source: Calculated using R.S. Means CostWorks 2024 Qtr 3 component prices

FAC 8116 Battery Energy Storage System

FAC 8116 Battery Energy Storage System				FY25 SUC: \$46,386.92						
Release: 2024 Qtr 3				UM: MW						
Zip Code Prefix: 222				Expected Service Life: 20		Adjusted Occurrences are the occurrences remaining after subtracting Repair/Replacement Overlaps. Overlap reduction removes a repair when it occurs the same year as a replacement.				
Type: MR				Model Size: 1						
Description	Frequency	Qty Unit	Total In-House	Total Incl OP	Service Life/Frequency	Occurrences	Adjusted Occurrences	Life Cost	Adjusted Cost	
Repair 500 kva transformer, primary, liquid filled	10	2.00 Ea.	\$6,124.21	\$7,040.86	2.0000	2	2	\$14,081.72	\$14,081.72	
Maintenance and inspection primary transformer, dry	0.5	2.00 Ea.	\$87.63	\$109.93	40.0000	40	40	\$4,397.38	\$4,397.38	
Repair switchgear 1200 A mainframe	5	2.00 Ea.	\$4,137.36	\$4,840.15	4.0000	4	3	\$19,360.60	\$14,520.45	
Maintenance and inspection switchgear, mainframe	1	2.00 Ea.	\$139.97	\$175.59	20.0000	20	20	\$3,511.80	\$3,511.80	
Replace switchgear 1200 A mainframe	20	2.00 Ea.	\$9,016.12	\$10,863.30	1.0000	1	1	\$10,863.30	\$10,863.30	
Repair switchgear, - (5% of total C.B.), indoor, less than 600 V	10	4.00 Ea.	\$3,567.89	\$4,117.98	2.0000	2	2	\$8,235.95	\$8,235.95	
Maintenance and inspection switchgear, indoor, less than 600 V	3	4.00 Ea.	\$175.26	\$219.87	6.6667	6	6	\$1,319.21	\$1,319.21	
Repair switchboard meter	10	8.00 Ea.	\$10,575.11	\$12,431.28	2.0000	2	2	\$24,862.56	\$24,862.56	
Replace switchboard meter	20	8.00 Ea.	\$36,819.43	\$42,013.96	1.0000	1	1	\$42,013.96	\$42,013.96	
Maintenance and repair rectifier, up to 600 V	2	8.00 Ea.	\$5,956.15	\$7,098.49	10.0000	10	9	\$70,984.89	\$63,886.40	
Maintenance and inspection rectifier, up to 600 V	0.33	8.00 Ea.	\$1,119.74	\$1,404.72	60.6061	60	60	\$84,283.11	\$84,283.11	
Replace rectifier, up to 600 V	20	8.00 Ea.	\$11,130.91	\$12,822.46	1.0000	1	1	\$12,822.46	\$12,822.46	
Maintenance and repair secondary transformer, dry	10	8.00 Ea.	\$2,364.08	\$2,810.11	2.0000	2	2	\$5,620.21	\$5,620.21	
Maintenance and inspection secondary transformer, dry	0.5	8.00 Ea.	\$696.19	\$873.37	40.0000	40	40	\$34,934.74	\$34,934.74	
Maintenance and repair of general wiring lightning protection system	1	0.35 M.L.F.	\$38.96	\$48.08	20.0000	20	20	\$961.51	\$961.51	
Maintenance and repair lightning ground rod	1	4.00 Ea.	\$381.84	\$477.33	20.0000	20	20	\$9,546.63	\$9,546.63	
Maintenance and repair transfer switch	5	2.00 Ea.	\$774.52	\$935.06	4.0000	4	4	\$3,740.23	\$3,740.23	
Maintenance and inspection transfer switch	0.5	2.00 Ea.	\$87.63	\$109.93	40.0000	40	40	\$4,397.38	\$4,397.38	
Replace transfer switch	18	2.00 Ea.	\$61,467.95	\$70,341.72	1.1111	1	1	\$70,341.72	\$70,341.72	
Maintenance and inspection battery, dry	0.08	8.00 Ea.	\$350.53	\$439.74	250.0000	250	250	\$109,934.50	\$109,934.50	
Replace battery, dry	5	8.00 Ea.	\$1,758.32	\$2,030.47	4.0000	4	4	\$8,121.88	\$8,121.88	
Maintenance and inspection UPS battery	0.17	8.00 Ea.	\$559.87	\$702.36	117.6471	117	117	\$62,176.04	\$62,176.04	
Replace motor generator UPS battery	15	8.00 Ea.	\$9,564.66	\$11,308.92	1.3333	1	1	\$11,308.92	\$11,308.92	
Replace voice/data outlet	20	4.00 Ea.	\$113.27	\$137.94	1.0000	1	1	\$137.94	\$137.94	
Maintenance and inspection patch panel	0.5	4.00 Ea.	\$370.00	\$464.17	40.0000	40	40	\$18,566.71	\$18,566.71	
Replace patch panel	15	4.00 Ea.	\$3,788.72	\$4,553.23	1.3333	1	1	\$4,553.23	\$4,553.23	
Repair cable splice overhead service	12	1.20 M.L.F.	\$710.18	\$887.65	1.6667	1	1	\$887.65	\$887.65	
Cable inspection overhead service, splice	5	1.20 M.L.F.	\$60.11	\$75.41	4.0000	4	4	\$301.64	\$301.64	
			\$171,936.61	\$199,334.08						
									MR Subtotal:	\$650,329.24
									MR Per Year:	\$32,516.46
									PM Total:	\$13,870.46
									Subtotal:	\$46,386.92
									Total Per Unit:	\$46,386.92

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Release: 2024 Qtr 3

Zip Code Prefix: 222

Type: PM

FY25 SUC: \$46,386.92

UM: MW

Expected Service Life: 20

Model Size: 1

Description	Qty	Labor Hours	Bare Mat	Bare Labor	Bare Equip	Bare Total	Total In-House	Total Incl OP
Controls, central system, electro/pneumatic, annualized	4	7.68	\$719.07	\$490.68	\$0.0000	1,209.75	1,428.86	1,683.93
Switchboard, with air circuit breaker, annualized	4	53.27	\$76.45	\$3,804.72	\$0.0000	3,881.17	5,030.23	6,183.11
Circuit breaker, high voltage air, annualized	32	15.04	\$528.54	\$1,067.71	\$0.0000	1,596.25	1,969.42	2,369.02
Circuit breaker, high voltage oil, annualized	2	1.71	\$38.02	\$122.51	\$0.0000	160.53	201.09	243.54
Switch, interrupt, high voltage, fused air, annualized	8	2.91	\$132.14	\$207.17	\$0.0000	339.30	414.67	496.64
Transformer, oil pad mounted, annually	2	2.16	\$1.90	\$154.38	\$0.0000	156.28	202.78	249.38
Power stabilizer, annualized	32	20.00	\$351.30	\$1,256.84	\$0.0000	1,610.24	2,023.05	2,453.43
Cathodic protection system, annualized	1	1.46	\$38.36	\$59.67	\$0.0000	128.03	158.77	191.42
						\$9,081.55	\$11,428.87	\$13,870.46