Table F.1-2 Illinois Buses with Marginal Costs Most Often More than 10% above the State Average

Number	Name	Area Name	Nominal kV	Hours 10% above Average	Cumulative $/MWh
33002	RS WALL	CILC	69	298	11,739
36544	K3192;4T	NI	138	218	8,847
36546	K3191;4T	NI	138	218	8,847
36548	K3192;4B	NI	138	218	8,847
36660	DAVIS; B	NI	138	218	8,847
36670	K3192;5T	NI	138	218	8,839
36874	K3192;5B	NI	138	218	8,839
36882	KANKE;BT	NI	138	218	8,837
36884	KANKE; B	NI	138	218	8,837
36562	BRADL; B	NI	138	218	8,837
36883	KANKE;RT	NI	138	218	8,837
36885	KANKE; R	NI	138	218	8,837
36661	DAVIS; R	NI	138	218	8,829
33001	EDWARDS1	CILC	69	282	8,217
33299	PEORIA	CILC	138	281	8,107
33300	PEKIN	CILC	138	279	7,714
33073	MIDWEST	CILC	69	278	7,700
36688	DIXON; B	NI	138	139	7,074
36689	DIXON; R	NI	138	139	7,071
33040	EASTERN	CILC	69	275	6,424
33023	HINES	CILC	69	273	6,192
33029	NORTHWST	CILC	69	273	5,970
36969	MAZON; R	NI	138	737	5,635
36027	DAVIS;3M	NI	138	147	5,475
36127	DAVIS;3C	NI	34.5	147	5,475
36968	MAZON; B	NI	138	235	5,273
36942	LOMBA; B	NI	138	25	5,141
37582	LOMBA;BP	NI	138	25	5,141
37114	PLEAS;BT	NI	138	25	5,116
37116	PLEAS; B	NI	138	25	5,116
33108	FARGO	CILC	69	267	4,913
36778	GLEND;BT	NI	138	25	4,501
36780	GLEND; B	NI	138	25	4,501
33088	HALLOCK	CILC	69	263	4,482
37369	WILMI;	NI	138	468	4,480
33175	MASON	CILC	138	337	4,403
32415	GALESBRG	IP	138	1,865	4,359
33144	HINES	CILC	138	262	4,209
37371	WILSO; R	NI	138	176	4,161
33146	EASTERN	CILC	138	264	3,994
32603	EGAL #1	IP	69	1,777	3,945

Table F.1-2 Illinois Buses with Marginal Costs Most Often More than 10% above the State Average

Number	Name	Area Name	Nominal kV	Hours 10% above Average	Cumulative $/MWh
32602	EGAL #2	IP	69	1,774	3,934
36776	G ELL; B	NI	138	25	3,923
37048	NORDI; B	NI	138	25	3,911
37195	ROUND; R	NI	138	145	3,892
36981	MENDO;	NI	138	130	3,848
36982	MENDO; T	NI	138	130	3,848
37167	H440 ;RT	NI	138	130	3,823
37169	H440 ; R	NI	138	130	3,776
37168	H445 ;3B	NI	138	130	3,776
33152	PIONEERC	CILC	138	262	3,759
32601	MONB #5	IP	69	1,728	3,746
33155	HALLOCK	CILC	138	260	3,715
33084	TAZEWELL	CILC	69	264	3,708
32600	MONB #4	IP	69	1,713	3,700
37166	STEWA; B	NI	138	130	3,679
36483	ANTIO;RT	NI	138	104	3,602
36485	ANTIO; R	NI	138	104	3,602
32416	MONMOUTH	IP	138	1,656	3,488
33154	CAT MOSS	CILC	138	256	3,430
33151	RADNOR	CILC	138	256	3,426
37063	NB212; R	NI	138	25	3,270
36667	DEERF;RT	NI	138	25	3,225
36669	DEERF; R	NI	138	25	3,225
37141	J375 ; R	NI	138	682	3,222
37631	EQUIS; R	NI	13.8	682	3,222
36813	GURNE; R	NI	138	50	3,218
36578	BUTTE; B	NI	138	25	3,211
36794	GRACE; B	NI	138	22	3,203
37140	J375 ; B	NI	138	235	3,176
37630	EQUIS; B	NI	13.8	235	3,176
36843	HIGHL; R	NI	138	26	3,130
36658	DAVIS;1T	NI	138	231	3,094
37091	O ELM; R	NI	138	26	3,075
36471	J371 ; R	NI	138	669	3,071
36473	J371 ;RT	NI	138	669	3,071
36470	J371 ; B	NI	138	236	3,066
36472	J371 ;BT	NI	138	236	3,066
33150	FARGO	CILC	138	254	3,015
37066	J339 ; B	NI	138	236	2,987
37040	N LEN; B	NI	138	238	2,982
33143	CAT SUB2	CILC	138	257	2,979

Table F.1-2 Illinois Buses with Marginal Costs Most Often More than 10% above the State Average

Number	Name	Area Name	Nominal kV	Hours 10% above Average	Cumulative $/MWh
37067	J339 ; R	NI	138	662	2,974
36448	ADDIS; B	NI	138	22	2,954
32334	ASHLEY	IP	138	119	2,941
36045	ITASC;1M	NI	138	27	2,937
36145	ITASC;1C	NI	34.5	27	2,937
36864	ITASC; B	NI	138	27	2,933
30439	CROSSVL	AMRN	138	528	2,888
36807	A450 ; R	NI	138	26	2,881
36433	1A431; R	NI	138	26	2,867
36439	1A431;5T	NI	138	26	2,867
37061	N CHI; R	NI	138	26	2,840
36754	FFORT; B	NI	138	230	2,785
36909	LAKEH; R	NI	138	29	2,782
36032	DRESD;1M	NI	138	613	2,722
36132	DRESD;1C	NI	34.5	613	2,722
36050	LISLE;2M	NI	138	26	2,709
36150	LISLE;2C	NI	34.5	26	2,709
36659	DAVIS;2T	NI	138	229	2,691

