

Appendix A – SCHEDULE OF SIGNIFICANT INTERCHANGES ASSUMED FOR TRANSFER LIMITS STUDIES

SUMMARY OF NET INTERCHANGE SCHEDULES

TO FROM	NYISO	PJM	IESO	ISONE	NB/NS	Trans Énergie	Cross- Sound	Neptune- HVdc	Linden VFT	HTP	NNC Transfer	Other Control Areas	TOTAL EXPORT+ IMPORT-
NYISO		35	0	90	0	-1090	-330	-660	-315	0	-100	125	-2245
PJM	-35		0	0	0	0	0	660	315	0	0	-5066	-4126
IESO	0	0		0	0	-1250	0	0	0	0	0	0	-1250
ISONE	-90	0	0		-800	-1725	330	0	0	0	100	0	-2185
NB/NS	0	0	0	800		-600	0	0	0	0	0	0	200
Trans Énergie	1090	0	1250	1725	600		0	0	0	0	0	45	4710

APPENDIX A	
SUMMARY OF SUMMER 2017 BASE TRANSFERS	
NEW BRUNSWICK/NOVA SCOTIA	
New Brunswick to TransÉnergie: Madawaska and Eel River HVdc	-600
New Brunswick to New England	800
Total Export (+) / Import (-)	200

NEW ENGLAND	
New England to New Brunswick	-800
New England to TransÉnergie: Sandy Pond HVdc	-1500
New England to TransÉnergie: Vermont	-225
New England to New York	-90
New England to NY: Norwalk Harbor-Northport	100
New England to NY: Cross-Sound	330
Total Export (+) / Import (-)	-2185

NEW YORK ISO	
New York to TransÉnergie	-1090
New York to New England	90
New York to New England: Norwalk Harbor-Northport	-100
New York to New England: Cross-Sound	-330
New York to PJM: NYPA to PA-RECS	73
New York to PJM: Sithe Allegheny	-38
New York to PJM: Non-Firm Energy	0
New York to PJM: Linden VFT	-315
New York to PJM: Neptune HVdc	-660
New York to PJM: HTP	0
New York to MISO: NYPA to AMP- Ohio	125
New York to IESO (Ontario)	0
Total Export (+) / Import (-)	-2245

APPENDIX A
SUMMARY OF SUMMER 2017 BASE TRANSFERS

IESO (Ontario)	
IESO to TransÉnergie	-1250
IESO to New York	0
IESO to PJM	0
IESO to MISO	0
Total Export (+) / Import (-)	-1250

PJM	
PJM to New York: NYPA to PA-RECS	-73
PJM to New York: Sithe Allegheny	38
PJM to New York: Non Firm Energy	0
PJM to New York: Neptune HVdc	660
PJM to New York: Linden VFT	315
PJM to New York: HTP	0
Miscellaneous Transfers to Other Areas	-5066
Total Export (+) / Import (-)	-4126

TRANSÉNERGIE	
TransÉnergie to New Brunswick: Madawaska and Eel River HVdc	600
TransÉnergie to New England: Sandy Pond HVdc	1500
TransÉnergie to New England: Vermont	225
TransÉnergie to New York	1090
TransÉnergie to IESO (Ontario)	1250
TransÉnergie to Cornwall	45
Total Export (+) / Import (-)	4710

Appendix B – SUMMER 2017 BASE CASE CONDITIONS

Summer 2017 Conditions

GENERATION FACILITIES (LEVEL OF GENERATION IN CASE)

The status and dispatch level of generation represented in this analysis is a reasonable expectation based on the information available at the time of the study. Those modeling assumptions incorporate known unit outage status.

TransÉnergie HVdc CONVERTER SCHEDULES

Chateaugay HVdc	842 MW	In Service
Sandy Pond HVdc	1500 MW	In Service
Highgate HVdc	225 MW	In Service
Madawaska HVdc	300 MW	In Service
Eel River HVdc	300 MW	In Service

AREA LOADS & LOSSES

NYISO	33,178 MW
ISO-NE	28,420 MW
IESO (Ontario)	23,119 MW
PJM	59,098 MW

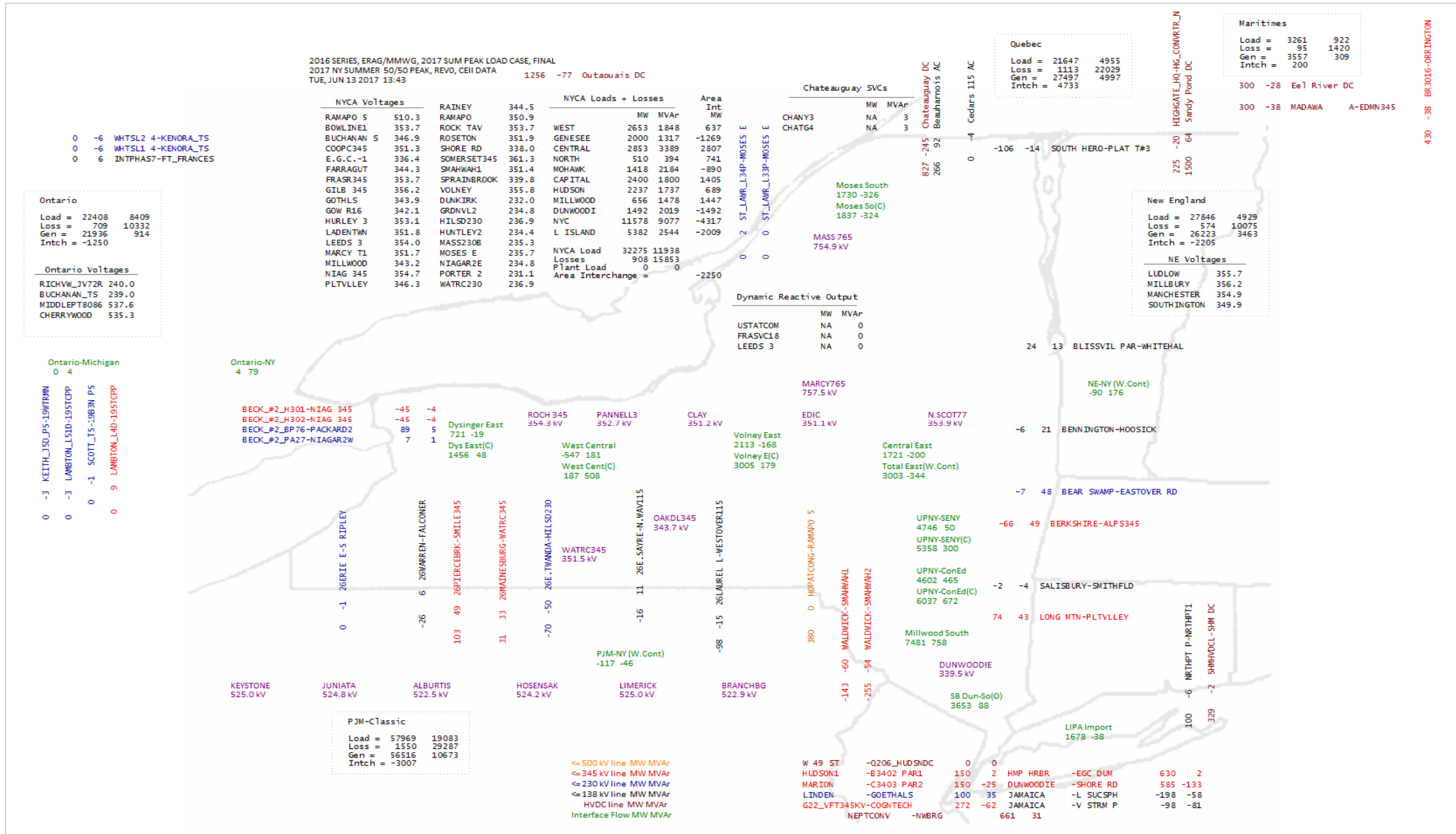
PHASE ANGLE REGULATOR SCHEDULES

Inghams (CD-ED)	120 MW
Sandbar PAR (PV-20)	100 MW
St. Lawrence-Moses L33P	0 MW
St. Lawrence-Moses L34P	0 MW
Norwalk Harbor-Northport	100 MW
Jamaica-Valley Stream	-100 MW
Jamaica-Lake Success	-200 MW
Hudson-Farragut (B3402)	150 MW
Marion-Farragut (C3403)	150 MW
Linden-Goethals	100 MW
Waldwick-Hinchmans	133 MW
Waldwick-Fairlawn	133 MW
Waldwick-Hillsdale	133 MW
Ramapo PAR #1 (+ to NY)	Out of Service
Ramapo PAR #2 (+ to NY)	380 MW

