



Appendix B :

CM Breadth Cost Analysis

Existing Equipment for DP-RP											
Panelboard	Feeder length per wire in ft	Conductor	Price per wire LF	Total price of wire	Conduit	Price LF	Total conduit price	Circuit breaker	Price each	Transformer	Price each
Kitchen	220	4#2, 1#2 ground	\$198.00	\$2,178.00	1 1/4"	\$5.35	\$1,177.00	100A	\$281.00	n/a	n/a
RP-1A	316	4#2, 1#2 ground	\$198.00	\$3,128.40	1 1/4"	\$5.35	\$1,690.60	100A	\$281.00	n/a	n/a
RP-1B	542	4#2, 1#2 ground	\$198.00	\$5,365.80	1 1/4"	\$5.35	\$2,899.70	100A	\$281.00	n/a	n/a
RP-1C	954	4#2, 1#2 ground	\$198.00	\$9,444.60	1 1/4"	\$5.35	\$5,103.90	100A	\$281.00	n/a	n/a
RP-1D	888	4#2, 1#2 ground	\$198.00	\$8,791.20	1 1/4"	\$5.35	\$4,750.80	100A	\$281.00	n/a	n/a
RP-2A	868	4#2, 1#2 ground	\$198.00	\$8,593.20	1 1/4"	\$5.35	\$4,643.80	100A	\$281.00	n/a	n/a
MDP-1	327	4#3/0, 1#3/0 ground	\$380.00	\$6,213.00	2"	\$7.80	\$2,550.60	200A	\$900.00	n/a	n/a
										300 KVA	\$13,000.00
Subtotals				\$43,714.20	\$22,816.40			\$2,586.00		\$13,000.00	
										Total Price	\$82,116.60

Redesign Equipment for DP-RP											
Panelboard	Feeder length per wire in ft	Conductor	Price per wire LF	Total price of wire	Conduit	Price LF	Total conduit price	Circuit breaker	Price each	Transformer	Price each
Kitchen	220	4#8, 1#8 ground	\$84.00	\$924.00	3/4"	\$2.86	\$629.20	40A	\$181.00	45 KVA	\$3,575.00
RP-1A	316	4#8, 1#8 ground	\$84.00	\$1,327.20	3/4"	\$2.86	\$903.76	40A	\$181.00	45 KVA	\$3,575.00
RP-1B	542	4#8, 1#8 ground	\$84.00	\$2,276.40	3/4"	\$2.86	\$1,550.12	40A	\$181.00	45 KVA	\$3,575.00
RP-1C	954	4#8, 1#8 ground	\$84.00	\$4,006.80	3/4"	\$2.86	\$2,728.44	40A	\$181.00	45 KVA	\$3,575.00
RP-1D	888	4#8, 1#8 ground	\$84.00	\$3,729.60	3/4"	\$2.86	\$2,539.68	40A	\$181.00	45 KVA	\$3,575.00
RP-2A	868	4#8, 1#8 ground	\$84.00	\$3,645.60	3/4"	\$2.86	\$2,482.48	40A	\$181.00	45 KVA	\$3,575.00
MDP-1	327	4#3, 1#3 ground	\$169.00	\$2,763.15	1 1/4"	\$5.35	\$1,749.45	70A	\$225.00	75 KVA	\$4,950.00
Subtotals				\$18,672.75	\$12,583.13			\$1,311.00		\$26,400.00	
										Total Price	\$58,966.88