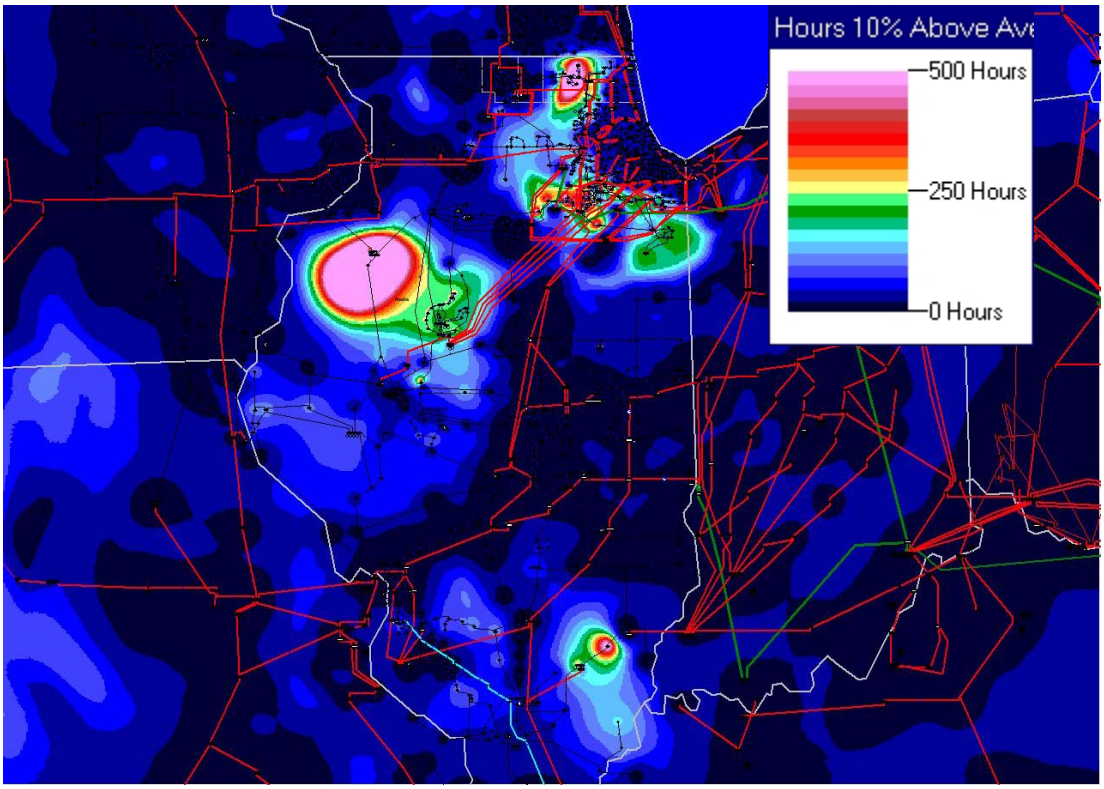

Figure F.1-29 Number of Hours Bus LMPs at Least 10% above the State Average

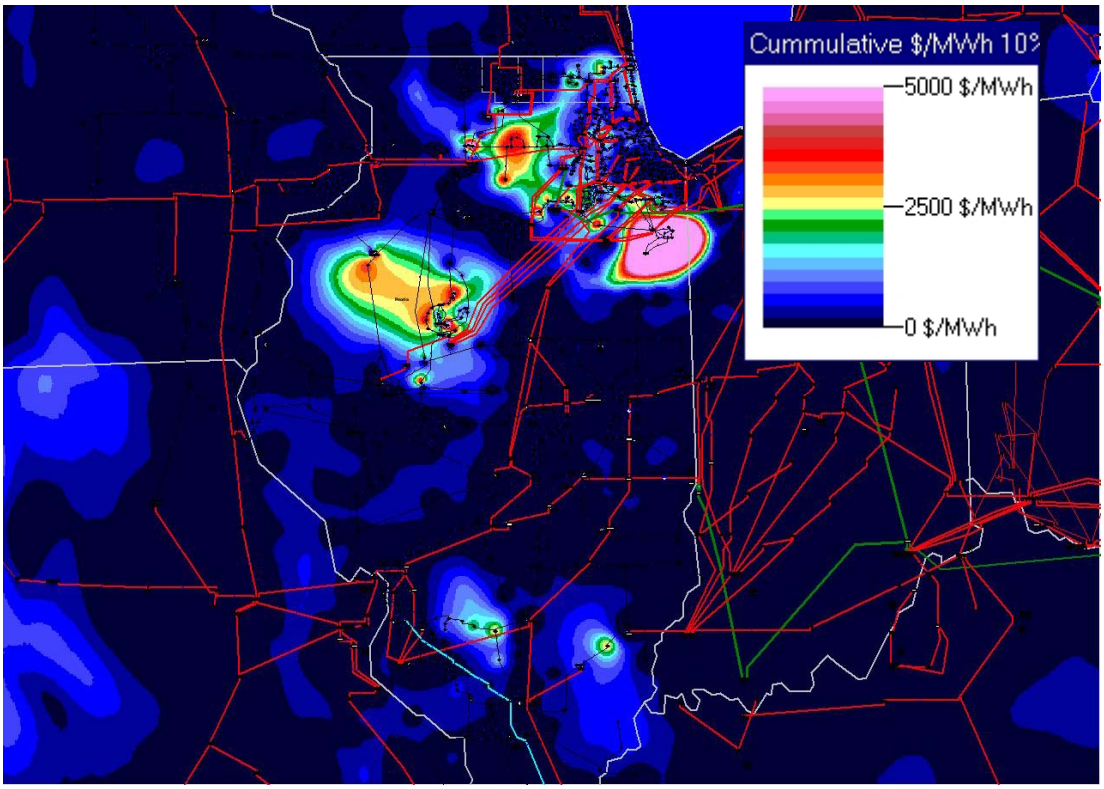

Figure F.1-30 Cumulative $/MWh 10% above the State Average

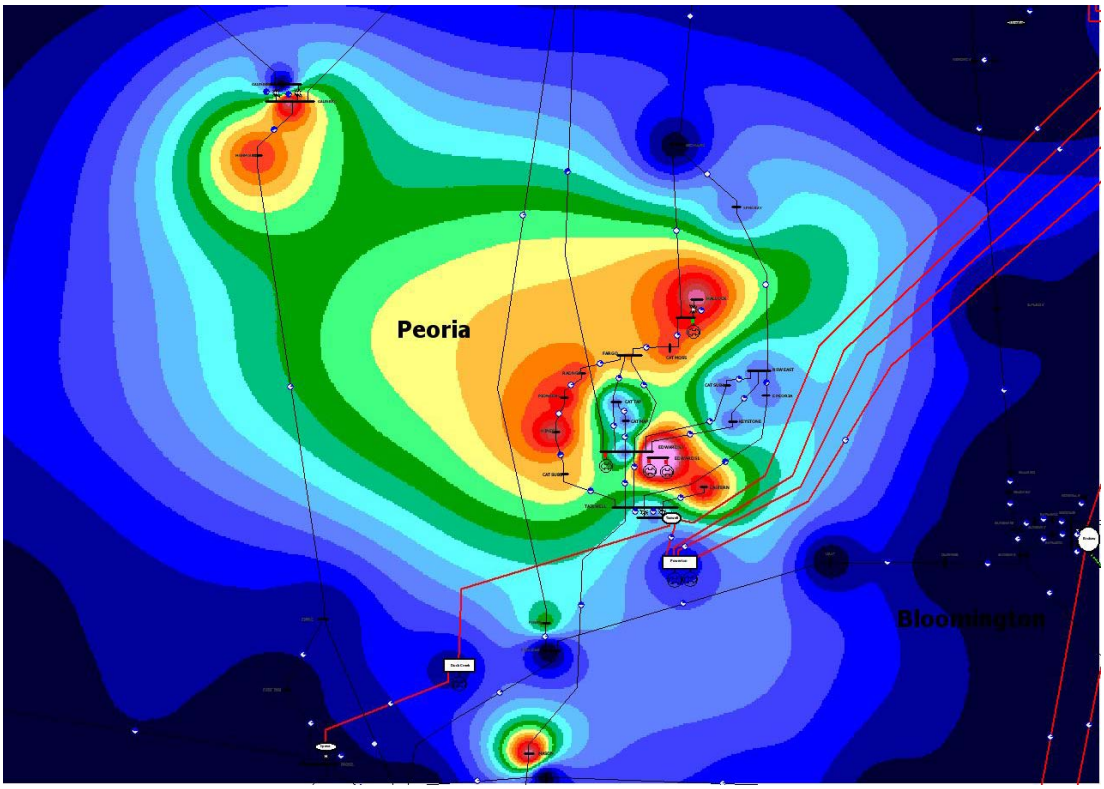

Figure F.1-31 Figure F.1-30 with Zoomed View of Peoria Area

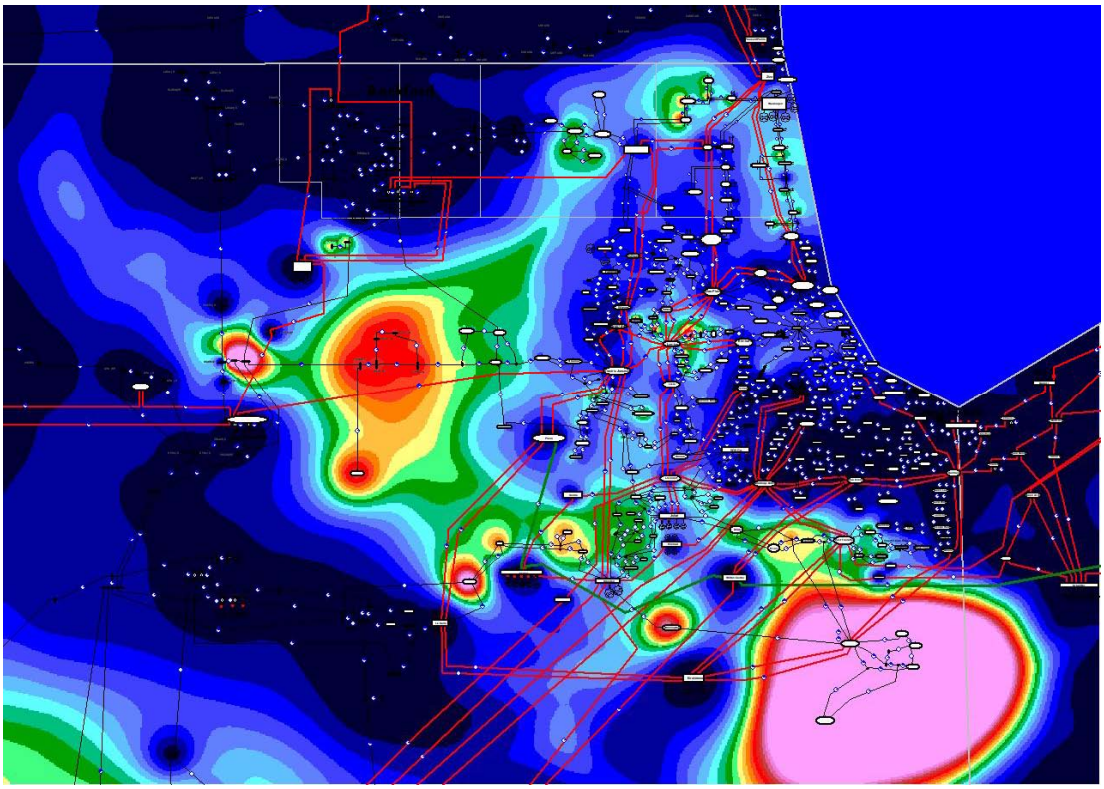

Figure F.1-32 Figure F.1-30 with Zoomed View of Northern Illinois

APPENDIX F.2

Appendix F.2 provides additional results for the modified case. The modified case is the same as the original case, except the generator cost curves have been modified to include a component that includes the impact of fixed costs in the generator bids. In general, higher fixed costs were added to out-of-state generators, causing Illinois to switch from being a net importer to being a net exporter.

