

Schedule E1

Michigan Public Service Commission
 Upper Peninsula Power Company
 Annual Service Area Sales by Major Customer Classes and System Output
 5-Year Projected

Case No.: U-16417
 Exhibit No.: A-5 (HWJ-1)
 Schedule: E1
 Page 1 of 1
 Witness: Harry W. John

<u>Line</u>	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
<u>No.</u>	<u>Year</u>	<u>Residential</u>	<u>Commercial</u>	<u>Industrial</u>	<u>Other</u>	<u>Total</u>	<u>Losses</u>	<u>Losses %</u> <u>of Output</u>	<u>System Output Unit of</u> <u>Measure</u>
1	2012	268,204,173	241,024,070	124,224,202	193,169,612	826,622,057	45,981,536	5.56%	kWh
2	2013	265,805,794	240,183,805	124,224,202	188,103,949	818,317,750	45,750,916	5.59%	kWh
3	2014	265,104,047	239,476,050	124,224,202	188,117,452	816,921,751	45,651,267	5.59%	kWh
4	2015	264,522,626	238,801,456	124,224,202	188,117,452	815,665,736	45,560,065	5.59%	kWh
5	2016	264,408,339	238,152,847	124,224,202	188,117,452	814,902,840	45,506,713	5.58%	kWh

Notes:

- 1) "Other" includes Street Lighting, Emergency Sales, RTMP, Sales for Resale, Opportunity Sales, and Company Use.
- 2) "Losses" include Transmission and Distribution only.
- 3) Losses are applied only to retail and wholesale sales.

UPPER PENINSULA POWER COMPANY
 2012 Test Year - Summary of Sales by Revenue Class (Calendar or Net)
 Units: kWh

