

- 1 **Q. Distribution - Transformers (p. 43 of 96)**
2 **Broken down by type, size and voltage of transformer units, please provide both the**
3 **number and cost of transformers purchased from 2005 to 2010 B expressed in**
4 **actual and 2009 dollars.**
5
6 A. A breakdown by type, size and voltage of transformers purchased from 2005 to 2008 and
7 an estimate for 2009 is provided in Attachment A.
8
9 In 2010 it is expected that 2,324 units will be purchased at an average unit cost of \$3,300
10 but a breakdown by type, size and voltage is not available at this time.

Distribution Transformer Purchases

Distribution Transformer Purchases

Primary Voltage	Secondary Voltage	Size	2005			2006			2007			2008			2009		
			Quantity	Cost	2009\$	Quantity	Cost	2009\$	Quantity	Cost	2009\$	Quantity	Cost	2009\$	Quantity	Cost	2009\$
Polemounted																	
2.4	120/240	50	7	13,383	15,605	0	0	0	0	0	0	0	0	0	0	0	0
2.4	120/240	75	5	13,088	15,261	0	0	0	0	0	0	0	0	0	0	0	0
7.2	120/240	10	248	250,073	291,586	251	300,527	343,803	280	363,213	389,727	250	341,194	350,406	81	114,336	114,336
7.2	120/240	25	590	806,522	940,404	586	988,277	1,130,589	668	1,191,905	1,278,914	597	1,135,188	1,165,838	361	688,357	688,357
7.2	120/240	50	476	863,036	1,006,300	462	1,132,184	1,295,219	544	1,415,631	1,518,972	570	1,517,373	1,558,342	446	1,215,096	1,215,096
7.2	120/240	75	168	405,051	472,290	128	417,183	477,257	220	785,288	842,614	215	775,496	796,434	172	639,545	639,545
7.2	120/240	100	100	285,648	333,065	34	127,691	146,078	95	413,095	443,251	70	302,469	310,636	60	279,396	279,396
7.2	120/240	167	0	0	0	0	0	0	3	19,005	20,392	0	0	0	0	0	0
7.2	240/480	50	0	0	0	0	0	0	0	0	0	3	10,682	10,970	0	0	0
7.2	347	10	16	15,305	17,846	2	2,292	2,623	22	29,161	31,290	18	23,913	24,559	0	0	0
7.2	347	25	40	53,379	62,240	18	30,878	35,324	16	31,023	33,287	37	73,582	75,568	18	37,866	37,866
7.2	347	50	22	39,562	46,129	62	148,617	170,017	45	119,288	127,996	32	86,748	89,090	36	100,675	100,675
7.2	347	75	24	54,763	63,854	8	26,442	30,250	17	60,783	65,221	36	129,545	133,043	20	76,873	76,873
7.2	347	100	30	82,355	96,026	12	44,593	51,014	10	45,004	48,290	46	200,025	205,426	18	75,812	75,812
7.2	600	10	0	0	0	0	0	0	0	0	0	3	17,688	18,166	0	0	0
7.2	600	25	0	0	0	0	0	0	3	6,129	6,577	5	10,198	10,474	0	0	0
14.4	120/240	10	106	109,294	127,437	120	143,219	163,842	125	170,852	183,324	136	188,478	193,567	70	101,283	101,283
14.4	120/240	25	232	333,770	389,176	315	537,721	615,152	235	456,581	489,911	286	558,731	573,817	250	508,731	508,731
14.4	120/240	50	218	406,029	473,430	236	593,949	679,478	150	415,477	445,807	251	697,653	716,490	167	474,514	474,514
14.4	120/240	75	64	159,512	185,991	72	231,405	264,728	93	319,646	342,980	49	183,710	188,671	77	286,167	286,167
14.4	120/240	100	30	87,077	101,532	24	93,827	107,339	34	152,056	163,156	19	83,310	85,560	64	285,312	285,312
14.4	347	10	16	15,507	18,081	0	0	0	14	19,201	20,603	10	13,831	14,205	0	0	0
14.4	347	25	0	0	0	0	0	0	0	0	0	10	20,107	20,650	0	0	0
14.4	347	50	22	40,047	46,695	0	0	0	14	40,685	43,655	38	104,761	107,590	8	23,073	23,073
14.4	347	75	0	0	0	0	0	0	4	14,842	15,925	25	91,318	93,784	20	76,892	76,892
14.4	347	100	14	39,067	45,553	0	0	0	0	0	0	14	62,171	63,850	10	47,905	47,905
14.4	347	167	0	0	0	2	9,660	11,051	0	0	0	0	0	0	3	21,679	21,679
14.4	600	50	0	0	0	0	0	0	0	0	0	2	5,707	5,861	0	0	0
7.2/2.4	120/240	25	0	0	0	0	0	0	0	0	0	0	0	0	8	19,174	19,174
7.2/2.4	120/240	50	0	0	0	0	0	0	0	0	0	3	9,102	9,348	8	24,982	24,982
7.2/2.4	120/240	75	2	5,412	6,310	2	6,790	7,768	0	0	0	0	0	0	9	36,443	36,443
7.2/2.4	120/240	100	0	0	0	6	23,832	27,263	4	18,307	19,644	0	0	0	14	64,790	64,790
7.2/2.4	347	25	2	3,278	3,822	2	4,007	4,584	0	0	0	0	0	0	0	0	0
7.2/2.4	347	50	0	0	0	0	0	0	0	0	0	3	9,007	9,250	0	0	0
7.2/2.4	347	75	6	17,597	20,518	0	0	0	0	0	0	3	11,424	11,733	0	0	0
7.2/2.4	347	100	2	6,029	7,030	0	0	0	0	0	0	6	26,781	27,504	0	0	0
7.2/2.4	347	167	0	0	0	2	10,501	12,013	0	0	0	0	0	0	0	0	0