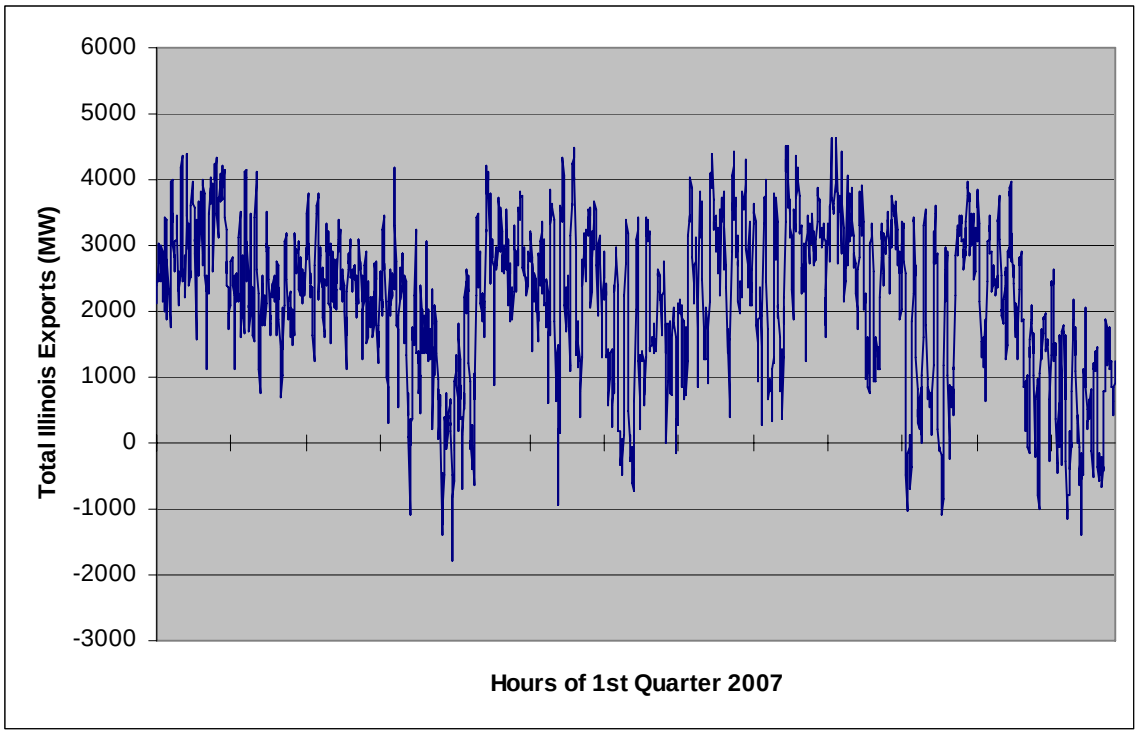

Figure F.2-1 Hourly Power Exports for Illinois during the 1st Quarter 2007

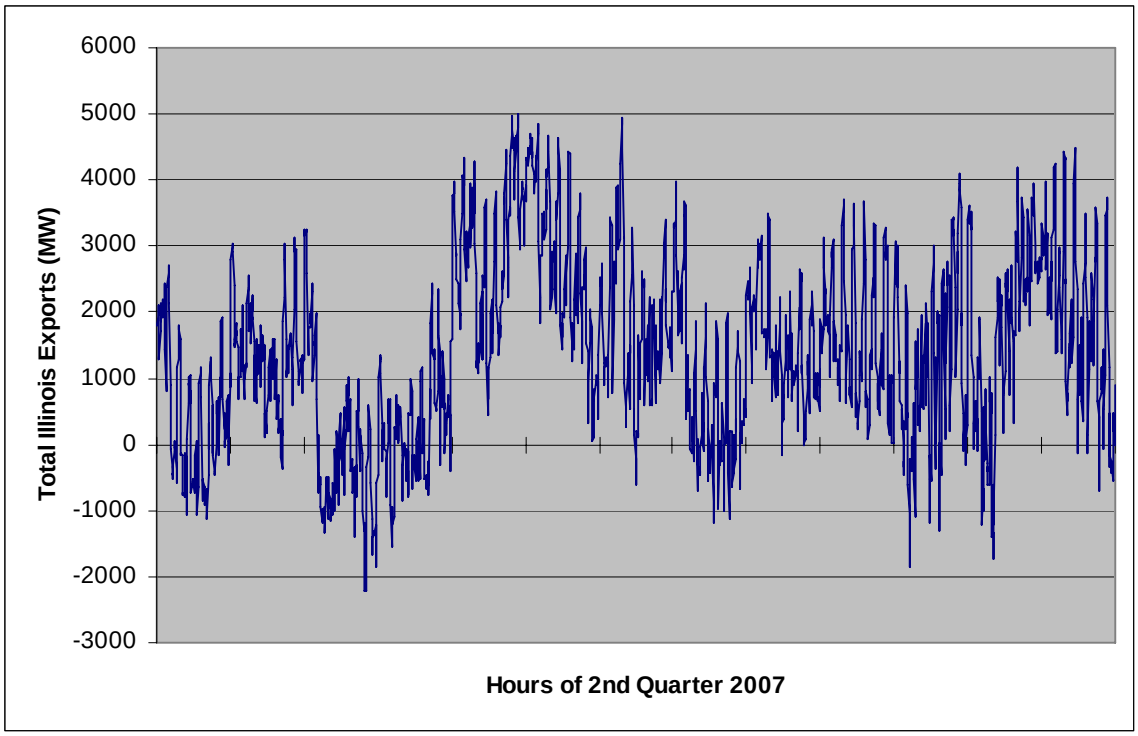

Figure F.2-2 Hourly Power Exports for Illinois in 2nd Quarter 2007

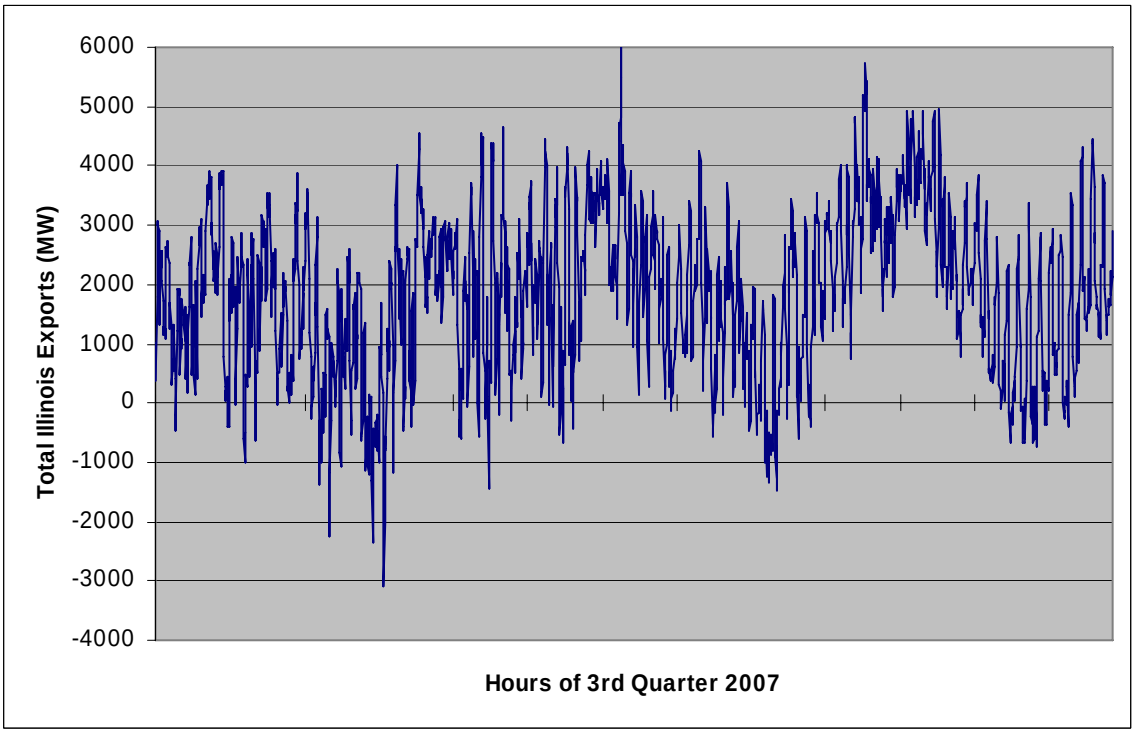

Figure F.2-3 Hourly Power Exports for Illinois in 3rd Quarter 2007

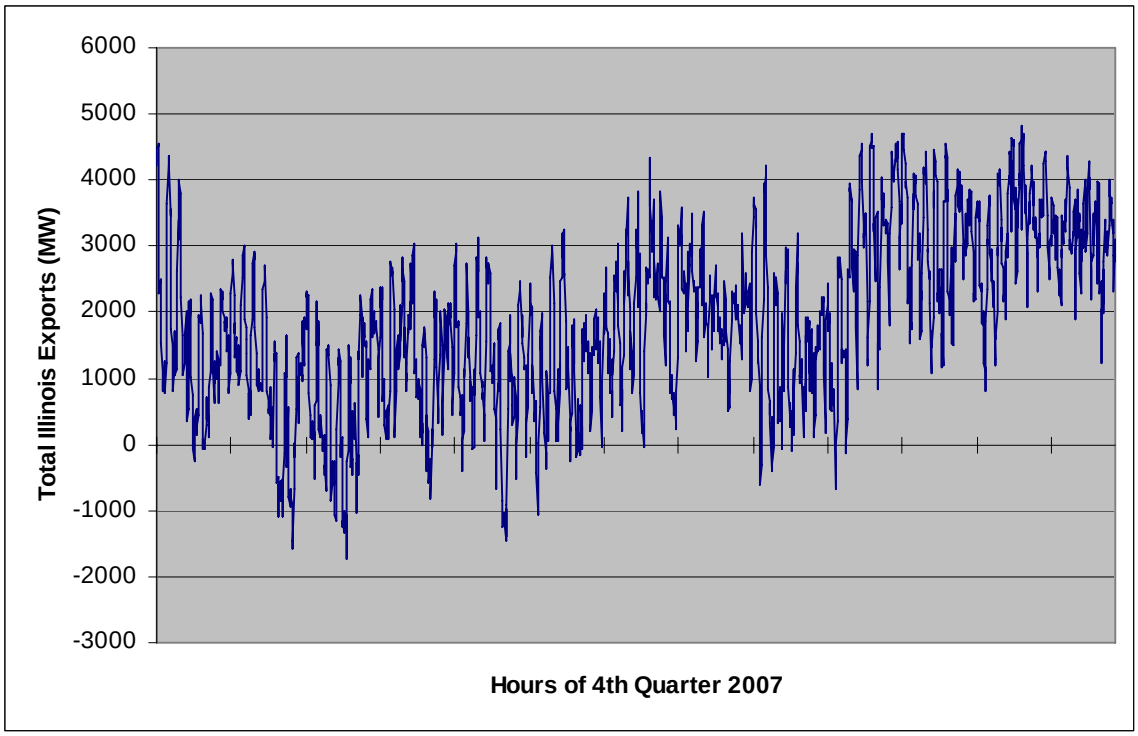

Figure F.2-4 Hourly Power Exports for Illinois in 4th Quarter 2007

Table F.2-1 Congested Transmission Lines 2007

Area	From Bus	To Bus	Cir-cuit	Contingency Name	Hours Binding	Avg MC	Max MC
WI	ARP 138	ARP 345	1	WIS39244ARP345-39785ROCKYRNC1	7,939	19.28	129.52
Ameren-MO	FRED TAP	FREDTOWN	1	AMRNMTL73	3,666	16.97	150.72
Ameren-MO	ORAN	STODDARD	1	AMRNMTL51	2,873	38.65	206.72
Brec-SIPC	14MORGAN	2GALTN_S	1	SIPC2761814LIVIN5-333525RNSHW_SC1	1,782	7.5	36.31
ComEd	MAZON; R	OGLES; T	1	345-L15502_B-R	1,750	10.78	60.49
WI	PAD 345	PAD 138	1	WIS39058PAD345-39119ROE345C1	1,727	12.5	70.12
IP	LAC N TP	GILSP TP	1	AMRNMTL71A	1,489	7.38	15.06
WI	BAIN 5	PLS PR4	2	WIS38850PLSPR3-38851PLSPR4C1	1,228	6.33	49.53
Ameren-IP	MASON CY	1346A TP	1	CIL-6	798	4.6	30.33
CILCO	HOLLAND	MASON	1	CIL-6	736	9.35	65.59
WI	EDG 345	CEDRSAUK	1	WIS38870GRANVL2-39433PTBCH1C1	734	0.98	4.92
IA (MEC)	DAVNPRT3	WALCOTT3	1	MEC64402LOUISA3-64403EMOLIN3C1	713	2.89	5.6
TVA	8CUMBERL	8DAVIDSO	1	TVA184228JVILLE-184258CUMBERLC1	677	0.83	13.47
ComEd	MAZON; R	OGLES; T	1	345-L2101-S	661	6.43	61.86
TVA	8JVILLE	8CUMBERL	1	TVA184258CUMBERL-184308DAVIDSOC1	641	14.07	37.76
Cinergy	08WEBSTE	08NEWLON	1	AEP2266505GRNTWN-2266705JEFRSOC1	595	3.43	57.91
Cinergy	08KOK HP	08KO IN5	1	AEP2266505GRNTWN-2266705JEFRSOC1	530	76.38	466.63
ComEd	MAZON; R	OGLES; T	1	CIL-6A	512	6.2	51.03
WI	OK CRK9	OC CRK6	1	WIS38857OCCRK8-39367OKCRKC1	502	0.53	14.96
Ameren-MO	MARIES	5MARIES	1	AMRNVSS17	483	78.58	201.72

Table F.2-1 Congested Transmission Lines 2007

Area	From Bus	To Bus	Cir-cuit	Contingency Name	Hours Binding	Avg MC	Max MC
ComEd	MAZON; R	OGLES; T	1	IP108	472	6.21	62.76
ComEd	MAREN;RT	P VAL; R	1	345-L15616-R	467	5.72	31.72
ComEd	MAZON; R	OGLES; T	1	345-L0302_B-S	345	3.83	54.56