Case No.: U-16417
 Witness: Harry W. John
 Exhibit A-5 (HWJ-1)
 Schedule E1.1

Line #		JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1	INTEGRATED SYSTEM													
2	RESIDENTIAL	25,368,227	23,179,842	21,290,969	18,921,217	17,508,765	17,680,640	19,229,085	19,916,516	19,972,098	20,498,685	20,642,600	23,941,261	248,149,905
3	C & I SMALL	19,168,615	18,687,136	18,427,940	17,525,342	17,277,200	17,996,618	18,847,456	18,652,978	17,393,221	17,302,521	17,845,750	18,725,394	217,850,171
4	C & I LARGE	9,395,598	8,944,865	9,573,164	9,701,170	8,622,056	9,121,850	9,633,688	8,781,803	9,309,842	9,370,779	9,146,201	9,183,904	110,784,920
5	STREET LIGHTING	579,208	475,066	454,072	380,460	343,779	308,235	331,780	369,752	410,005	482,062	516,445	566,975	5,217,839
6	TOTAL MPSC JURISDICTION	54,511,648	51,286,909	49,746,145	46,528,189	43,751,800	45,107,343	48,042,009	47,721,049	47,085,166	47,654,047	48,150,996	52,417,534	582,002,835
7														
8	EMERGENCY SALES	0	0	0	0	0	0	0	0	0	0	0	0	0
9	RTMP	14,699,935	15,185,090	14,538,169	13,735,809	15,575,747	15,412,764	14,277,232	15,256,858	16,228,505	14,628,895	15,903,923	12,317,567	177,760,494
10	SALE FOR RESALE	0	0	0	0	0	0	0	0	0	0	0	0	0
11	SUB-TOTAL	69,211,583	66,471,999	64,284,314	60,263,998	59,327,547	60,520,107	62,319,241	62,977,907	63,313,671	62,282,942	64,054,919	64,735,101	759,763,329
12														
13	OPPORTUNITY SALES	0	10,559	150,975	1,327,628	966,331	1,105,230	1,342,891	1,136,921	428,295	104,106	36,834	51,582	6,661,352
14	TOTAL INTEGRATED SALES	69,211,583	66,482,558	64,435,289	61,591,626	60,293,878	61,625,337	63,662,132	64,114,828	63,741,966	62,387,048	64,091,753	64,786,683	766,424,681
15														
16														
17	IRON RIVER SYSTEM													
18	RESIDENTIAL	2,068,248	1,873,547	1,809,712	1,535,374	1,461,467	1,454,343	1,581,805	1,615,099	1,471,501	1,588,144	1,668,516	1,926,512	20,054,268
19	C & I SMALL	2,018,068	1,951,631	1,952,944	1,861,742	1,856,847	1,927,049	2,028,708	2,007,248	1,859,873	1,851,560	1,884,917	1,973,312	23,173,899
20	C & I LARGE	1,168,342	901,738	1,074,125	1,102,072	1,005,029	1,459,604	1,429,596	1,071,994	823,361	868,686	1,239,155	1,295,580	13,439,282
21	STREET LIGHTING	44,610	35,830	35,200	29,636	26,836	24,142	25,886	29,119	32,385	37,983	40,561	43,894	406,082
22	TOTAL MPSC JURISDICTION	5,299,268	4,762,746	4,871,981	4,528,824	4,350,179	4,865,138	5,065,995	4,723,460	4,187,120	4,346,373	4,833,149	5,239,298	57,073,531
23														
24	EMERGENCY SALES	0	0	0	0	0	0	0	0	0	0	0	0	0
25	RTMP	0	0	0	0	0	0	0	0	0	0	0	0	0
26	SALE FOR RESALE	0	0	0	0	0	0	0	0	0	0	0	0	0
27	SUB-TOTAL	5,299,268	4,762,746	4,871,981	4,528,824	4,350,179	4,865,138	5,065,995	4,723,460	4,187,120	4,346,373	4,833,149	5,239,298	57,073,531
28														
29	OPPORTUNITY SALES	0	0	0	0	0	0	0	0	0	0	0	0	0