East Garden City #1	315 MW
East Garden City #2	315 MW

Appendix C – POWER FLOW TRANSCRIPTION DIAGRAM

SYSTEM OVERVIEW



Appendix D – RATINGS OF MAJOR TRANSMISSION FACILITIES IN NEW YORK

EQUIPMENT NAME	LINE ID	KV	NOR	LTE	STE	PTID	MW FLOW
ACADEMY_138A_138B_PAR1	PAR1	138	251	312	372	325751	155
ACADEMY_138A_138B_PAR8	PAR8	138	251	312	372	325750	155
ACADEMY_345_138_TR1	TR1	345	252	316	364	325753	155
ACADEMY_345_138_TR8	TR8	345	252	316	364	325752	155
ADIRNDCK_230_115_BK1	BK1	115	115	144	172	26697	80
ADIRNDCK-CHASLAKE_230_13	13	230	440	478	560	325233	158
ADIRNDCK-PORTER__230_12	12	230	440	478	560	25082	180
ALBANY_-GREENBSH_115_1	1	115	186	208	237	25860	136
ALBANY_-GREENBSH_115_2	2	115	186	208	237	25868	136
ALBANY_-TRINITY_115_5	5	115	198	201	201	25861	132
ALBANY_-TRINITY_115_9	9	115	147	178	258	25872	88
ALCOA_-DENNISON_115_12	12-AD	115	175	202	222	25227	51
ALCOA_-NOGDNRG_115_13	13-ANO	115	128	147	159	25230	24
ALCOA_PA-ALCOA__115_R8105	R8105	115	206	247	310	25202	6
ALCOA_PA-GRASRIVR_115_MAL4	MAL4	115	218	253	291	326295	80
ALCOA_PA-GRASRIVR_115_MAL5	MAL5	115	218	253	291	326296	80
AMAWALK_-MOHANSIC_115_995 U.G.	995UG	115	78	78	80	26481	10
AMAWALK_-MOHANSIC_115_996 U.G.	996UG	115	97	97	97	26480	16
ANDOVER_-PALMITER_115_157-932	157_932	115	79	101	119	25094	0
ARCADE_-MACHIAS_115_167	151	115	129	148	160	326168	9
ASH___-TEMPLE__115_9	9	115	207	233	233	26062	2
ASHLEYRD-MASONCR_115_909	909	115	155	179	193	25847	21
ASHLEYRD-PLATSBRG_115_700	700	115	174	193	220	25845	44
ASTANNEX_138A_138B_PAR1	PAR1	138	347	416	464	325848	75
ASTANNEX_345_138_TR1	TR1	345	268	335	393	325847	75
ASTANNEX-ASTORIAE_138_34091	34091	138	236	272	304	325849	75
ASTANNEX-E13THSTA_345_Q35L	Q35L	345	499	741	1476	25134	234
ASTANNEX-E13THSTA_345_Q35M	Q35M	345	499	741	1476	25142	253
ASTORIAE-ASTORIA3_138_34123	34123	138	271	311	400	25876	126
ASTORIAE-CORONA__138_34181	34181	138	174	235	368	25277	131
ASTORIAE-CORONA__138_34182	34182	138	174	235	368	25278	126
ASTORIAE-CORONA__138_34183	34183	138	174	235	368	25279	130
ASTORIAE-CORONA__138_34184	34184	138	174	235	368	25280	122
ASTORIAE-CORONA__138_34185	34185	138	174	235	368	25281	116
ASTORIAE-CORONA__138_34186	34186	138	174	235	368	25282	118
ASTORIAW-QUENBRDG_138_28241	28241	138	174	235	368	25315	141
ASTORIAW-QUENBRDG_138_28242	28242	138	174	235	368	25316	145
ASTORIAW-QUENBRDG_138_28243	28243	138	348	469	688	25317	265
ASTORIAW-QUENBRDG_138_28244	28244	138	363	525	688	25318	305

EQUIPMENT NAME	LINE ID	KV	NOR	LTE	STE	PTID	MW FLOW
ATHENS_-PLSNTVLY_345_91	91	345	1331	1538	1724	25054	988
BAGATLRD-PILGRIM_138_564	564	138	445	505	573	325607	49
BAKER_ST-FALCONER_115_160	160-3	115	176	197	239	26513	7
BALLSTON-TAPBLSTN_115_302	302	115	116	120	145	325897	4
BARRETT_138_69_BK 1	BK 1	138	112	139	156	26600	91
BARRETT_138A_138B_PAR	B_PAR	138	266	271	325	25590	105
BARRETT_-FREEPORT_138_459	459	138	184	271	325	26425	105
BATAVIA_-EBATAVIA_115_107	107	115	159	159	159	326099	5
BATAVIA_-SEBATVIA_115_117	117	115	220	239	239	26017	1
BATH__-MONTRFL_115_965	965	115	124	139	149	26163	16
BATH__-SPENCHIL_115_723	723	115	124	139	159	325797	19
BATNKILL-EASTOVER_115_10	10	115	186	214	237	26474	32
BATTHILL-PYRITES_115_7	7-BHP	115	76	87	94	26065	7
BEAR SWP-EASTOVER_230_E205W	E205W	230	440	505	555	25030	8
BECK__-NIAGARA_230_PA27	PA27	230	400	460	558	25025	8
BECK__-NIAGARA_345_PA301	PA301	345	1070	1322	1714	25040	46
BECK__-NIAGARA_345_PA302	PA302	345	1070	1322	1714	25041	46
BECK__-PACKARD_230_BP76	BP76	230	500	587	588	25024	89
BENETTRD-E_DUNKRK_115_161	161-3	115	168	185	206	326231	33
BENETTRD-E_DUNKRK_115_162	161-3	115	168	185	206	326233	32
BENNETT_-MORAIN_115_725	725	115	125	152	179	325858	43
BENNETT_-SPENCHIL_115_953	953	115	124	139	159	26164	13
BERKSHIR-ALPS__345_393	393	345	1463	1697	1912	25034	66
BERKSHIR-NORTHFLD_345_312	312	345	1345	1345	1793	25366	53
BERRY_RD-BAKER_ST_115_160	160-2	115	193	213	240	26512	8
BETHLHEM-ALBANY__115_18	18-BA	115	329	369	423	26119	134
BIGTREE_-DAVIS_RD_115_904	904	115	139	163	183	25162	16
BIGTREE_-LANGNERD_115_903	903	115	176	196	225	326050	75
BLACKRVR-CLIMAX__115_1	1-BC	115	116	120	145	26067	45
BLACKRVR-EWATRWN_115_5	5	115	116	120	145	325771	29
BLACKRVR-FORTDRUM_115_2	2-BF	115	116	120	145	26068	26
BLACKRVR-GLENPARK_115_3	3	115	119	119	119	325315	30
BLACKRVR-LIGHTHSE_115_6	6	115	116	120	145	25506	5
BLISSVIL-WHITEHAL_115_K7	K7	115	187	217	229	25028	25
BLUESTOR-LAFARGE_115_8	8	115	116	120	145	326091	53
BLUESTOR-PLSTVYCH_115_13-987	13-987	115	129	158	192	25505	46
BLUESTOR-PLSTVYCH_115_8	8	115	116	120	145	25498	52
BNNINGTN-HOOSICK_115_K6	K6	115	150	217	239	25029	7
BNVLMUNI-PORTER__115_2	2	115	107	107	107	325778	13
BOONVLE-BNVLMUNI_115_2	2	115	96	96	96	26073	8
BOONVLE-PORTER__115_1	1-BP	115	100	100	100	26074	11
BOONVLE-ROME__115_3	3-BR	115	116	120	145	26071	35
BOONVLE-ROME__115_4	4-BR	115	105	114	134	26072	42
BORDRCTY-GUARDIAN_115_969	969	115	176	179	179	325283	80