SIPC	2CARML_S	2HMLTN_S	99	AMRNVSS76	322	35.02	88.57
ComEd	FISK ; R	FISK STR	19	TR81_TAYLR_R-C	305	16.43	155.7
Ameren-MO	CEE TAP	CENTRAL	1	AMRNMTL55	262	2.71	12.01
WI	DEAD RVR	DR NEU1	1	WIS39917DEADRVR-39898DRNEU1AC1	242	0.14	1.05
ComEd	FISK ; B	FISK STR	19	TR82_TAYLR_B-C	192	9.31	28.46
ComEd-WI	ZION ; R	PLS PR2	1	345-L17101-R	189	0.17	1.37
ComEd	SLINE;5S	WASHI; R	1	345-L17723_B-C	182	10.74	141.11
CILCO	RS WALL	RSW EAST	1	Basecase	178	205.88	1000
ComEd	LASCO; B	MAZON; B	1	345-L1223_R-S	171	13.27	47.54
ComEd	CLYBO; B	CROSB; B	1	138-L4018_R-C	157	0.67	14.32
ComEd	CLYBO; B	CROSB; B	1	345-L4621_B-N	145	1.83	31.42
Ameren-MO	HAMLTNAM	HAMLTNAM	1	AMRNMTL32	144	6.49	14.83
ComEd	HILLC;6B	WILL ;BT	1	138-L0907_B-S	143	9.31	12.73
IP	SPRTA TP	ARCH TAP	1	IP30	142	4.25	23.74
ComEd	DAVIS; B	DAVIS;3M	1	345-L17704_R-S	139	74.69	546.83
ComEd	WAUKE; B	ZION ;	1	345-L2221_R-N	132	1.36	4.29
ComEd	ELMHU;3I	F PAR; B	1	TR81_ELMHU_R-N	127	8.11	140.69
IP	LAC N TP	GILSP TP	1	IP95	124	7.83	12.21
Cinergy	08GALAGH	08GALAGH	1	AEP2266705JEFRSO-2267105ROCKPTC1	118	0.66	1.5
BREC-SIPC	14MORGAN	2GALTN_S	1	IP98	118	48.92	134.34
SIPC	2CARML_S	2HMLTN_S	99	SIPC31023MARIONS-333515MRN_PLNC1	117	41.74	84.74
ComEd	DIXON; R	NELSO;RT	1	138-L15507_B-R	108	101.67	494.23
ComEd	BARTL;BT	SPAUL; B	1	345-L14402_B-N	103	5.15	23.63
CILCO	HOLLAND	MASON	1	345-L0304_R-S	98	28.46	91.04
IP-ComEd	PWR JCTB	POWER;	1	CIL-6A	89	13.84	92.51
Ameren-CWLP	AUBURN N	CHATHAM	1	IP109	88	2.59	27.04
ComEd	ELECT;3R	ELECT;3M	1	TR84_ELECT_R-N	87	3.44	16.38
ComEd	SLINE;2S	WASHI; B	1	138-L0708_B-C	84	3.62	24.11
ComEd	TOLLW; B	TOLLW;3M	1	138-L7910_B-R	84	4.26	21.6
Ameren-IP	MASON CY	1346A TP	1	CIL-6A	83	4.58	23.67
ComEd	JEFFE; B	KINGS; B	1	138-L1110_B-C	82	14.12	137.33
ComEd	RIDGE; B	RIDGE;BS	1	138-L5118_B-S	79	18.69	215.76
IA (ALTW)	HAZLTON5	HAZLTON3	1	ALTW34020HAZLS5-34018HAZLTON3C2	79	47.41	73.64
AEP	05BENTON	05COOK	1	AEP2265405COOK-2853818PALISAC1	79	3.34	16.54
IP	MT VRNON	ASHLEY	1	IP96	78	40.63	133.72
Ameren-MO	CEE TAP	CENTRAL	1	Basecase	73	4.16	12.95
IN	07RAMSEY	07RAMSY5	2	CIN2518107RAMSY5-2538808SPEEDC1	72	549	1000
WI	EDG 345	CEDRSAUK	1	WIS38898PTBCH2-39433PTBCH1C1	69	1.07	3.86