Distribution Transformer Purchases

Primary Voltage	Secondary Voltage	Size	2005			2006			2007			2008			2009		
			Quantity	Cost	2009\$	Quantity	Cost	2009\$	Quantity	Cost	2009\$	Quantity	Cost	2009\$	Quantity	Cost	2009\$
14.4/7.2	120/240	25	2	3,325	3,877	0	0	0	0	0	0	0	0	0	0	0	0
14.4/7.2	120/240	50	2	4,329	5,047	0	0	0	0	0	0	0	0	0	0	0	0
14.4/7.2	120/240	75	2	5,963	6,952	0	0	0	0	0	0	0	0	0	0	0	0
14.4	7.2	500	0	0	0	0	0	0	0	0	0	1	21,325	21,901	1	26,219	26,219
14.4	7.2	750	0	0	0	0	0	0	1	28,480	30,559	0	0	0	2	60,730	60,730
7.2	2.4	50	0	0	0	0	0	0	0	0	0	0	0	0	2	7,616	7,616
7.2	2.4	250	0	0	0	0	0	0	0	0	0	0	0	0	1	15,157	15,157
Subtotal			2,446	4,118,403	4,802,058	2,344	4,873,595	5,575,392	2,597	6,115,653	6,562,095	2,738	6,711,520	6,892,731	1,926	5,308,622	5,308,622
Mini Padmounted																	
7.2	120/240	50	10	34,240	39,924	6	25,567	29,249	0	0	0	12	62,106	63,783	1	6,411	6,411
7.2	120/240	75	14	56,762	66,184	20	86,628	99,102	0	0	0	14	83,950	86,217	12	81,099	81,099
7.2	120/240	100	8	34,926	40,724	16	84,762	96,967	0	0	0	6	43,026	44,188	6	46,781	46,781
7.2	120/240	167	1	7,409	8,639	1	8,348	9,551	0	0	0	0	0	0	1	11,596	11,596
14.4	120/240	100	0	0	0	1	6,195	7,087	0	0	0	0	0	0	0	0	0
7.2/2.4	120/240	50	0	0	0	0	0	0	0	0	0	0	0	0	2	7,268	7,268
7.2/2.4	120/240	75	0	0	0	0	0	0	0	0	0	0	0	0	1	8,476	8,476
7.2/2.4	120/240	100	0	0	0	2	14,466	16,549	0	0	0	0	0	0	9	39,168	39,168
14.4/7.2	120/240	100	0	0	0	0	0	0	0	0	0	0	0	0	1	8,887	8,887
Subtotal			33	133,337	155,471	46	225,966	258,505	0	0	0	32	189,082	194,187	33	209,686	209,686
Padmounted																	
12.5	120/208	300	3	38,532	44,928	2	34,706	39,704	3	53,283	57,173	3	71,880	73,821	2	54,156	54,156
12.5	120/208	500	4	74,644	87,035	1	21,042	24,072	5	106,330	114,092	0	0	0	3	93,228	93,228
12.5	120/208	300 Loop		0	0	0	0	0	0	0	0	1	38,813	39,861	0	0	0
12.5	120/208	750		0	0	0	0	0	2	74,318	79,743	3	75,084	77,111	0	0	0