EQUIPMENT NAME	LINE ID	KV	NOR	LTE	STE	PTID	MW FLOW
BOWLINE_345_138_BK455	BK455	345	506	587	671	25664	215
BOWLINE_-WHAVSTRW_345_67-1	67-1	345	687	747	747	25567	563
BOWLINOR-CONGERS_138_561	561	138	317	363	383	26723	178
BRIGHAM_-LUDLUM__115_161	161-2	115	168	185	206	26020	47
BRISTLHL-CLAY___115_4	4	115	105	107	107	25518	43
BRISTLHL-S.OSWEGO_115_4	4	115	105	114	134	25512	46
BROOK_RD-SMITHBRD_115_2	2	115	220	253	280	325901	30
BROOK_RD-SMITHBRD_115_302	302	115	220	253	280	325902	20
BROOK_RD-TAPBROOK_115_2	2	115	220	253	280	325899	66
BROOK_RD-TAPBROOK_115_302	302	115	220	253	280	325900	38
BROOKHVN_138_69_BK 1	BK 1	138	227	263	302	26548	111
BROOKHVN_138_69_BK 2	BK 2	138	227	263	302	325152	103
BROOKHVN-EDWARDAV_138_864	864	138	259	319	351	25553	145
BROOKHVN-SILLSRD_138_874	874	138	395	481	568	325617	147
BROOKHVN-SILLSRD_138_887	887	138	395	436	499	325619	147
BROOKHVN-WILDWOOD_138_861	861	138	389	474	560	325932	65
BROWNFLS-HIGLEY__115_1	1-BH	115	102	122	135	26078	44
BROWNFLS-TAYLORVL_115_3	3-BT	115	102	120	135	26076	51
BROWNFLS-TAYLORVL_115_4	4-BT	115	105	114	134	26077	51
BUCHAN_N_345_138_BK TA5	BK TA5	345	195	272	343	25425	127
BUCHAN_N-BUCHANAN_138_95891	95891	138	225	273	345	25568	127
BUCHAN_N-EASTVIEW_345_W93	W93	345	1722	1894	2404	25133	1200
BUCHAN_S-MILLWOOD_345_W97	W97	345	1490	1664	1876	25146	916
BUCHAN_S-MILLWOOD_345_W98	W98	345	1490	1664	1876	25247	916
BUCHANAN-MILLWOOD_138_96951	96951	138	275	302	383	25283	29
BUCHANAN-MILLWOOD_138_96952	96952	138	275	302	383	25284	29
BUFAL129-MAPLE140_115_38	38	115	145	151	185	326159	82
BUFAL129-MAPLE140_115_39	39	115	145	151	185	326160	80
BUFALO54-BUFALO61_115_38	38	115	187	215	236	326155	59
BUFALO54-BUFALO61_115_39	39	115	174	181	226	326156	58
BUFALO61-URBAN154_115_38	38	115	174	181	226	326153	54
BUFALO61-URBAN154_115_39	39	115	174	181	226	326154	53
BUFALO78-HUNTLEY__115_130	130	115	168	181	206	26043	98
BULYMO_-BOONVLE_115_6	6	115	116	120	124	325265	45
BURDECK_-ALTAMONT_115_17	17-BA	115	116	120	145	26151	71
BURDECK_-VORHVSLE_115_19	19-BV	115	116	120	145	26152	76
BURNS__138_69_BK 519	BK 519	138	208	258	284	25889	79
BURNS_-CORPDRIV_138_702	702	138	189	217	226	325812	104
BURNS_-N.HEMPST_138_531	531	138	236	270	285	25878	17
BURNS_-WHAVSTOR_138_541	541	138	236	270	285	25879	81
BUTLER_-MOHICAN__115_18	18	115	116	120	145	26434	18
C._ISLIP_138_69_BK 3	BK 3	138	228	263	302	26519	122
C._ISLIP-RONKOKMA_138_883	883	138	391	476	562	26497	84
C_BATNKILL-MULTP-10_115_10	10	115	182	197	237	26121	31

EQUIPMENT NAME	LINE ID	KV	NOR	LTE	STE	PTID	MW FLOW
CANAL__-RIVRHEAD_138_910	910	138	200	247	283	325242	145
CANANDGA-STONYRDG_230_68	68	230	498	534	566	25176	81
CARD__-MILSTONE_345_383	383	345	1488	1912	2097	25332	226
CARMEL_-CROTONFL_115_991	991	115	215	247	275	26155	82
CARMEL_-WOODSTNY_115_992	992	115	215	247	275	325278	116
CARR_ST_-BM_CC_GM_115_6	6	115	187	213	236	325216	89
CARR_ST_-DEWITT__115_15	15-CD	115	187	213	236	26093	2
CARRSCRN-SALAMANC_115_153	153	115	128	147	159	326163	22
CARRSCRN-SALAMANC_115_154	154	115	128	147	159	326165	25
CASTLEGD-FULLRHLW_115_937	937	115	249	287	319	325222	6
CATON__-HILLSIDE_115_960	960	115	102	113	120	325290	34
CAVANARD-PORTER__115_7	7	115	116	120	145	325214	66
CEDAR__-BURGOYNE_115_6	6	115	116	120	145	26516	7
CHADWICK-E.WALDEN_115_DW	DW-3	115	176	211	240	26218	37
CHADWICK-WBALMVLE_115_DW	DW-2	115	175	193	220	26217	1
CHASLAKE-PORTER__230_11	11	230	440	505	516	25051	186
CHAT_TAP-LYON_MTN_115_1(911)	911	115	135	159	175	325704	9
CHATEAUG-CHAT_TAP_115_911	911	115	135	159	175	325705	9
CHATGUAY-MASSENA_765_7040	7040	765	3975	4839	5300	25301	1090
CHEMUNG_-NWAVERLY_115_962	962	115	150	180	205	325289	30
CHESTROR-SUGRLOAF_138_271	271	138	236	270	285	325424	37
CHRCHTWN-BLUESTOR_115_13-987	13-987	115	175	179	179	26685	59
CHRCHTWN-CRARYVIL_115_984	984	115	113	144	173	26500	24
CHRCHTWN-SCHODACK_115_14-984	14/984	115	175	196	196	26126	84
CHURCH_S-ROTRDAM_115_10	10-AR	115	116	120	131	26428	30
CLAY__345_115_BK 1	BK 1	345	455	606	794	25387	250
CLAY__345_115_BK 2	BK 2	345	478	637	794	25421	250
CLAY__-DEWITT__115_3	3-CD	115	116	120	139	25519	68
CLAY__-DEWITT__115_5	5-CD	115	193	213	240	25522	54
CLAY__-DEWITT__345_13	13	345	1109	1344	1529	25168	553
CLAY__-EDIC__345_1-16	Jan-16	345	1301	1501	1685	25200	348
CLAY__-EDIC__345_2-15	Feb-15	345	1301	1501	1685	25169	349
CLAY__-HOPKINS_115_11	11	115	220	252	280	25516	118
CLAY__-INDPDNCE_345_26	26	345	1670	1931	2210	25858	938
CLAY__-TEALLAVE_115_10	10-CT	115	116	120	145	25520	76
CLAY__-WETZEL__115_14	14-CG	115	220	252	280	25517	87
CLAY__-WOODARD__115_17	17	115	220	252	280	25515	112
CLIMAX_-TAYLORVL_115_8	8-CT	115	105	114	134	26431	10
CLINTON_-IMC_TAP_115_15	15-CI	115	116	120	145	26128	16
CLRKSCRN_345_115_BK1	BK1	345	235	255	295	325724	98
CLRKSCRN_345_115_BK2	BK2	345	235	255	295	325725	98
CLRKSCRN-OAKDALE_345_36	36	345	1207	1327	1590	325726	645
CLYDE__115_34_TR1	TR1	115	125	143	154	25221	21
CLYDE__-STATE_ST_115_3-971	971	115	120	146	159	68810	17