Table F.2-1 Congested Transmission Lines 2007

Area	From Bus	To Bus	Cir-cuit	Contingency Name	Hours Binding	Avg MC	Max MC
ComEd	HILLC;6B	WILL ;BT	1	Basecase	69	9.25	17.28
WI	EDG 138	EDG 345	1	WIS39215EDG138-39214EDG345C2	66	228.55	389.86
ComEd	Y450 ; R	CONGR; R	1	Basecase	66	12.52	200.55
Ameren	ALBION	CROSSVL	1	IP96	65	12.41	56.18
ComEd	MAZON; R	OGLES; T	1	TR81_DRESD_B-S	60	12.54	46.73
ComEd	HARBO;8S	UNIVE; B	1	345-L17723_B-C	57	2.47	11.48
Cinergy	08BUFTN1	08BUFTN1	1	CIN2496206PIERC2-2602908FOSTERC1	55	111.11	224.67
Ameren	EFFINGHM	NEWTON	1	AMRNVSS35	53	3.4	27.03
Ameren	HAMLTNAM	KH2 XFMR	1	AMRNMTL32	52	15.36	22.46
ComEd	UNIVE; B	WASHI; B	1	138-L13701_R-C	51	0.26	0.34
WI	WESTONWP	WESTON	1	WIS39245ARP138-39244ARP345C1	51	0.95	1.71
ComEd	D799 ;6B	RIDGE; B	1	138-L1321_G-C	50	48.38	230.38
ComEd	CROSB; R	ROCKW; R	1	138-L6721_B-C	47	0.49	1.37
ComEd	DIXON; B	NELSO; B	1	138-L15508_R-R	45	88.71	463.33
ComEd	O PAR; B	RIDGE;9I	1	Basecase	41	0.59	1.9
ComEd	ELWOO; R	GOODI;1R	1	345-L1223_R-S	39	8.23	36.39
ComEd	DEVON;3R	ROSEH;RT	1	138-L11416_R-C	38	49.92	331.8
Ameren	ALBION	CROSSVL	1	IP98	36	25.31	93.9
ComEd	SLINE;2S	WASHI; B	1	345-L17723_B-C	36	0.25	0.45
Cinergy	08M.FTHS	08MFTM9	1	Basecase	35	48.08	109.45
WI	WESTONWP	WESTON	1	Basecase	35	1.19	2.06
ComEd-WI	ZION ; R	PLS PR2	1	WIS36406WEMPL;B-39058PAD345C1	31	0.16	0.43
ComEd	F PAR;0S	NATOM; R	1	345-L12002_R-N	31	0.48	3.06
CILCO	HOLLAND	MASON	1	345-L2101-S	31	3.42	7.12
ComEd	DAVIS;3M	DAVIS; B	1	345-L17704_R-S	27	65.3	313.8
ComEd	E FRA; R	GOODI;1R	1	Basecase	26	6.82	27.49
ComEd	TAYLO; R	TAYLO;1M	1	TR82_TAYLR_B-C	26	64.32	215.94