30	TOTAL IRON RIVER SALES	5,299,268	4,762,746	4,871,981	4,528,824	4,350,179	4,865,138	5,065,995	4,723,460	4,187,120	4,346,373	4,833,149	5,239,298	57,073,531
31														
32	SUMMARY													
33	INTEGRATED SYSTEM													
34														
35	INTEGRATED SYSTEM SALES	69,211,583	66,482,558	64,435,289	61,591,626	60,293,878	61,625,337	63,662,132	64,114,828	63,741,966	62,387,048	64,091,753	64,786,683	766,424,681
36														
37	COMPANY USE	457,597	430,807	361,491	274,155	208,230	141,728	104,755	119,768	127,883	176,277	269,211	386,432	3,058,334
38														
39	DISTRIBUTION LOSS FACTOR	3.66%	3.66%	3.66%	3.66%	3.66%	3.66%	3.66%	3.66%	3.66%	3.66%	3.66%	3.66%	3.66%
40	TRANSMISSION LOSS FACTOR	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
41	TOTAL LOSS FACTOR	7.16%	7.16%	7.16%	7.16%	7.16%	7.16%	7.16%	7.16%	7.16%	7.16%	7.16%	7.16%	7.16%
42														
43	DISTRIBUTION LOSSES	2,011,874	1,892,868	1,833,939	1,712,966	1,608,937	1,656,116	1,762,172	1,750,974	1,727,998	1,750,590	1,772,180	1,932,625	21,413,239
44	TRANSMISSION LOSSES	1,923,924	1,810,120	1,753,767	1,638,082	1,538,601	1,583,717	1,685,137	1,674,429	1,652,457	1,674,061	1,694,707	1,848,139	20,477,141
45	TOTAL LOSSES	3,935,798	3,702,988	3,587,706	3,351,048	3,147,538	3,239,833	3,447,309	3,425,403	3,380,455	3,424,651	3,466,887	3,780,764	41,890,380
46	TOTAL KWH REQUIRED	73,604,978	70,616,353	68,384,486	65,216,829	63,649,646	65,006,898	67,214,196	67,659,999	67,250,304	65,987,976	67,827,851	68,953,879	811,373,395
47														
48	SUMMARY													
49	IRON RIVER SYSTEM													
50	IRON RIVER SYSTEM SALES	5,299,268	4,762,746	4,871,981	4,528,824	4,350,179	4,865,138	5,065,995	4,723,460	4,187,120	4,346,373	4,833,149	5,239,298	57,073,531
51														
52	COMPANY USE	7,293	7,508	6,658	5,962	4,725	4,420	3,992	3,740	4,498	4,331	5,589	6,795	65,511
53														
54	DISTRIBUTION LOSS FACTOR	3.66%	3.66%	3.66%	3.66%	3.66%	3.66%	3.66%	3.66%	3.66%	3.66%	3.66%	3.66%	3.66%
55	TRANSMISSION LOSS FACTOR	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
56	TOTAL LOSS FACTOR	7.16%	7.16%	7.16%	7.16%	7.16%	7.16%	7.16%	7.16%	7.16%	7.16%	7.16%	7.16%	7.16%
57														
58	DISTRIBUTION LOSSES	194,220	174,591	178,558	165,973	159,389	178,226	185,562	173,016	153,413	159,236	177,098	192,007	2,091,289
59	TRANSMISSION LOSSES	185,730	166,959	170,752	158,718	152,422	170,435	177,450	165,452	146,707	152,275	169,356	183,613	1,999,869
60	TOTAL LOSSES	379,950	341,550	349,311	324,691	311,811	348,660	363,011	338,468	300,120	311,510	346,454	375,620	4,091,156
61	TOTAL KWH REQUIRED	5,686,511	5,111,804	5,227,950	4,859,477	4,666,715	5,218,218	5,432,998	5,065,668	4,491,738	4,662,214	5,185,192	5,621,713	61,230,198
62														
63	TOTAL UPPCO	79,291,489	75,728,157	73,612,436	70,076,306	68,316,361	70,225,116	72,647,194	72,725,667	71,742,042	70,650,190	73,013,043	74,575,592	872,603,593