EQUIPMENT NAME	LINE ID	KV	NOR	LTE	STE	PTID	MW FLOW
COBBLENM-COBBLENY_115_BK 1	BK 1	115	40	41	45	25426	16
COBBLENM-SPRINGVL_115_151	151	115	129	148	160	326166	23
COBBLENM-SPRINGVL_115_152	152	115	129	148	160	326170	15
CODNIGTN-E.ITHACA_115_981	981-1	115	108	128	143	25730	18
CODNIGTN-ETNA___115_998	998	115	227	253	283	25734	49
COFFEEN_-EWATRTWN_115_5	5	115	119	119	119	325769	24
COFFEEN_-GLENPARK_115_3	3-CG	115	119	119	119	26069	56
COLDENHM-ROCKTVRN_115_J	J	115	232	257	304	26420	20
COLDSPRG-CARRSCRN_115_905	905	115	36	40	42	26440	12
COLLIERS-RICHFELD_115_929	929	115	125	152	215	26169	2
COLTON_-FLATROCK_115_2	2-CF	115	114	123	142	26088	45
COLTON_-HIGLEY___115_1	1-HC	115	128	147	159	26087	45
COLTON_-TOWNLINE_115_9	9	115	119	119	119	325641	29
COMSTKNM-BURGOYNE_115_13	13-MW	115	116	120	145	26484	25
CONGERS_-SNKEHLRD_138_563	563	138	212	267	281	25887	139
COOPERNY-FERNDAL_115_950	950	115	176	179	179	26171	57
COOPERNY-ROCKHILL_115_957	957	115	144	160	173	325614	37
COOPERS_345_115_BK 2	BK 2	345	220	261	300	25433	73
COOPERS_345_115_BK 3	BK 3	345	220	261	300	25434	74
COOPERS_-DOLSONAV_345_CCDA42	CRT-42	345	1704	1793	1793	25111	637
COOPERS_-MIDDLETP_345_CMT-34	CMT-34	345	1464	1793	1793	25110	707
CORONA___138A_138B_BK R1	B_BK R1	138	181	253	319	25621	45
CORONA___138A_138C_BK R2	C_BK R2	138	181	253	319	25622	45
CORONA_-JAMAICA_138_18001	18001	138	143	212	357	25285	45
CORONA_-JAMAICA_138_18002	18002	138	143	212	357	25286	45
CORPDRIV-HARNGCRN_138_703	703	138	189	222	250	25881	81
CORTLAND-FENERWND_115_3	3	115	125	143	154	325248	11
CORTLAND-TULLERHL_115_1-716	1	115	128	147	159	25059	1
CORTLAND-TULLYCTR_115_18	18	115	176	211	239	26089	66
CURRY_RD-WOLF_RD___115_8	8	115	116	120	145	26254	35
CURTPALM-EJWEST___115_9	9	115	128	147	159	326146	6
DALEROAD-GARDNVLB_115_39	39	115	129	181	206	26036	47
DANSKAMR-CHADWICK_115_DW	DW-1	115	183	248	279	26219	38
DANSKAMR-MARLBORO_115_DB	DB	115	183	215	237	26221	56
DANSKAMR-NCHELSEA_115_AC	AC	115	183	211	295	25829	158
DANSKAMR-NCHELSEA_115_DC	DC	115	178	199	295	25830	163
DANSKAMR-RYND_115_DR	DR	115	183	248	279	25831	40
DAVIS_RD-STOLLERD_115_927	927	115	203	226	239	26172	9
DEERFLD_-SCOBIE___345_373	373	345	1373	1373	1373	26383	470
DELEMTER-LAKEVIEU_115_141	141	115	88	101	108	325873	19
DELEMTER-LAKEVIEU_115_142	142	115	88	101	108	325880	31
DELHI___-DELHI_TP_115_951	951	115	164	164	164	26174	88
DELHI___-GR.GORGE_115_916	916	115	90	90	90	26479	13
DELHI___-VINGR_TP_115_917_916	917-916	115	120	120	120	25911	20

EQUIPMENT NAME	LINE ID	KV	NOR	LTE	STE	PTID	MW FLOW
DELHI_TP-COLLIERS_115_951	951-2	115	239	239	239	26203	46
DENNISON-LAWRNCAV_115_4	4	115	220	252	280	25225	21
DENNISON-LAWRNCAV_115_5	5	115	220	252	280	25226	25
DENNISON-ROSEMNTA_115_1/11	1-RD	115	176	203	223	25523	0
DENNISON-ROSEMNTB_115_2/22	2-RD	115	176	203	223	25524	0
DEPEW_NG-ERIE_ST_115_54-921	54-921	115	124	138	158	26010	45
DEPEW_TP-DEPEW___115_BK 1	BK 1	115	108	120	120	25428	13
DEWITT__345_115_BK 2	BK 2	345	517	658	794	25418	231
DEWITT_-TEALLAVE_115_4	4-DT	115	116	120	145	26094	48
DOLSONAV-ROCKTVRN_345_DART44	CRT-42	345	1704	1793	1793	326310	632
DULEY__-PATNODE_230_PND-1	PND-1	230	397	476	504	325856	19
DULEY__-PLATSBRG_230_DP-1	DP-1	230	247	277	318	25272	9
DUNKIRK_230_115_BK 31	BK 31	230	139	197	248	25386	73
DUNKIRK_230_115_BK 41	BK 41	230	133	190	248	25430	73
DUNKIRK_-BERRY_RD_115_160	160-1	115	193	213	239	26025	44
DUNKIRK_-BRIGHAM_115_161	161-1	115	168	181	206	26021	51
DUNKIRK_-BRIGHAM_115_162	162-1	115	168	181	206	26027	44
DUNKIRK_-SILVRCK_115_141	141	115	88	101	108	26026	2
DUNKIRK_-SILVRCK_115_142	142	115	88	101	108	26018	4
DUNWODIE_138_138_BK N1	BK N1	138	315	375	433	25624	115
DUNWODIE_138_138_BK N2	BK N2	138	194	293	400	25623	115
DUNWODIE_138_138_BK S1	BK S1	138	345	491	600	25626	180
DUNWODIE-DUNWOODN_345_W74	W74	345	411	494	554	326212	309
DUNWODIE-DUNWOODS_345_W73	W73	345	310	387	424	326211	265
DUNWODIE-E179THST_138_99153	99153	138	233	348	617	25287	180
DUNWODIE-MOTTHAVN_345_71	71	345	707	833	1298	25151	556
DUNWODIE-MOTTHAVN_345_72	72	345	707	833	1298	25191	552
DUNWODIE-SHERMCRK_138_99031	99031	138	139	187	303	25193	115
DUNWODIE-SHERMCRK_138_99032	99032	138	189	288	393	25239	115
DUNWODIE-SHORE_RD_345_Y50	Y50	345	653	914	1436	25091	587
DUNWOODN_345_138_BK N1	BK N1	345	411	494	554	25209	309
DUNWOODS_345_138_BK S1	BK S1	345	310	387	424	25208	265
DUNWOODS-DUNWOODN_138_99997	99997	138	205	255	311	25532	3
E.ITHACA-ETNA___115_981	981	115	108	128	143	25733	60
E.SAYRE_-NWAVERLY_115_956	956	115	108	128	143	25013	17
E.TWANDA-HILLSIDE_230_70	70	230	483	531	630	25014	71
E.WALDEN_115_69_TR_3	TR_3	115	52	69	81	26681	21
E.WALDEN-COLDENHM_115_CW	CW	115	232	257	304	26225	11
E.WALDEN-MODENA___115_EM	EM	115	232	257	304	25832	3
E.WALDEN-ROCKTVRN_115_D	D	115	233	265	312	26226	12
E_DUNKRK-MOONS_SW_115_161	161-3	115	88	101	108	326232	18
E_DUNKRK-MOONS_SW_115_162	161-3	115	88	101	108	326234	21
E13THSTA_345_138_BK 10	BK 10	138	251	280	305	25467	129
E13THSTA_345_138_BK 11	BK 11	138	273	288	315	25468	109