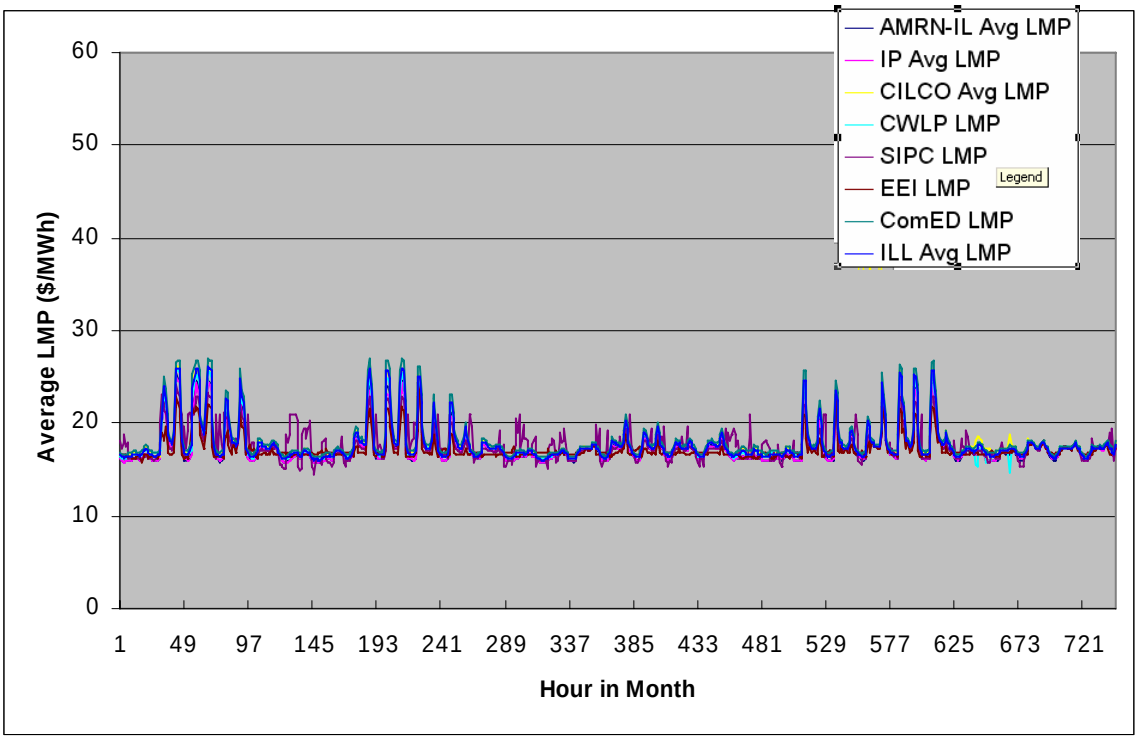

Figure F.2-5 Average LMPs for January 2007

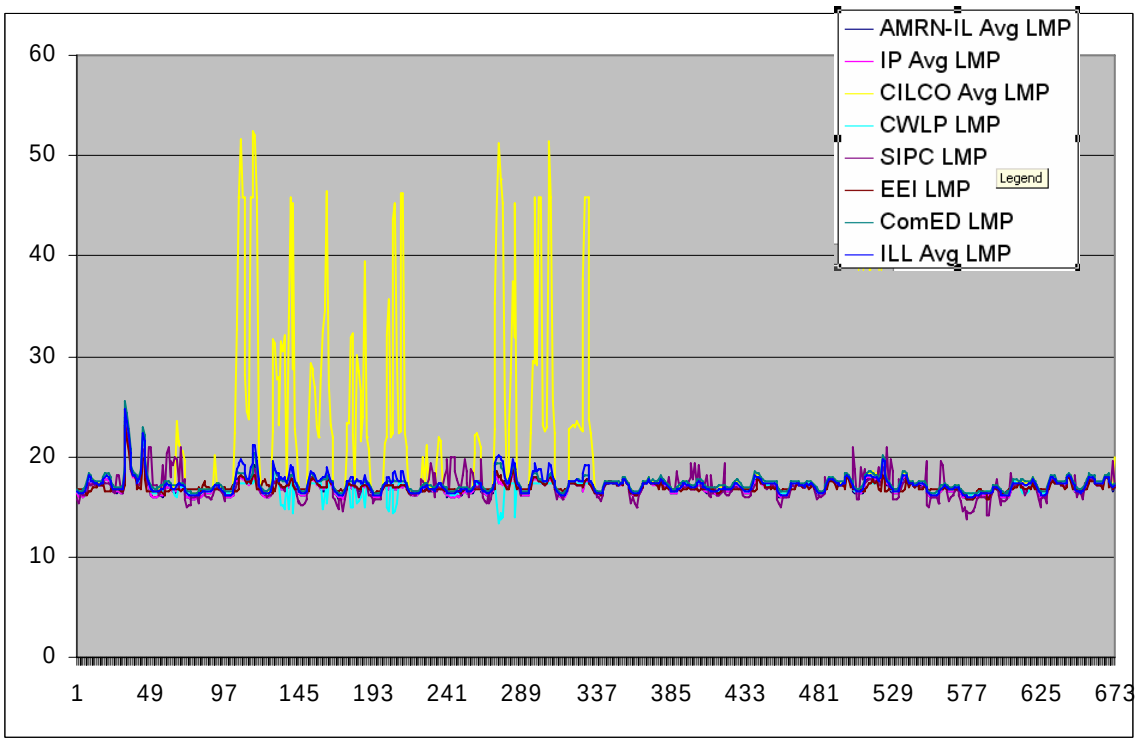

Figure F.2-6 Average LMPs for February 2007

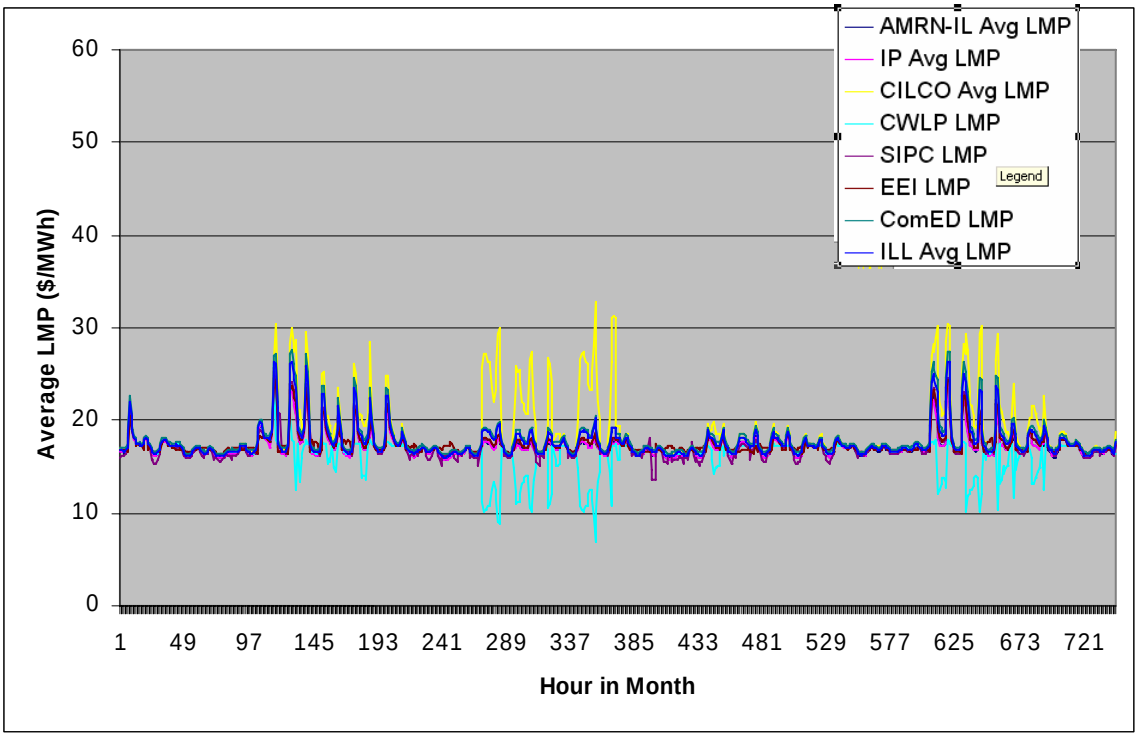

Figure F.2-7 Average LMPs for March 2007

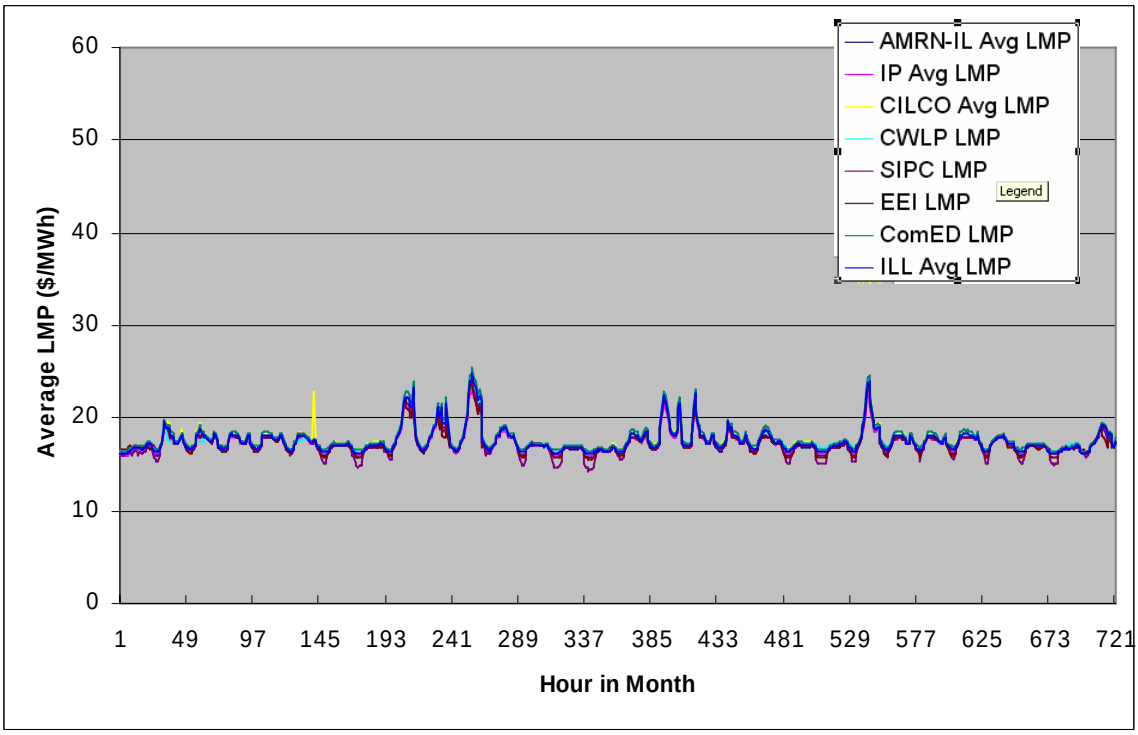

Figure F.2-8 Average LMPs for April 2007