UPPER PENINSULA POWER COMPANY
 2012 Test Year - Summary of Sales by Rate Schedule (Calendar or Net)
 Units: Kwh

Case No.: U-16417
 Witness: Harry W. John
 Exhibit A-5 (HWJ-1)
 Schedule E1.2

Line #	RATE SCHEDULE	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1	INTEGRATED SYSTEM													
2	A-1	21,274,977	19,264,566	17,832,163	16,252,569	15,528,048	15,909,252	17,552,441	18,162,424	18,147,454	18,436,302	18,116,544	20,570,643	217,047,383
3	AH-1	4,014,086	3,844,363	3,393,127	2,610,094	1,932,927	1,725,665	1,632,473	1,710,043	1,775,453	2,000,778	2,453,914	3,293,975	30,386,898
4	C-1	4,877,656	4,685,610	4,517,819	4,332,315	4,136,169	4,293,894	4,578,157	5,967,470	3,226,384	4,344,633	4,215,919	4,660,744	53,836,770
5	CP-PRI	2,769,454	2,714,801	2,790,953	2,766,864	2,687,227	2,759,413	2,754,679	2,739,585	2,693,403	2,700,546	2,729,255	2,860,050	32,966,230
6	CP-SEC	6,057,326	6,065,198	6,055,794	5,835,355	5,848,759	6,188,439	6,410,599	5,686,963	6,299,091	5,755,897	6,075,554	6,095,119	72,374,094
7	CP-TRN	3,581,342	3,251,756	3,596,640	3,905,811	3,255,660	3,595,746	3,645,537	3,817,101	3,353,472	3,298,459	3,362,558	3,526,153	42,190,235
8	OPPORTUNITY	-	10,559	150,975	1,327,628	966,331	1,105,230	1,342,891	1,136,921	428,295	104,106	36,834	51,582	6,661,352
9	H-1	926,632	981,985	863,364	611,070	544,858	525,210	572,463	605,716	662,687	594,955	594,527	725,867	8,209,334
10	P-1	7,244,136	6,926,736	7,013,020	6,679,649	6,668,641	6,903,769	7,238,430	6,432,442	7,227,941	6,654,503	6,922,972	7,064,604	82,976,843
11	RTMP-MI	14,699,935	15,185,090	14,538,169	13,735,809	15,575,747	15,412,764	14,277,232	15,256,858	16,228,505	14,628,895	15,903,923	12,317,567	177,760,494
12	SL-3	77,321	67,233	59,386	45,140	43,746	41,178	42,194	42,421	44,953	52,526	57,666	63,113	636,877
13	SL-5	29,940	22,587	21,059	17,954	16,024	14,262	15,463	17,501	19,534	22,998	24,542	26,981	248,845
14	SL-6	471,095	384,401	372,882	316,734	283,521	252,349	273,659	309,335	344,970	405,907	433,502	476,088	4,324,443
15	WP-3	3,036,297	2,938,020	3,107,883	3,042,974	2,715,322	2,810,811	3,242,817	2,149,649	3,192,549	3,272,918	3,030,152	2,913,302	35,452,694
16	Z-3	151,386	139,651	122,053	111,661	90,902	87,354	83,097	80,400	97,274	113,625	133,890	140,895	1,352,188
17	SUBTOTAL - INTEGRATED	69,211,583	66,482,556	64,435,287	61,591,627	60,293,882	61,625,336	63,662,132	64,114,829	63,741,965	62,387,048	64,091,752	64,786,683	766,424,680
18														
19	IRON RIVER SYSTEM													
20	A-2	1,817,714	1,616,836	1,595,571	1,380,225	1,339,660	1,352,759	1,468,205	1,514,130	1,374,711	1,460,240	1,530,893	1,713,158	18,164,102
21	AH-2	241,405	248,596	206,396	148,176	115,922	96,054	108,484	96,008	91,721	120,873	129,082	204,358	1,807,075
22	C-2	575,755	556,405	534,319	506,282	493,947	477,552	524,084	545,859	561,148	493,434	489,576	534,740	6,293,101
23	CP-SEC	606,649	588,420	618,830	620,865	643,931	714,309	739,927	735,927	621,755	630,365	623,068	611,023	7,755,069
24	CP-TRN	1,168,342	901,738	1,074,125	1,102,072	1,005,029	1,459,604	1,429,596	1,071,994	823,361	868,686	1,239,155	1,295,580	13,439,282
25	H-2	73,490	85,244	79,388	50,417	49,980	30,764	46,171	36,321	37,497	45,493	44,321	78,714	657,800
26	P-2	752,992	713,272	712,871	677,338	663,023	699,156	713,436	683,738	633,170	674,829	718,976	739,669	8,382,470
27	SL-10	44,487	35,772	35,096	29,535	26,754	24,071	25,811	29,046	32,302	37,880	40,453	43,772	404,979
28	Z-4	18,435	16,465	15,383	13,911	11,934	10,872	10,277	10,438	11,454	14,574	17,627	18,284	169,654
29	SUBTOTAL-IRON RIVER	5,299,269	4,762,748	4,871,979	4,528,821	4,350,180	4,865,141	5,065,991	4,723,461	4,187,119	4,346,374	4,833,151	5,239,298	57,073,532
30														
31	TOTAL UPPCO	74,510,852	71,245,304	69,307,266	66,120,448	64,644,062	66,490,477	68,728,123	68,838,290	67,929,084	66,733,422	68,924,903	70,025,981	823,498,212