EQUIPMENT NAME	LINE ID	KV	NOR	LTE	STE	PTID	MW FLOW
E13THSTA_345_138_BK 12	BK 12	138	273	288	315	25463	134
E13THSTA_345_138_BK 13	BK 13	138	258	320	368	25464	106
E13THSTA_345_138_BK 14	BK 14	138	251	280	305	25465	107
E13THSTA_345_138_BK 15	BK 15	138	274	312	343	25466	139
E13THSTA_345_138_BK 16	BK 16	138	270	304	338	25469	134
E13THSTA-EASTRIVR_138_37041	37041	138	148	242	432	326190	10
E13THSTA-EASTRIVR_138_37042	37042	138	148	242	432	326191	10
E13THSTA-EASTRIVR_138_37043	37043	138	148	242	432	326192	10
E13THSTA-EASTRIVR_138_37044	37044	138	148	242	432	326193	10
E13THSTA-FARRAGUT_345_45	45	345	745	913	1339	25190	131
E13THSTA-FARRAGUT_345_46	46	345	760	927	1350	25251	190
E13THSTA-FARRAGUT_345_48	48	345	554	740	1150	25252	15
E13THSTA-FARRAGUT_345_B47	B47	345	358	645	1011	25177	91
E179THST-HELLGT_E_138_15053	15053	138	165	229	364	25289	15
E179THST-HELLGT_E_138_15054	15054	138	165	229	364	25290	15
E179THST-HELLTP_W_138_15055	15055	138	210	301	384	25288	203
E179THST-PARKCHTR_138_38X01	38X01	138	169	288	501	25327	13
E179THST-PARKCHTR_138_38X02	38X02	138	169	288	501	25328	13
E179THST-PARKCHTR_138_38X03	38X03	138	169	288	501	25329	16
E179THST-PARKCHTR_138_38X04	38X04	138	169	288	501	25330	16
EASTOVER_230_115_TR 1	TR 1	230	381	494	597	326097	43
EASTRIVR_138_69_BK 111	BK 111	138	76	108	159	25526	10
EASTRIVR_138_69_BK 112	BK 112	138	76	108	159	25527	10
EASTRIVR_138_69_BK 113	BK 113	138	76	108	159	25528	10
EASTRIVR_138_69_BK 114	BK 114	138	76	108	159	25529	10
EASTVIEW_345_138_BK 1N	BK 1N	138	370	424	424	25472	189
EASTVIEW_345_138_BK 1S	BK 1S	138	370	424	424	25373	176
EASTVIEW_345_138_BK 2N	BK 2N	138	370	424	424	25471	203
EASTVIEW_345_138_BK 2S	BK 2S	138	370	424	424	25470	188
EASTVIEW-SPRNBK_345_W64	W64	345	2296	2658	3202	25143	991
EASTVIEW-SPRNBK_345_W65	W65	345	1720	2215	2657	25144	879
EASTVIEW-SPRNBK_345_W78	W78	345	2296	2658	3202	25346	826
EASTVIEW-SPRNBK_345_W79	W79	345	1720	2215	2657	25153	835
EBATAVIA-GOLAH__115_119	119	115	129	160	173	26012	10
EDIC__-FRASER__345_EF24-40	EF24-40	345	1793	1793	1793	25112	804
EDIC__-N.SCTLND_345_14	14	345	1331	1538	1724	25170	527
EDIC_PTR_230_115_BK 1P	BK 1P	230	269	320	338	25389	61
EDIC_PTR_230_115_BK 2P	BK 2P	230	269	320	338	25423	61
EDIC_PTR_345_115_BK 3E	BK 3E	345	455	539	679	25424	176
EDIC_PTR_345_115_BK 4E	BK 4E	345	505	629	794	25454	176
EDIC_PTR_345_230_BK 2E	BK 2E	230	479	562	683	25422	185
EDWARDAV-RIVRHEAD_138_893	893	138	258	298	334	325654	128
EELPOTRD-MEYER__115_724	968	115	112	131	143	325288	6
EFISHKCH_345_115_BK 1	BK 1	345	412	497	530	25724	52

EQUIPMENT NAME	LINE ID	KV	NOR	LTE	STE	PTID	MW FLOW
EFISHKCH_345_115_BK 2	BK 2	345	450	505	560	325845	0
EFISHKIL_345_115_BK 1	BK 1	345	412	497	530	25724	52
EFISHKIL-WOOD_ST_345_F38	F38	345	1839	2520	3202	25367	905
EFISHKIL-WOOD_ST_345_F39	F39	345	1839	2520	3202	25368	981
EGRDNCTY_138_69_BK 1	BK 1	138	227	263	302	26652	111
EGRDNCTY_345_138_BK 1	BK 1	345	444	513	641	25551	315
EGRDNCTY_345_138_BK 2	BK 2	345	444	513	641	25552	315
EGRDNCTY_345C_345A_PAR1	A_PAR1	345	444	599	787	25678	315
EGRDNCTY_345C_345B_PAR2	B_PAR2	345	444	599	787	25679	315
EGRDNCTY-CARLPLCE_138_361	361	138	258	298	333	25533	57
EGRDNCTY-EGRDNCTR_345_Y49_ST	Y49_ST	345	637	900	1329	325158	630
EGRDNCTY-NEWBRDGE_138_462	462	138	199	276	484	25303	53
EGRDNCTY-NEWBRDGE_138_463	463	138	169	283	346	25304	53
EGRDNCTY-NEWBRDGE_138_465	465	138	197	289	350	25535	62
EGRDNCTY-ROSLYN__138_362	362	138	253	292	327	25534	14
EJWEST_-SCOFDRD_115_9	9	115	193	213	240	326147	47
EKINGSTN-RHINEBCK_115_ER	ER	115	175	193	220	26222	28
ELBRIDGE_345_115_BK 1	BK 1	345	470	557	717	25448	309
ELBRIDGE-GRS_LOCK_115_19	19-EG	115	116	120	145	26097	11
ELBRIDGE-GRS_LOCK_115_3	3	115	143	143	143	26098	13
ELBRIDGE-HYATT__115_15-979	15-EH	115	129	148	160	25109	65
ELBRIDGE-LAFAYTTE_345_17-LE	17-LE	345	940	1517	1830	25149	537
ELBRIDGE-MILTON_C_115_18	18-EM	115	129	136	136	26095	8
ELBRIDGE-STATE_ST_115_5-972	5_972	115	120	144	156	25107	90
ELM_ST_-SENECA__230_71	71	230	223	254	262	26426	28
ELM_ST_-SENECA__230_72	72	230	223	254	262	26427	29
ELWOOD__138_69_BK 3	BK3	138	108	133	156	26540	64
ENDICOTT-RANGEHL_115_920	920	115	149	149	149	26158	17
ENDICOTT-ROBBLEAV_115_948	948	115	249	254	254	26159	63
ENORWICH-CYLINE_115_918	918	115	108	120	120	325280	37
ENORWICH-JENNISON_115_946	946	115	80	110	131	25729	36
ERIE E_-S.RIPLEY_230_69	69	230	480	572	637	25016	0
ERIE_ST_-PAVNMTRD_115_926	926	115	215	240	269	26175	23
ETNA__-CLRKSCRN_115_715	715	115	242	255	295	325728	97
ETNA__-CLRKSCRN_115_947	947	115	242	255	295	325727	97
ETNA__-WILLET__115_945	945-2	115	125	149	156	25731	60
FAIRFIEL-INGHAM_C_115_3	3	115	116	120	145	26106	55
FAIRPORT-ELBRIDGE_115_2	2	115	145	151	185	26099	34
FAIRPORT-HOOK_TAP_115_1	1	115	145	151	157	26327	5
FALCONER-SOUTHADOW_115_153	153	115	129	148	160	26033	15
FALCONER-SOUTHADOW_115_154	154	115	129	148	160	26032	7
FARMGTN_115_12_BK 3	BK 3	115	23	29	44	325380	5
FARMGTN_115_34_BK 1	BK 1	115	56	68	99	70259	40
FARMGTN_115_34_BK 2	BK 2	115	56	64	84	70258	25