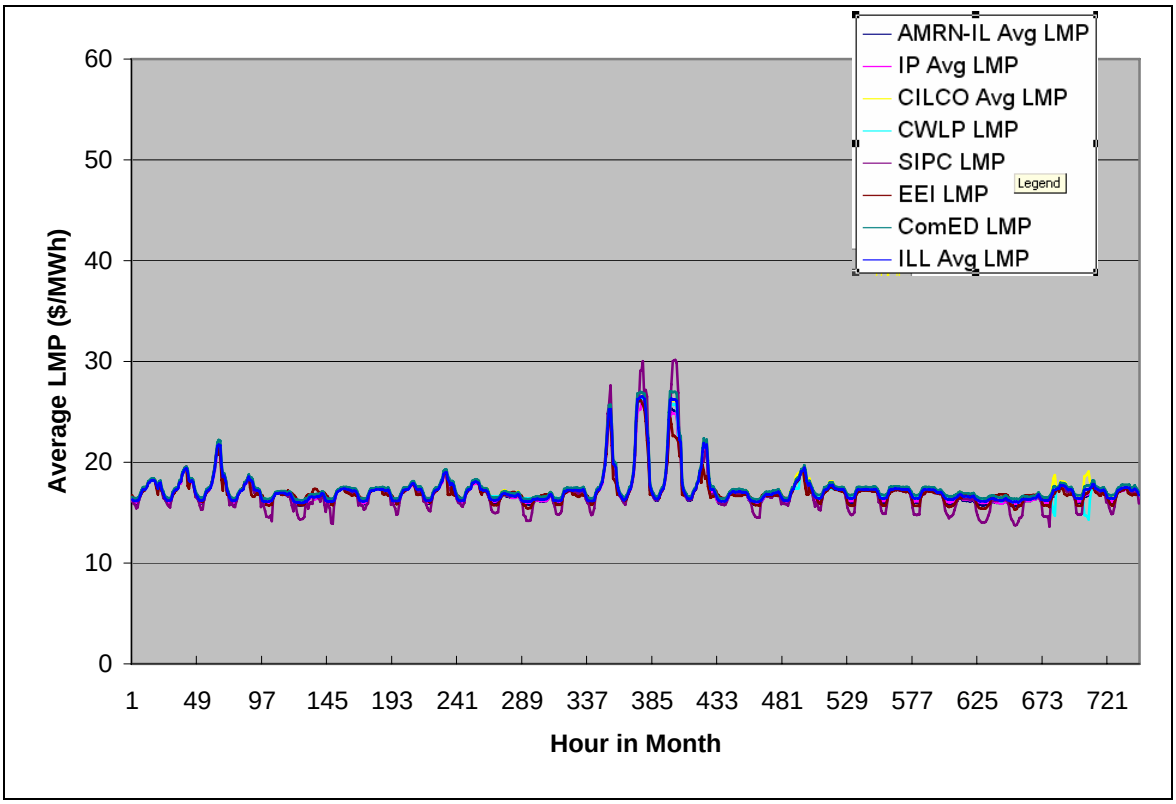

Figure F.2-9 Average LMPs for May 2007

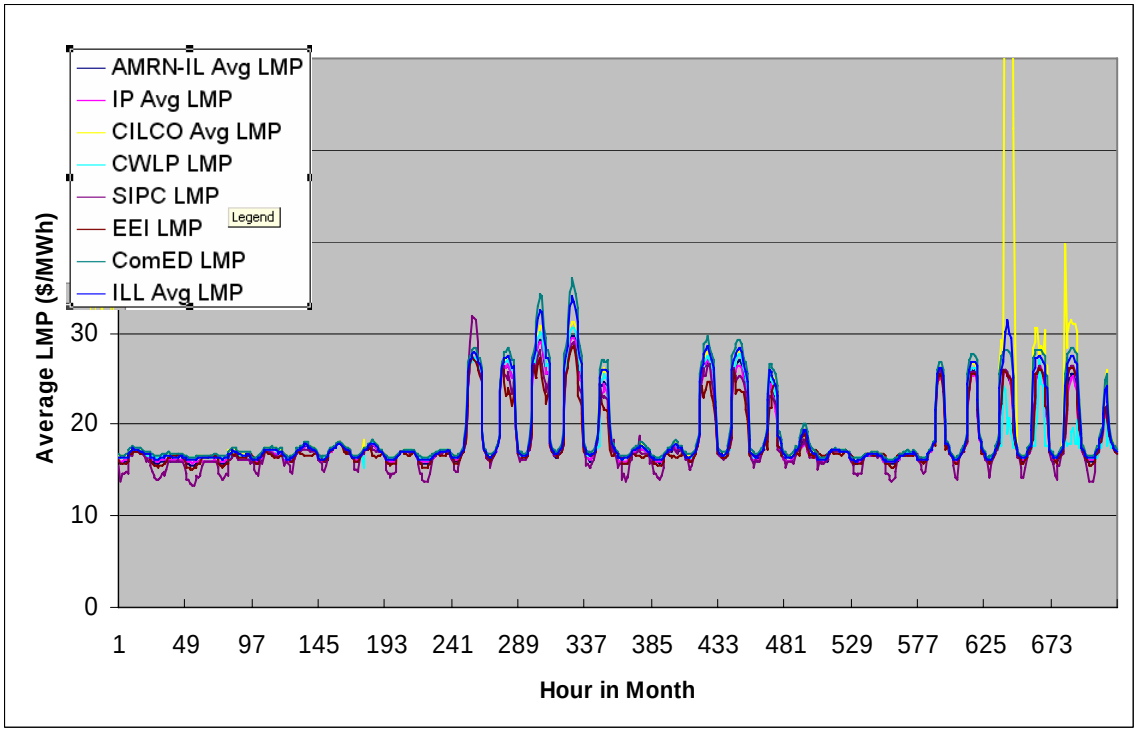

Figure F.2-10 Average LMPs for June 2007

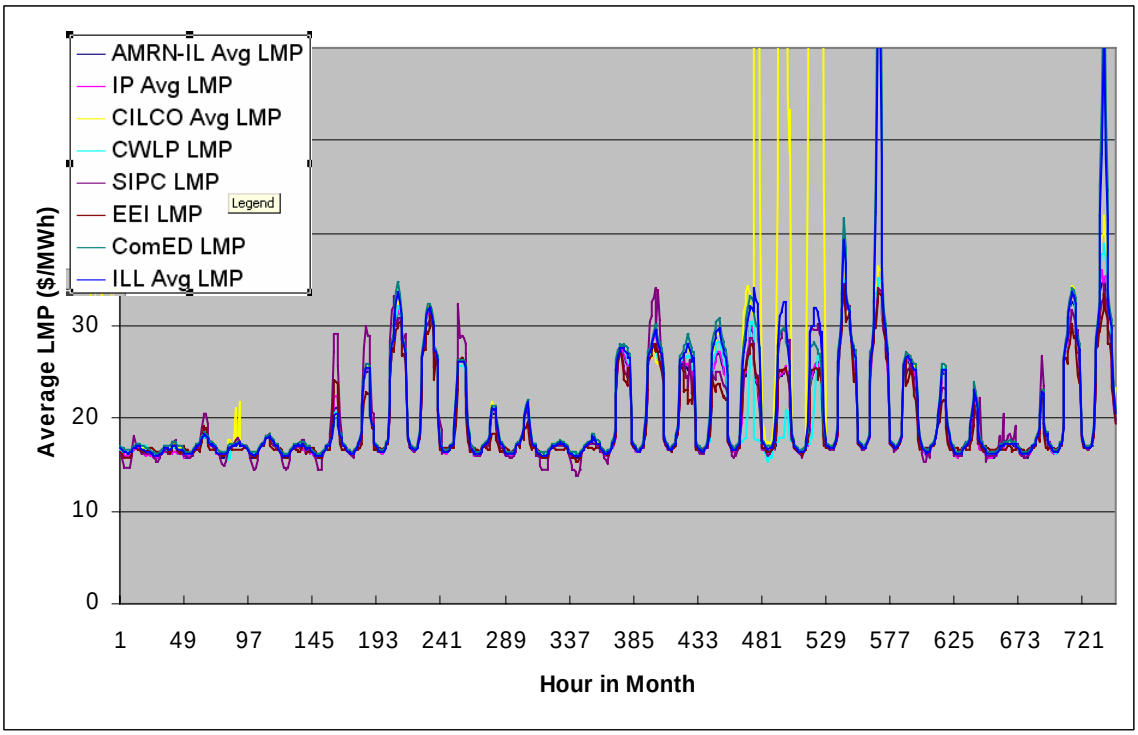

Figure F.2-11 Average LMPs for July 2007

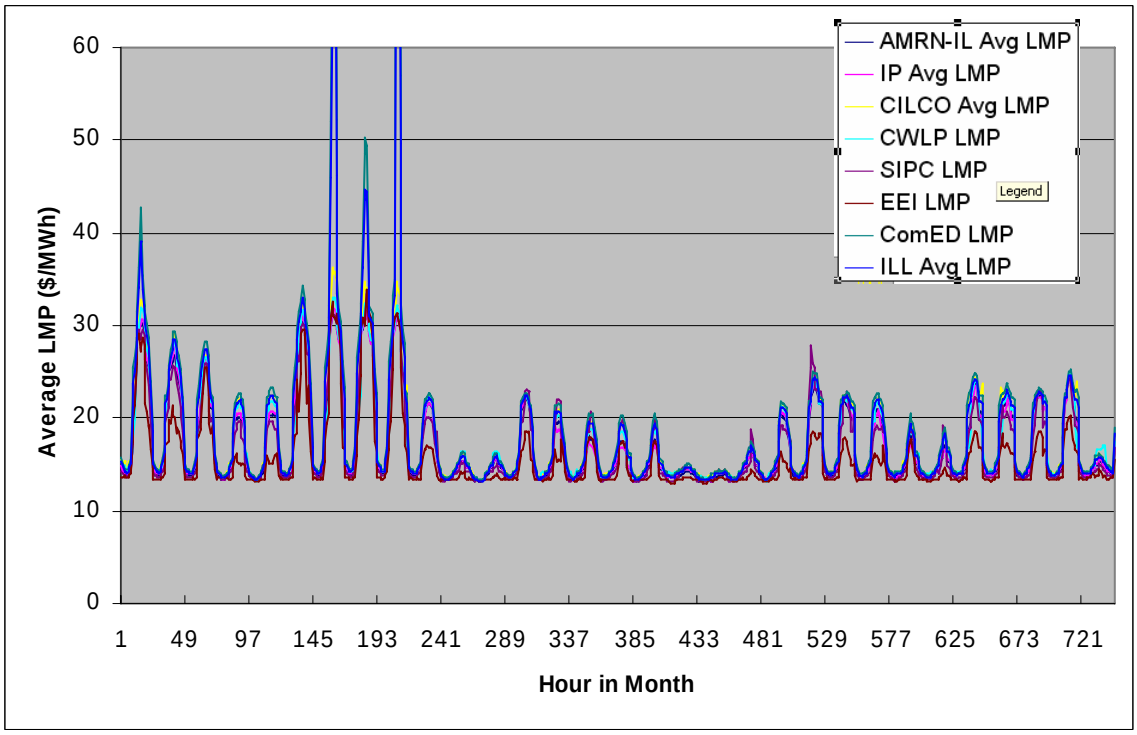

Figure F.2-12 Average LMPs for August 2007