UPPER PENINSULA POWER COMPANY
 2012 Test Year - Demand Unit Forecast (Calendar or Net)
 Units: kW

Case No.: U-16417
 Witness: Harry W. Johns
 Exhibit A-5 (HWJ-1)
 Schedule E2

Line #	RTSCHED	DEMAND	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1	INTEGRATED SYSTEM														
2	CP-PRI	FIRM	6,578	6,449	7,022	5,389	6,647	6,473	6,416	6,498	7,092	6,541	6,229	6,148	77,482
3	CP-SEC	FIRM	12,702	13,292	14,132	14,895	16,187	15,600	15,394	14,307	17,555	14,614	14,734	14,203	177,615
4	CP-TRN	FIRM	3,400	3,400	3,700	3,200	3,200	3,550	3,550	4,450	4,300	3,200	3,200	3,400	42,550
5	RTMP-MI	FIRM	35,145	34,598	32,968	24,447	26,636	27,953	34,149	36,460	31,316	28,137	35,111	29,977	376,897
6	P-1	FIRM	22,153	22,812	22,161	22,800	24,259	23,163	23,059	21,544	25,874	21,990	21,634	21,872	273,321
7	WP-3	INTERRUPTIBLE	5,829	5,806	5,713	5,852	5,898	5,644	6,359	7,280	6,451	6,151	5,967	5,806	72,756
8	CP-PRI	INTERRUPTIBLE	481	277	226	206	212	196	197	181	216	195	483	511	3,381
9	CP-SEC	INTERRUPTIBLE	1,078	1,075	1,065	1,150	1,153	1,052	1,062	1,019	1,167	1,072	1,089	1,065	13,047
10	CP-TRN	INTERRUPTIBLE	5,942	5,676	9,647	5,296	5,594	5,270	5,843	5,933	6,022	5,531	5,503	5,569	71,826
11	INTEGRATED SYSTEM TOTAL		93,308	93,385	96,634	83,235	89,786	88,901	96,029	97,672	99,993	87,431	93,950	88,551	1,108,875
12															
13	IRON RIVER SYSTEM														
14	CP-SEC	FIRM	1,526	1,584	1,768	1,760	2,105	1,892	1,778	1,925	2,040	1,698	1,753	1,655	21,484
15	CP-TRN	FIRM	2,600	2,600	1,400	1,400	1,400	2,600	2,600	2,600	2,600	1,400	1,400	2,600	25,200
16	P-2	INTERRUPTIBLE	2,404	2,537	2,561	2,383	2,640	2,493	2,328	2,431	2,848	2,494	2,635	2,588	30,342
17	CP-TRN	INTERRUPTIBLE	1,052	1,004	1,657	2,180	1,508	846	884	364	817	1,393	2,056	774	14,535
18	IRON RIVER SYSTEM TOTAL		7,582	7,725	7,386	7,723	7,653	7,831	7,590	7,320	8,305	6,985	7,844	7,617	91,561
19															
20	TOTAL UPPCO		100,890	101,110	104,020	90,958	97,439	96,732	103,619	104,992	108,298	94,416	101,794	96,168	1,200,436