EQUIPMENT NAME	LINE ID	KV	NOR	LTE	STE	PTID	MW FLOW
FARMGTN_-BORDRCTY_115_4-977	977	115	150	177	193	25057	66
FARMGTN_-HAMLNNM_115_7-983	7-983	115	108	108	108	26101	48
FARRAGUT_345A_138C_BK 9X	BK 9X	345	110	155	195	25636	60
FARRAGUT_345A_138D_BK 10X	BK 10X	345	110	155	195	25637	90
FARRAGUT_345B_345A_TR11	TR11	345	497	705	930	25044	150
FARRAGUT_345C_345A_TR12	TR12	345	503	699	930	25043	150
FARRAGUT-GOWANUS_345_41	41	345	630	829	1301	25141	564
FARRAGUT-GOWANUS_345_42	42	345	630	829	1301	25140	564
FARRAGUT-HUDS_AVE_138_32077	32077	138	106	106	106	25291	90
FARRAGUT-HUDS_AVE_138_32078	32078	138	114	169	194	25292	60
FARRAGUT-HUDS_AVE_138_32711	32711	138	108	144	159	25293	61
FENERWND-ONEIDA__115_8	8	115	146	157	159	25894	3
FERNDAL- WWDBURNY_115_959	959	115	90	90	90	26180	20
FEURABSH-GREENBSH_115_17	17	115	176	197	248	25862	47
FEURABSH-NCATSKLL_115_2	2-FN	115	116	120	145	25067	0
FISHKPLN-EFISHKIL_115_HF	HF	115	198	230	260	26227	25
FISHKPLN-SYLVANLK_115_FP/990	FP/990	115	203	226	239	25066	122
FITZPTRK-EDIC___345_FE-1	FE-1	345	1434	1434	1661	25077	660
FIVE_MIL-VALLEY44_115_152	152	115	129	148	160	326174	7
FIVE_MIL-VALLEY44_115_167	167	115	129	148	160	326173	2
FIVEMILE_345_115_TR1	TR1	345	538	597	597	326175	64
FIVEMILE-STOLLERD_345_29	29	345	639	769	840	326176	39
FLATROCK-BROWNFLS_115_2	2-FBF	115	102	122	135	26079	48
FLATSTR_-EELPOTRD_115_722	968	115	112	131	143	325287	12
FORGEBRK-MERTPARK_115_WF	WF	115	194	214	240	26229	76
FORTDRUM-DEFERIET_115_2-FD	2-FD	115	116	120	145	26091	6
FORTDRUM-TAYLORVL_115_2	2-DT	115	102	114	134	26090	13
FOXHILLS-WILLWBRK_138_29211	29211-1	138	182	262	439	25771	133
FOXHILLS-WILLWBRK_138_29212	29212-1	138	182	262	439	25772	118
FRASANX-COOPERS_345_UCC2-41	UCC2-41	345	1793	1793	1793	326221	850
FRASER__345_115_BK 2	BK 2	345	305	386	420	25391	135
FRASER_-COOPERS_345_33	33	345	1494	1721	1793	25236	649
FRASER_-GILBOA__345_GF5-35	GF5-35	345	1428	1605	1793	25060	29
FRASERNY-DELHI_TP_115_951	951-3	115	227	239	239	26202	135
FREEPORT-NEWBRDGE_138_461	461	138	228	295	346	25155	165
FRESHKLS_138C_138A_R1_21191	21191	138	275	387	486	25639	200
FRESHKLS_138C_138B_R2_21192	21192	138	272	372	439	25640	200
FRESHKLS_345_138_TA 1	TA 1	138	275	387	486	25457	200
FRESHKLS_345_138_TB 1	TB 1	138	272	372	440	25458	200
FRNKYONG-WALDENNG_115_182	182	115	168	181	206	326279	74
FRONT_ST-ROSA_RD_115_11	11	115	200	239	239	26274	87
FROST_BR-LONG_MTN_345_352	352	345	1240	1240	1425	25363	208
FROST_BR-SOUTHNGT_345_329	329	345	1240	1446	1601	25364	438
FTZPK_NM-LIGHTHSE_115_3	3-FLH	115	116	119	145	25502	22

EQUIPMENT NAME	LINE ID	KV	NOR	LTE	STE	PTID	MW FLOW
FULLRHWL-MORGANRD_115_937	937	115	239	239	239	325223	8
GARDNVLA-GIRDLERD_115_705	705	115	215	239	239	25116	56
GARDNVLA-LANGNERD_115_903	903	115	139	163	183	325284	96
GARDNVLA-STOLLERD_230_66	66	230	474	574	665	25180	159
GARDNVLB_230_115_BK 2	BK 2	230	258	280	354	25385	98
GARDNVLB_230_115_BK 3	BK 3	230	141	182	250	25416	66
GARDNVLB_230_115_BK 4	BK 4	230	141	183	250	25417	66
GARDNVLB-BETHWEST_115_149	149	115	200	217	260	325317	19
GARDNVLB-BETHWEST_115_150	150	115	200	217	260	325318	7
GARDNVLB-CLVRBANK_115_141	141	115	88	101	107	26038	38
GARDNVLB-CLVRBANK_115_142	142	115	88	101	108	26037	38
GARDNVLB-COBBLENM_115_151	151	115	187	199	199	26040	23
GARDNVLB-COBBLENM_115_152	152-1	115	187	199	199	26023	31
GARDNVLB-DUNKIRK_230_73	73	230	556	584	601	25166	73
GARDNVLB-DUNKIRK_230_74	74	230	505	505	505	25197	73
GARDNVLB-GARDNVLA_115_T1012	T1012	115	320	343	365	25085	3
GARDNVLB-GARDNVLA_230_T8-12	T8-12	230	636	739	773	25089	67
GARDNVLB-WALDENNG_115_54-921	54-921	115	129	182	236	26035	20
GE_R_D_-GROOMS__115_20_15	20_15	115	200	217	260	26266	27
GELCKHM_-WETZEL__115_14	14-CG	115	220	252	280	326189	70
GILBOA_-LEEDS__345_GL3	GL3	345	1428	1605	1971	25219	491
GILBOA_-N.SCTLND_345_GNS-1	GNS-1	345	1428	1605	1866	25052	49
GINNA_-PANNELRG_115_912	912	115	227	251	264	25260	22
GINNA_-S124____115_913	913	115	251	301	354	26281	161
GINNA_-STA_135_115_909	909	115	226	249	269	325837	72
GINNA_-STA_135_115_937	937	115	226	249	269	325838	72
GINNA_-STA_204_115_908	908-1	115	252	302	355	26282	76
GINNA_-STA_204_115_911	911	115	251	300	354	26283	176
GIRDLERD-STOLLERD_115_706	706	115	203	226	239	325161	22
GLENWDGT-ROSLYN__138_364	364	138	253	310	342	25556	34
GLENWOOD_138_69_BK 5	BK 5	138	112	138	156	25735	101
GLENWOOD_138_69_BK 6	BK 6	138	112	138	156	70637	83
GLENWOOD-CARLPLCE_138_363	363	138	254	312	344	25554	17
GLENWOOD-GLENWDGT_138_366	366	138	252	309	341	25555	50
GOETHALS_345A_345B_BK 1N	BK 1N	345	688	843	1056	25641	100
GOETHALS-FRESHKLS_345_21	21	345	919	1006	1286	25138	34
GOETHALS-FRESHKLS_345_22	22	345	981	1390	1602	25137	34
GOETHALS-LINDN_CG_345_G23L	G23L	345	672	893	1630	26000	455
GOETHALS-LINDN_CG_345_G23M	G23M	345	672	893	1630	325203	455
GOETHSLN_345/230_BK 1	BK 1	345	528	727	817	25642	100
GOLAH_-MORTIMER_115_110	110	115	130	136	159	26034	74
GOUDEY_-ROBBLEAV_115_940	940	115	238	277	305	325166	47
GOUVNEUR-BATTHILL_115_8	8-GBH	115	76	87	94	26066	24
GOWANUS_138A_138B_PAR R14	PAR R14	138	248	335	421	25794	140