Existing Equipment for DP-EC													
Panelboard	Feeder length per wire in ft	Conductor	Price per wire CLF	Total price of wire	Conduit	Price LF	Total conduit price	Circuit breaker	Price each	Transformer	Price each	Distribution Board	Price
EC-CA	395	4#2, 1#2 ground, 1#2ig	\$198.00	\$4,692.60	1 1/2"	\$6.45	\$2,547.75	100A	\$281.00	n/a	n/a	n/a	n/a
EC-1A	224	4#2, 1#2 ground, 1#2ig	\$198.00	\$2,661.12	1 1/2"	\$6.45	\$1,444.80	100A	\$281.00	n/a	n/a	n/a	n/a
EC-1B	542	4#2, 1#2 ground, 1#2ig	\$198.00	\$6,438.96	1 1/2"	\$6.45	\$3,495.90	100A	\$281.00	n/a	n/a	n/a	n/a
EC-1C	934	4#2, 1#2 ground, 1#2ig	\$198.00	\$11,095.92	1 1/2"	\$6.45	\$6,024.30	100A	\$281.00	n/a	n/a	n/a	n/a
EC-1D	870	4#2, 1#2 ground, 1#2ig	\$198.00	\$10,335.60	1 1/2"	\$6.45	\$5,611.50	100A	\$281.00	n/a	n/a	n/a	n/a
EC-1D1	758	4#6, 1#6 ground, 1#6ig	\$113.00	\$5,139.24	1 1/2"	\$6.45	\$4,889.10	70A	\$225.00	n/a	n/a	n/a	n/a
EC-2A	417	4#2, 1#2 ground, 1#2ig	\$198.00	\$4,953.96	1 1/2"	\$6.45	\$2,689.65	100A	\$281.00	n/a	n/a	n/a	n/a
EC-2B	546	4#2, 1#2 ground, 1#2ig	\$198.00	\$6,486.48	1 1/2"	\$6.45	\$3,521.70	100A	\$281.00	n/a 300 KVA	n/a \$13,000.00	n/a 208/120V 3p, 4w 800A	n/a \$3,225.00
Subtotals				\$51,803.88			\$30,224.70		\$2,192.00		\$13,000.00		\$3,225.00
												Total Price \$100,445.58	

Redesign Equipment for DP-EC													
Panelboard	Feeder length per wire in ft	Conductor	Price per wire LF	Total price of wire	Conduit	Price LF	Total conduit price	Circuit breaker	Price each	Transformer	Price each	Distribution Board	Price
EC-CA	395	4#8, 1#8 ground, 1#8ig	\$84.00	\$1,990.80	1"	\$3.97	\$1,568.15	40A	\$181.00	45 KVA	\$3,575.00	n/a	n/a
EC-1A	224	4#8, 1#8 ground, 1#8ig	\$84.00	\$1,128.96	1"	\$3.97	\$889.28	40A	\$181.00	45 KVA	\$3,575.00	n/a	n/a
EC-1B	542	4#8, 1#8 ground, 1#8ig	\$84.00	\$2,731.68	1"	\$3.97	\$2,151.74	40A	\$181.00	45 KVA	\$3,575.00	n/a	n/a
EC-1C	934	4#8, 1#8 ground, 1#8ig	\$84.00	\$4,707.36	1"	\$3.97	\$3,707.98	40A	\$181.00	45 KVA	\$3,575.00	n/a	n/a
EC-1D	870	4#8, 1#8 ground, 1#8ig	\$84.00	\$4,384.80	1"	\$3.97	\$3,453.90	40A	\$181.00	45 KVA	\$3,575.00	n/a	n/a
EC-1D1	758	4#10, 1#10 ground, 1#10ig	\$62.00	\$2,819.76	3/4"	\$2.86	\$2,167.88	30A	\$181.00	30 KVA	\$3,075.00	n/a	n/a
EC-2A	417	4#8, 1#8 ground, 1#8ig	\$84.00	\$2,101.68	1"	\$3.97	\$1,655.49	40A	\$181.00	45 KVA	\$3,575.00	n/a	n/a
EC-2B	546	4#8, 1#8 ground, 1#8ig	\$84.00	\$2,751.84	1"	\$3.97	\$2,167.62	40A	\$181.00	45 KVA	\$3,575.00	n/a	n/a
Subtotals				\$22,616.88			\$17,762.04		\$1,448.00		\$28,100.00	480/208 3p, 4w, 400A	\$2,475.00
												Total Price \$72,401.92	

Total Cost of Systems

	Existing System	Redesign
Conductor	\$95,518.08	\$41,289.63
Conduit	\$53,041.10	\$30,345.17
Circuit breakers	\$4,778.00	\$2,759.00
Transformers	\$26,000.00	\$54,500.00
Resized distribution panel EC	\$3,225.00	\$2,475.00
Total Cost	\$182,562.18	\$131,368.80