UPPER PENINSULA POWER COMPANY
 2012 Test Year - Fixed Charge Count Forecast (Calendar or Net)

Line #	RATE SCHEDULE	YR / SEAS	TYPE	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1	INTEGRATED SYSTEM															
2	A-1	SEAS	CUSTOMERS	-	-	-	-	1,221	1,224	1,226	1,229	1,231	1,234	-	-	7,365
3	A-1	YR	CUSTOMERS	38,239	38,237	38,235	38,233	38,231	38,229	38,227	38,225	38,223	38,222	38,220	38,218	458,739
4	AH-1	YR	CUSTOMERS	3,418	3,421	3,423	3,426	3,429	3,432	3,435	3,438	3,441	3,444	3,447	3,450	41,204
5	C-1	YR	CUSTOMERS	4,317	4,317	4,316	4,315	4,314	4,313	4,312	4,311	4,310	4,309	4,309	4,308	51,751
6	CP-PRI	YR	CUSTOMERS	6	6	6	6	6	6	6	6	6	6	6	6	72
7	CP-SEC	YR	CUSTOMERS	48	48	48	48	48	48	48	48	48	48	48	48	576
8	CP-TRN	YR	CUSTOMERS	4	4	4	4	4	4	4	4	4	4	4	4	48
9	H-1	YR	CUSTOMERS	216	216	216	216	216	216	216	216	216	216	216	216	2,592
10	P-1	YR	CUSTOMERS	419	418	418	417	417	416	416	415	415	414	414	413	4,992
11	RTMP-MI	YR	CUSTOMERS	1	1	1	1	1	1	1	1	1	1	1	1	12
12	SL-3	YR	CUSTOMERS	67	67	67	67	67	67	67	67	67	67	67	67	804
13	WP-3	YR	CUSTOMERS	1	1	1	1	1	1	1	1	1	1	1	1	12
14	SL-5	YR	LAMPS	251	251	251	251	251	251	251	251	251	251	251	251	3,012
15	SL-6	YR	LAMPS	6,434	6,438	6,442	6,448	6,454	6,459	6,466	6,472	6,478	6,484	6,491	6,500	77,566
16	Z-3	YR	LAMPS	1,703	1,698	1,696	1,691	1,688	1,684	1,682	1,678	1,678	1,676	1,675	1,675	20,228
17	INTEGRATED SYSTEM TOTAL			55,124	55,123	55,124	55,124	56,348	56,351	56,358	56,366	56,370	56,377	55,150	55,158	668,973
18																
19	IRON RIVER SYSTEM															
20	A-2	SEAS	CUSTOMERS	-	-	-	-	49	49	50	50	50	50	-	-	298
21	A-2	YR	CUSTOMERS	3,188	3,187	3,187	3,186	3,185	3,184	3,183	3,183	3,182	3,181	3,180	3,179	38,205
22	AH-2	YR	CUSTOMERS	184	184	184	183	183	183	183	182	182	182	181	181	2,192
23	C-2	YR	CUSTOMERS	404	403	403	402	402	401	401	400	400	399	399	398	4,812
24	CP-SEC	YR	CUSTOMERS	6	6	6	6	6	6	6	6	6	6	6	6	72
25	CP-TRN	YR	CUSTOMERS	1	1	1	1	1	1	1	1	1	1	1	1	12
26	H-2	YR	CUSTOMERS	24	24	24	24	24	24	24	24	24	24	24	24	288
27	P-2	YR	CUSTOMERS	56	56	56	56	56	56	56	56	56	56	56	56	672
28	SL-10	YR	LAMPS	682	682	683	682	680	681	680	681	680	679	679	679	8,168
29	Z-4	YR	LAMPS	234	233	234	235	234	234	235	235	235	235	235	236	2,815
30	IRON RIVER SYSTEM TOTAL			4,779	4,776	4,778	4,775	4,820	4,819	4,819	4,818	4,816	4,813	4,761	4,760	57,534
31																
32	TOTAL UPPCO			59,903	59,899	59,902	59,899	61,168	61,170	61,177	61,184	61,186	61,190	59,911	59,918	726,507