EQUIPMENT NAME	LINE ID	KV	NOR	LTE	STE	PTID	MW FLOW
GOWANUS_138A_138B_PAR R2	PAR R2	138	245	302	347	25793	140
GOWANUS_345_138_BK T14	BK T14	138	248	335	421	25475	140
GOWANUS_345_138_BK T2	BK T2	138	245	302	347	25476	140
GOWANUS_-GOETHALS_345_25	25	345	492	702	1211	25139	469
GOWANUS_-GOETHALS_345_26	26	345	492	702	1211	25571	469
GOWANUS_-GREENWD_138_42231	42231	138	254	302	347	25214	140
GOWANUS_-GREENWD_138_42232	42232	138	237	289	338	25215	140
GOWANUSA-GREENWD_138_42G24	42G24	138	244	268	268	26007	198
GOWANUSC-GREENWD_138_42G13	42G13	138	239	268	268	26006	189
GOWANUSN_345KV_REA_R41_REACTR	R41_REA	345	687	896	1315	26001	564
GOWANUSS_345KV_REA_R42_REACTR	R42_REA	345	687	896	1315	26003	564
GR.GORGE-VINGR_TP_115_916 N.O.	916 N.O.	115	125	152	193	26478	0
GREENBSH-FT_ORAN_115_15	15	115	186	199	199	26130	43
GREENBSH-RVSD_TAP_115_4	4	115	176	211	239	325649	0
GREENBSH-STEPHTWN_115_993	993	115	116	120	145	26447	0
GREENDGE-FLATSTR_115_968	968	115	108	128	143	26185	29
GREENDGE-MONTRFL_115_967	967	115	108	128	143	26184	40
GREENDGE-MONTRFL_115_970	970	115	124	139	159	26183	49
GREENLWN_138_69_BK5	BK5	138	108	133	156	26655	49
GREENLWN-ELWOOD__138_673	673	138	365	480	567	25546	107
GREENLWN-SYOSSET_138_676	676	138	246	353	564	25548	4
GREENWD_-FOXHILLS_138_29231	29231	138	174	235	368	25321	30
GREENWD_-FOXHILLS_138_29232	29232	138	174	235	368	25322	49
GRISLD64-NIAGB130_115_182	182	115	174	181	226	26014	115
GROOMS_-JOHNSON_115_13-14	13	115	220	252	280	26267	59
GRS_LOCK-GELCKHM_115_8	8-GS	115	116	120	145	26103	61
GRS_LOCK-S.OSWEGO_115_9	9-GS	115	135	135	135	25510	92
GRS_LOCK-TILDEN__115_16	16-GT	115	116	120	145	26102	34
GUARDIAN-HALEYRD_115_969	969	115	176	179	179	26167	75
HALEYRD_-GREENDGE_115_969	969	115	176	179	179	325294	53
HAMLTNNM-ELBRIDGE_115_7-983	7-983	115	155	167	169	26096	59
HAMLTNNM-HAMLTNNY_115_BK1	BK 1	115	30	37	56	25394	11
HAMRHILL-INDK-OSW_115_6	6-HI	115	114	120	142	26114	62
HANAWAFL-COLTON__115_5	5	115	182	197	248	326185	19
HANCOCK_-HAZEL__115_955	955-1	115	102	113	120	26187	0
HARSNRAD-ROBNSNRD_115_907	907	115	215	247	275	26162	27
HAUPPAUG-C_ISLIP_138_889	889	138	210	304	345	25681	71
HAZEL_-FERNDALE_115_955	955-2	115	102	113	120	26181	11
HDSNBRDG-DEWITT__115_10	10	115	207	233	233	325260	68
HDSNBRDG-DEWITT__115_7	7	115	237	274	318	325261	52
HELLGT_E-ASTORIAE_138_34051	34051	138	174	235	368	25323	15
HELLGT_E-ASTORIAE_138_34052	34052	138	174	235	368	25324	15
HELLGT_W-ASTORIAW_138_24051	24051	138	160	250	436	25210	28
HELLGT_W-ASTORIAW_138_24052	24052	138	160	250	436	25211	32

EQUIPMENT NAME	LINE ID	KV	NOR	LTE	STE	PTID	MW FLOW
HELLGT_W-ASTORIAW_138_24053	24053	138	140	186	186	25212	132
HELLGT_W-ASTORIAW_138_24054	24054	138	140	186	186	25213	131
HICKLING-CATON___115_958	958	115	102	113	120	26189	14
HICKLING-YAWGERRD_115_964	964	115	125	134	148	26188	23
HILLBURN_138_69_BK 317	BK 317	138	187	230	265	26330	74
HILLBURN-RAMAPOOR_138_52	52	138	187	230	265	25882	74
HILLSIDE-CHEMUNG_115_962	962	115	150	176	179	25726	32
HILLSIDE-WATRCURE_230_69	69	230	550	637	657	25181	211
HINMAN_-HARSNRAD_115_908	908	115	238	287	306	26161	160
HISHELDN-STONCREK_230_81	81	230	417	479	533	325622	91
HOLBROOK_138_69_BK 1	BK 1	138	227	263	302	69378	137
HOLBROOK_138_69_BK 2	BK 2	138	99	122	142	69376	60
HOLBROOK-NSHORBCH_138_884	884	138	330	382	437	25341	7
HOLBROOK-SILLSRD_138_872	872	138	441	488	595	25340	5
HOLBROOK-WEST BUS_138_888	888	138	496	543	622	25542	344
HOLTSVLE-UNIONAVE_138_818	818	138	181	231	264	25584	83
HOLTSVLE-WEST BUS_138_876	876	138	298	327	374	325974	213
HOLTSVLE-WEST BUS_138_877	877	138	481	527	603	325909	213
HOMER C_-HOMR_NYW_345_48	48	345	979	979	1013	326213	238
HOMER_HL-FIVE_MIL_115_169	169	115	221	256	287	26452	27
HOMER_HL-FIVE_MIL_115_170	170	115	221	256	287	26022	27
HOMER_HL-NILE___115_157	157-1	115	88	101	108	26041	27
HOMR_NYW-PIERC_NY_345_48	48	345	979	979	1013	326214	238
HOMRC_NY-MAINS_NY_345_47	47	345	1212	1410	1710	326121	139
HOOK_TAP-FARMGTN_115_7-983	7-983	115	145	151	162	26100	21
HOPATCON-RAMAPO__500_5018	5018	345	999	1301	1713	25019	380
HOPKINS_-TEALLAVE_115_11	11	115	220	239	239	26105	84
HUDS_AVE-JAMAICA_138_701	701	138	147	221	360	25294	67
HUDS_AVE-JAMAICA_138_702	702	138	147	221	360	25295	67
HUDSON_-PLSTVYCH_115_12	12-HP	115	129	157	159	25499	52
HUDSON_-VALKIN__115_15	15	115	186	214	237	26514	88
HUDSONP_-FARRAGUT_345_B3402	B3402	345	432	614	801	25020	150
HUNTLEY_-BUFAL129_115_38	38	115	145	151	185	26047	85
HUNTLEY_-BUFAL129_115_39	39	115	145	151	185	26044	83
HUNTLEY_-ELM_ST__230_70	70	230	432	477	491	25855	41
HUNTLEY_-SAWYER__230_79	79	230	566	654	755	25127	263
HUNTLEY_-SAWYER__230_80	80	230	566	654	755	25128	313
HUNTLEY_-ST_60_36_115_36	36-1	115	168	175	176	26046	2
HUNTLEY_-ST_60_37_115_37	37-1	115	148	148	148	26045	3
HURLYAVE_115_69_TR 3	TR 3	115	95	118	149	25837	35
HURLYAVE_345/115_BK 1	BK 1	345	419	481	488	25419	187
HURLYAVE-LINCNPBK_115_HP	HP	115	198	230	260	25833	80
HURLYAVE-ROSETON_345_303	303	345	1396	1623	1870	25218	483
HURLYAVE-STURGNPL_115_HS	HS	115	169	186	191	25834	54