12.5	120/208	1000		0	0	1	36,208	41,422	0	0	0	0	0	0	0	0	0
12.5	347/600	300		0	0	0	0	0	3	59,224	63,547	3	71,766	73,704	1	26,133	26,133
12.5	347/600	500	8	132,018	153,933	3	61,229	70,046	4	79,698	85,516	6	160,890	165,234	7	209,848	209,848
12.5	347/600	750		0	0	4	106,106	121,385	5	126,710	135,960	5	197,665	203,002	4	162,082	162,082
12.5	347/600	1000	2	59,127	68,942	1	32,709	37,419	0	0	0	7	300,062	308,164	1	45,164	45,164
12.5	347/600	1500		0	0	1	42,140	48,208	3	154,777	166,076	7	368,607	378,559	2	120,392	120,392
12.5	347/600	2000	3	151,792	176,989	2	92,144	105,413	0	0	0	0	0	0	5	349,710	349,710
12.5	347/600	2500		0	0	2	116,154	132,880	0	0	0	0	0	0	0	0	0
25	347/600	750	2	45,342	52,869	0	0	0	0	0	0	0	0	0	0	0	0
25	347/600	1000	5	136,291	158,915	0	0	0	2	86,326	92,628	2	84,012	86,280	0	0	0

Distribution Transformer Purchases

Primary Voltage	Secondary Voltage	Size	2005			2006			2007			2008			2009		
			Quantity	Cost	2009\$	Quantity	Cost	2009\$	Quantity	Cost	2009\$	Quantity	Cost	2009\$	Quantity	Cost	2009\$
25	347/600	1500	1	34,841	40,625	0	0	0	1	48,679	52,233	0	0	0	1	59,619	59,619
12.5/4.16	120/208	150		0	0	1	15,171	17,356	0	0	0	0	0	0	0	0	0
12.5/4.16	120/208	300	2	33,229	38,745	0	0	0	1	24,939	26,760	0	0	0	0	0	0
12.5/4.16	120/208	500	3	61,527	71,740	0	0	0	0	0	0	0	0	0	0	0	0
12.5/4.16	347/600	300		0	0	0	0	0	0	0	0	0	0	0	0	0	0
12.5/4.16	347/600	300	0	0	0	0	0	0	0	0	0	0	0	0	1	31,302	31,302
12.5/4.16	347/600	750		0	0	0	0	0	0	0	0	2	81,176	83,368	0	0	0
12.5/4.16	347/600	1500		0	0	0	0	0	0	0	0	2	118,676	121,880	0	0	0
				0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal			33	767,343	894,722	18	557,609	637,905	29	814,284	873,727	41	1,568,631	1,610,984	27	1,151,634	1,151,634
Total			2,512	5,019,083	5,852,251	2,408	5,657,170	6,471,802	2,626	6,929,937	7,435,822	2,811	8,469,233	8,697,902	1,986	6,669,942	6,669,942