UPPER PENINSULA POWER COMPANY
2010 Historic Year - Summary of Sales by Rate Schedule (Calendar or Net)
Units: kWh

Line #	RATE SCHEDULE	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1	INTEGRATED SYSTEM													
2	A-1	18,713,481	19,988,627	17,825,047	17,325,192	14,580,026	14,638,481	19,830,850	19,107,741	18,393,898	17,600,550	16,272,221	22,472,735	216,748,850
3	AH-1	3,874,686	4,120,030	3,346,508	2,394,217	1,289,989	1,395,096	1,641,318	1,794,943	1,795,467	2,029,710	2,604,255	3,847,234	30,133,452
4	C-1	4,040,426	4,815,443	4,740,078	4,543,513	3,776,495	4,035,416	5,015,225	7,389,229	2,201,546	4,279,315	4,103,336	5,397,817	54,337,838
5	CP-BUYOUT	-	-	-	-	-	-	-	-	-	-	-	6,768	6,768
6	CP-PRI	1,023,627	907,591	968,642	989,098	875,807	943,956	975,881	944,318	875,140	920,042	907,905	1,069,655	11,401,662
7	CP-SEC	5,066,884	6,794,803	6,249,371	6,006,390	5,605,706	6,086,007	6,595,850	6,359,379	5,699,430	5,854,547	6,048,360	6,427,648	72,794,376
8	CP-TRN	4,201,910	4,039,681	4,202,822	4,444,213	3,787,840	4,084,856	4,133,438	4,303,705	3,844,354	3,804,892	3,867,739	4,177,391	48,892,841
9	EMER	1,181,142	(1,181,142)	-	-	-	-	-	-	-	-	-	-	-
10	OPPORTUNITY	2,389,562	3,073,884	8,898,137	6,914,996	6,921,164	4,934,731	4,377,310	5,405,084	3,658,139	8,889,494	6,329,787	4,065,449	65,857,737
11	H-1	877,930	1,087,164	907,894	399,880	483,303	470,807	645,674	761,093	580,533	537,044	616,784	854,676	8,222,782
12	P-1	6,408,271	7,080,924	7,091,771	6,839,389	6,385,687	6,541,970	7,587,512	7,459,531	6,318,652	6,827,227	6,722,410	7,502,499	82,765,843
13	RTMP-MI	15,318,632	13,777,945	14,583,900	14,940,873	16,055,488	15,164,952	11,679,667	12,895,200	16,043,881	16,495,768	14,371,500	12,622,777	173,950,583
14	SCHEDULE A	451,613	-	-	-	-	-	-	-	-	-	-	-	451,613
15	SL-3	76,582	65,372	58,407	43,899	43,146	41,042	41,578	41,511	43,844	51,033	56,056	60,406	622,876
18	WP-1D	3,388,911	(3,926,273)	-	-	-	-	-	-	-	-	-	-	(537,362)
19	WP-3	3,036,297	2,938,020	3,107,883	3,042,974	2,715,322	2,810,811	3,242,817	2,149,649	3,192,549	3,272,918	3,030,152	2,908,126	35,447,518
16	SL-5	29,654	21,962	20,712	17,460	15,804	14,215	15,237	17,125	19,052	22,344	23,857	25,824	243,246
17	SL-6	466,590	373,762	366,734	308,024	279,631	251,516	269,667	302,697	336,459	394,371	421,400	455,669	4,226,520
25	Z-3	153,826	131,033	113,322	98,413	86,655	78,560	82,160	92,175	104,541	121,938	132,171	143,967	1,338,760
20	WR-1	2,220,315	1,916,853	1,754,997	1,588,288	1,794,250	1,823,371	2,318,334	2,315,817	1,918,606	1,850,253	1,971,727	2,218,391	23,691,202
21	WR-2	1,979,439	1,757,987	1,829,600	1,626,113	1,664,629	1,651,684	1,912,370	1,931,468	1,630,377	1,731,112	1,742,203	1,970,648	21,427,630
22	WR-3	2,326,426	2,041,449	2,018,095	1,803,719	1,903,727	1,782,412	2,024,179	2,053,445	1,805,988	1,922,537	2,052,522	2,416,638	24,151,137
23	WR-4	3,046,884	2,700,982	2,694,355	2,493,072	2,637,665	2,569,213	3,012,152	3,157,595	2,517,713	2,613,214	2,730,712	3,171,254	33,344,811
24	WR-5	1,414,289	1,245,895	1,276,367	1,137,679	1,201,974	1,196,420	1,411,872	1,473,265	1,201,676	1,243,040	1,231,834	1,415,600	15,449,911
25	SUBTOTAL - INTEGRATED	81,687,377	73,771,993	82,054,642	76,957,402	72,104,308	70,515,516	76,813,090	79,954,970	72,181,846	80,461,348	75,236,931	83,231,171	924,970,594
26														
27	IRON RIVER SYSTEM													
28	A-2	1,763,234	1,713,699	1,460,222	1,320,537	1,211,336	1,118,455	1,725,018	1,647,446	1,361,102	1,387,765	1,456,023	1,791,904	17,956,741
29	AH-2	245,491	283,845	176,326	112,474	92,460	62,572	118,172	104,463	89,923	113,325	133,433	242,019	1,774,502
30	C-2	471,252	594,156	525,886	529,365	463,102	446,400	679,519	546,530	537,567	482,234	432,726	626,164	6,334,901
31	CP-SEC	586,194	591,406	647,940	598,324	654,601	716,916	776,762	796,093	643,666	628,848	614,244	644,874	7,899,868
32	CP-TRN	1,168,342	901,738	1,074,125	1,102,072	1,005,029	1,459,604	1,429,596	1,071,994	823,361	868,686	1,239,155	1,295,580	13,439,282
33	H-2	56,876	101,963	69,141	42,140	46,708	15,624	64,310	29,773	31,512	56,633	43,035	109,759	667,474
34	P-2	665,382	712,569	752,490	633,496	664,361	696,535	741,882	777,423	621,013	691,046	714,094	794,973	8,465,264
35	WP-2	484,402	(545,613)	-	-	-	-	-	-	-	-	-	-	(61,211)
36	SL-10	44,273	35,534	34,872	29,424	26,642	23,994	25,723	28,910	32,187	37,712	40,269	43,594	403,134
37	Z-4	19,452	15,067	14,334	12,097	11,026	9,903	10,413	11,707	12,900	15,863	17,080	18,297	168,139
38	SUBTOTAL-IRON RIVER	5,504,898	4,404,365	4,755,336	4,379,929	4,175,264	4,550,003	5,571,395	5,014,339	4,153,231	4,282,112	4,690,058	5,567,165	57,048,095
39														
40	TOTAL UPKO	87,192,274	78,176,358	86,809,978	81,337,331	76,279,572	75,065,519	82,384,485	84,969,309	76,335,077	84,743,460	79,926,989	88,798,336	982,018,688