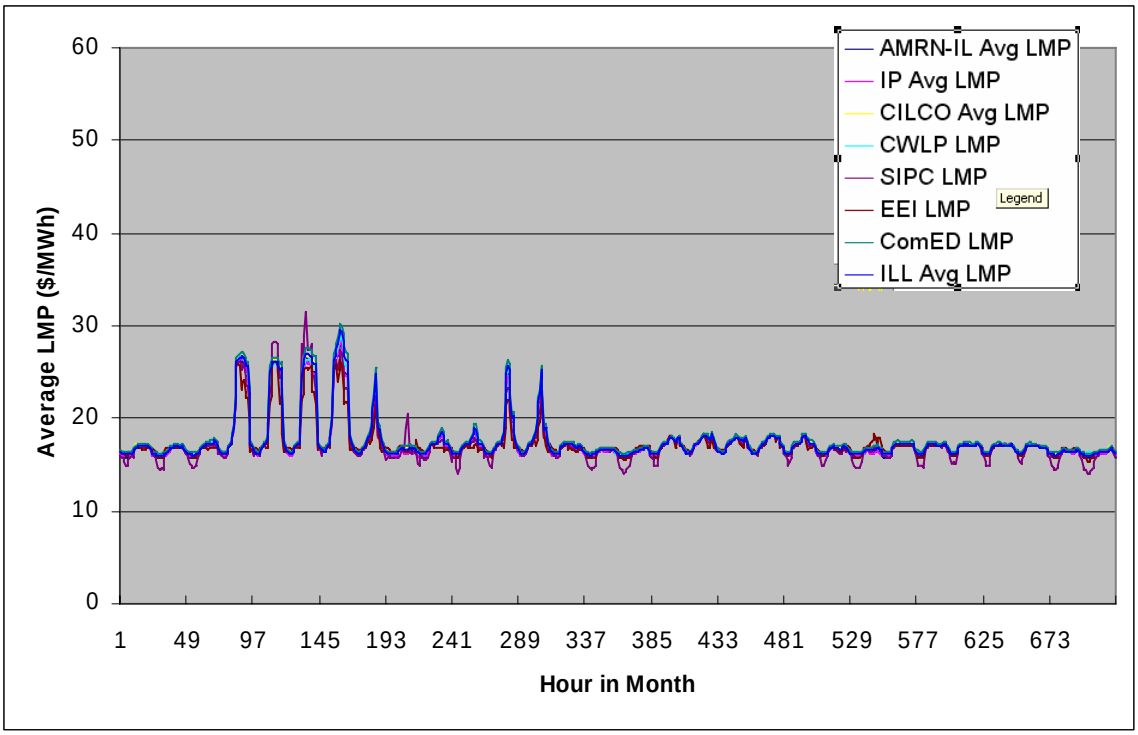

Figure F.2-13 Average LMPs for September 2007

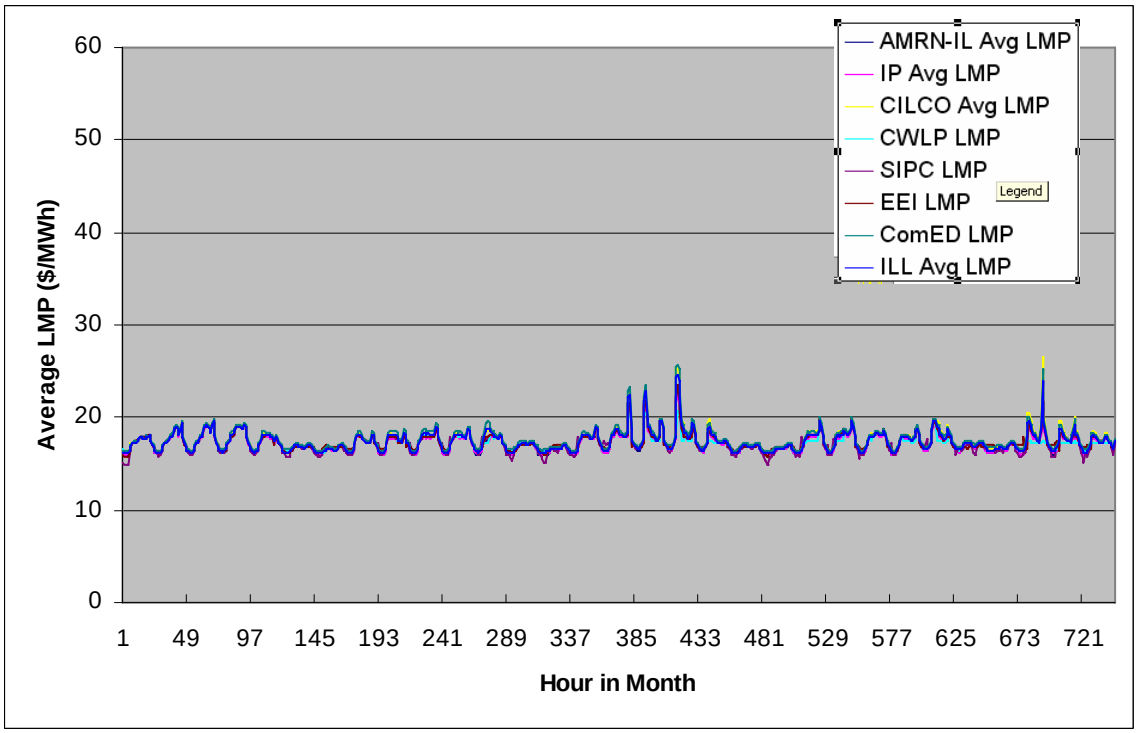

Figure F.2-14 Average LMPs for October 2007

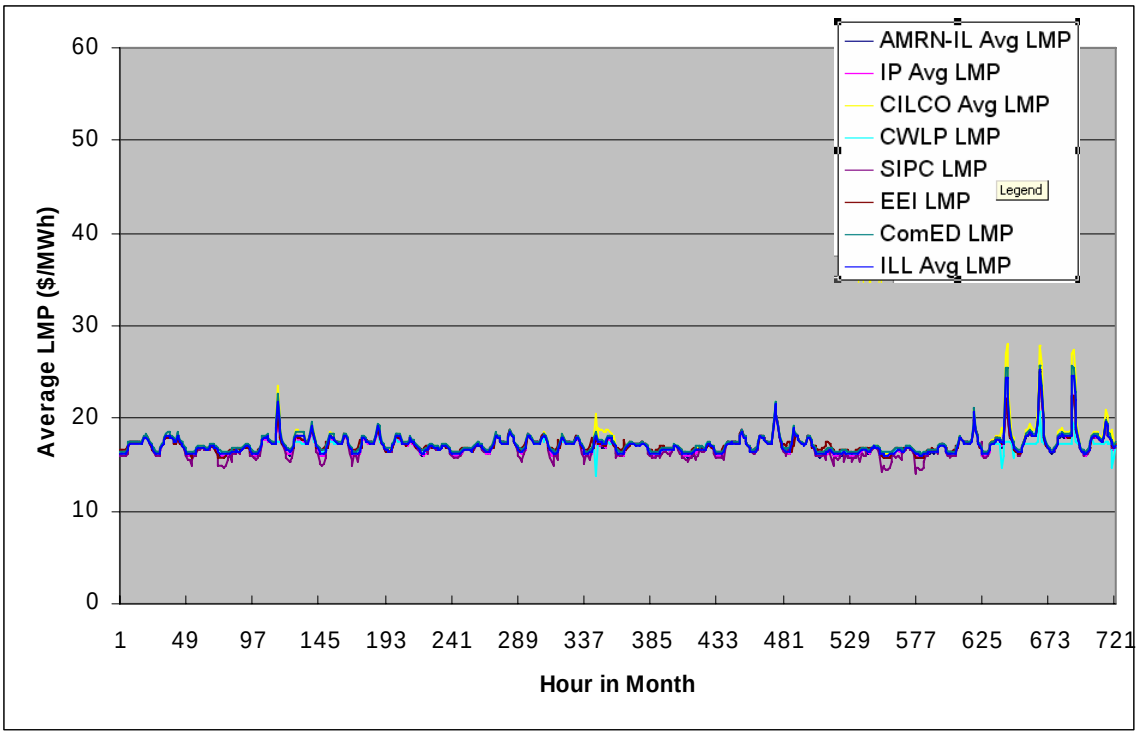

Figure F.2-15 Average LMPs for November 2007

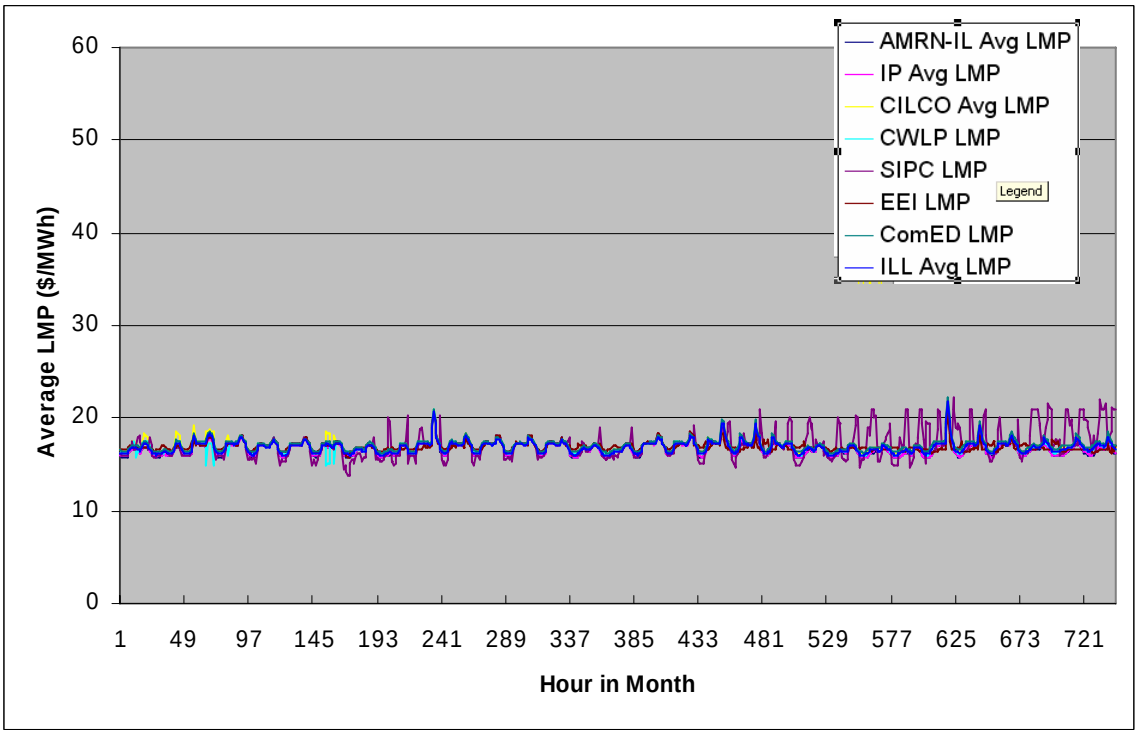

Figure F.2-16 Average LMPs for December 2007