UPPER PENINSULA POWER COMPANY
 2010 Historic Year - Summary of Fixed Charge Counts by Rate Schedule (Calendar or Net)

Case No.: U-16417
 Witness: Harry W. Johns
 Exhibit A-15 (HWJ-2)
 Schedule E3

Line #	RATE SCHEDULE	YR / SEAS	TYPE	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1	INTEGRATED SYSTEM															
2	A-1	SEAS	CUSTOMERS	-	-	-	-	1,176	1,173	1,177	1,179	1,181	1,184	-	-	7,070
3	A-1	YR	CUSTOMERS	38,207	38,166	38,169	38,194	38,145	38,164	38,164	38,190	38,209	38,188	38,260	38,263	458,319
4	AH-1	YR	CUSTOMERS	3,377	3,376	3,378	3,382	3,382	3,370	3,379	3,375	3,374	3,375	3,379	3,380	40,527
5	C-1	YR	CUSTOMERS	4,341	4,325	4,319	4,327	4,315	4,322	4,313	4,319	4,319	4,312	4,333	4,329	51,874
6	CP-BUYOUT	YR	CUSTOMERS	-	-	-	-	-	-	-	-	-	-	-	1	1
7	CP-PRI	YR	CUSTOMERS	5	5	5	5	5	5	5	5	5	5	5	5	60
8	CP-SEC	YR	CUSTOMERS	40	47	48	48	46	47	47	47	48	48	48	48	562
9	CP-TRN	YR	CUSTOMERS	5	5	5	5	5	5	5	5	5	5	5	5	60
10	H-1	YR	CUSTOMERS	221	221	219	219	218	218	216	216	216	216	215	216	2,611
11	P-1	YR	CUSTOMERS	429	426	426	427	426	425	421	427	429	430	428	426	5,120
12	RTMP-MI	YR	CUSTOMERS	1	1	1	1	1	1	1	1	1	1	1	1	12
13	SCHEDULE A	YR	CUSTOMERS	1	-	-	-	-	-	-	-	-	-	-	-	1
14	SL-3	YR	CUSTOMERS	63	63	63	61	63	67	68	68	67	71	72	72	798
15	WP-1D	YR	CUSTOMERS	29	-	-	-	-	-	-	-	-	-	-	-	29
16	WP-3	YR	CUSTOMERS	1	1	1	1	1	1	1	1	1	1	1	1	12
17	WR-1	YR	CUSTOMERS	2	2	2	2	2	2	2	2	2	2	2	2	2
18	WR-2	YR	CUSTOMERS	1	1	1	1	1	1	1	1	1	1	1	1	1
19	WR-3	YR	CUSTOMERS	1	1	1	1	1	1	1	1	1	1	1	1	1
20	WR-4	YR	CUSTOMERS	1	1	1	1	1	1	1	1	1	1	1	1	1
21	WR-5	YR	LANSE	1	1	1	1	1	1	1	1	1	1	1	1	1
22	SL-5	YR	LAMPS	267	267	250	250	258	259	250	250	250	250	250	250	3,051
23	SL-6	YR	LAMPS	6,517	7,847	10,976	7,346	6,613	6,941	6,460	6,370	6,482	6,370	6,375	6,638	84,935
24	Z-3	YR	LAMPS	1,824	1,844	1,854	1,828	1,800	1,838	1,807	1,802	1,809	1,796	1,801	1,787	21,790
25	INTEGRATED SYSTEM TOTAL			55,334	56,600	59,720	56,100	56,460	56,842	56,320	56,261	56,402	56,258	55,179	55,428	676,838
26																
27	IRON RIVER SYSTEM															
28	A-2	SEAS	CUSTOMERS	-	-	-	-	49	49	47	47	46	46	-	-	284
29	A-2	YR	CUSTOMERS	3,205	3,200	3,204	3,207	3,202	3,204	3,200	3,202	3,201	3,204	3,189	3,199	38,417
30	AH-2	YR	CUSTOMERS	194	193	192	191	190	189	189	190	190	190	189	188	2,285
31	C-2	YR	CUSTOMERS	422	422	419	420	420	419	417	416	413	411	411	411	5,001
32	CP-SEC	YR	CUSTOMERS	6	6	6	6	6	6	6	6	6	6	6	6	72
33	CP-TRN	YR	CUSTOMERS	1	1	1	1	1	1	1	1	1	1	1	1	12
34	H-2	YR	CUSTOMERS	25	25	25	25	25	25	25	25	25	25	27	25	302
35	P-2	YR	CUSTOMERS	53	54	54	53	53	53	53	53	55	56	55	56	648
36	WP-2	YR	CUSTOMERS	6	-	-	-	-	-	-	-	-	-	-	-	-
37	SL-10	YR	LAMPS	861	774	1,117	685	685	771	686	686	902	716	687	687	9,257
38	Z-4	YR	LAMPS	237	234	255	237	238	239	236	235	234	236	236	236	2,853
39	IRON RIVER SYSTEM TOTAL			5,010	4,909	5,273	4,825	4,869	4,956	4,860	4,861	5,073	4,891	4,801	4,809	59,131
40																
41	TOTAL UPPCO			60,344	61,509	64,993	60,925	61,329	61,798	61,180	61,122	61,475	61,149	59,980	60,237	735,969

Upper Peninsula Power Company

Annual System Sales, Maximum Demands, and Load Factors 2005-2010 Historical Data and 2012 Test Year Data

Line No.	(a) Year	(b)	(c) Annual Sales Mwh	(d) Maximum Demand	(e) Date	(f) Annual Load Factor
1	2005	Historical	1,129,309	138	July 11, 2005	93.4%
2	2006	Historical	1,206,040	140	December 6, 2006	98.3%
3	2007	Historical	1,203,882	157	August 1, 2007	87.5%
4	2008	Historical	1,083,533	144	December 15, 2008	85.9%
5	2009	Historical	1,098,059	139	July 27, 2009	90.2%
6	2010	Historical	982,019	129	August 30, 2010	
7	2012	Forecast	823,498	120		78.3%

Column (b) Annual sales exclude Company Use and Losses.

Column (d) Historical Maximum Demand is firm load as reported in FERC Form 1, Page 401.b.

Column (f) 2011 loss of wholesale customers will affect the peak and load factor