EQUIPMENT NAME	LINE ID	KV	NOR	LTE	STE	PTID	MW FLOW
HYATT__115_34_BK 1	BK 1	115	54	67	100	70329	21
HYATT_-BORDRCTY_115_15-979	979	115	129	148	160	25106	44
IMC_TAP_-MECO__115_15-IM	15-IM	115	125	143	154	26132	20
INDCORTH-SPIERFLS_115_18	18	115	278	321	368	26149	129
INDK-OSW-LIGHTHSE_115_2	2-ILH	115	114	120	142	25503	12
INDN_PT3-BUCHAN_S_345_W96	W96	345	1574	1762	1991	25570	1037
INDPDNCE_345_18_TB 5	MT 5	345	215	235	255	68303	162
INDPDNCE_345_18_TB 6	MT 6	345	215	235	255	68304	162
INDPDNCE-SCRIBA__345_25	25	345	1670	1931	2210	25859	26
INGCALTN-DEPEW_NG_115_54-921	54-921	115	129	182	239	326276	62
INGHAM_C_115_115_PAR 2	PAR 2	115	167	197	239	25242	120
INGHAM_C-INGHAM_E_115_R81	R81	115	182	197	239	25243	0
INGHAM_E-ESPRGFLD_115_7-942	7	115	79	105	131	25061	31
INGHAM_E-IMC_TAP_115_15	15-II	115	105	114	134	25871	37
INGHAM_E-STJHNVLE_115_6	6-IS	115	86	90	107	26133	37
INGHAM_E-STONER__115_9	9-IS	115	105	114	134	25863	34
JAMAICA_-LAKSUCSS_138_903	903	138	240	328	428	25090	198
JAMAICA_-VALLYSTR_138_901 L_M	901 L_M	138	268	358	441	25048	98
JENNISON_115_46_BK 1A	BK 1A	115	52	52	53	69462	17
JENNISON-HANCOCK_115_954	954	115	102	113	120	26186	32
JENNISON-KATTLVLE_115_943	943	115	110	139	159	25898	59
JENNISON-SIDNEYRR_115_949	949	115	80	110	120	26173	25
JOHNSON_-MAPLEWOD_115_12	12	115	220	239	239	26268	95
KATONAH_-AMAWALK_115_995	995	115	215	247	275	325279	54
KATONAH_-CROTONFL_115_991	991	115	215	247	275	26157	1
KENTAVE_-GREENWD_138_31232	31231-2	138	174	226	247	25299	92
KINTIGH_-ROCHESTR_345_SR1-39	SR-1	345	1301	1501	1685	25073	348
KNAPPCRN_115_69_TR 2	TR 2	115	38	49	60	25838	11
KNAPPCRN-SANDDOCK_115_KB_KC	KB_KC	115	198	226	260	26240	37
KNAPPCRN-SPACKILL_115_SK	SK	115	198	226	260	325777	7
KNTFSRNC-SCOTAFLT_115_913	913	115	120	120	120	26207	6
LADENTWN-BOWLINE_345_68	68	345	687	747	747	25249	344
LADENTWN-BUCHAN_S_345_Y88	Y88	345	1703	1894	2404	25185	794
LADENTWN-WHAVSTRW_345_67-2	67-2	345	1720	2215	2657	25248	325
LAFAYTTE-CLRKSCRN_345_4-46	Apr-46	345	1207	1327	1479	25049	845
LAFAYTTE-DEWITT__345_22	22	345	1164	1164	1164	25174	320
LAKEVIEU-CLVRBANK_115_142	142	115	88	101	108	325881	31
LAKSUCSS_138_69_BK 5	BK 5	138	227	263	302	26603	132
LAKSUCSS_138_69_BK 6	BK 6	138	227	263	302	325098	121
LAKSUCSS_138A_138B_PAR	B_PAR	138	297	356	427	25593	178
LANGDON_-NORTHSDE_115_936	936	115	176	196	225	26160	61
LAUREL L-GOUDEY__115_952	952	115	108	128	143	25012	102
LAURLEGY-SCOV RCK_345_384	384	345	717	1004	1219	26389	379
LAWRNCAV-HANAWAFL_115_5	5	115	182	197	248	26085	16

EQUIPMENT NAME	LINE ID	KV	NOR	LTE	STE	PTID	MW FLOW
LAWRNCV-SUGARISL_115_4	4	115	220	252	280	326186	13
LEEDS__-ATHENS__345_95	95	345	1331	1538	1724	25789	34
LEEDS__-HURLYAVE_345_301	301	345	1396	1623	1870	25055	671
LEEDS__-PLSNTVLY_345_92	92	345	1331	1538	1724	25056	998
LIGHTHSE-EWATRTWN_115_5	5	115	116	119	119	25504	9
LIGHTHSE-MALLORY_115_7	7-CL	115	108	108	108	25521	32
LINCNPBK-EKINGSTN_115_LR	LR	115	194	214	240	26223	40
LINDEN_-GOETHALS_230_A2253	A2253	230	541	715	845	25017	100
LNGRD209-GARDNVLB_115_180	180	115	160	166	206	326282	110
LOCKPORT-HINMAN__115_100	100	115	220	252	280	25087	124
LOCKPORT-N.AKRON__115_108	108	115	130	136	165	25266	32
LOCKPORT-OAKFIELD_115_112	112	115	131	144	158	25300	32
LOCKPORT-SHELBY76_115_113	113	115	143	165	180	25263	28
LOCKPORT-SWEDEN__115_111	111	115	199	199	199	25262	21
LOCKPORT-TELGRAPH_115_107	107	115	220	252	280	25265	49
LOCKPORT-TELGRAPH_115_114	114-1	115	143	165	180	25264	33
LOCUSTGR-NEWBRIDGE_138_558	558	138	321	472	575	25158	255
LONG_MTN-PLSNTVLY_345_398	398	345	1135	1313	1596	25033	74
LONG_MTN-PLUM TRE_345_321	321	345	1434	1649	1936	25720	133
LONGLANE-LAFARGE__115_6	6	115	116	120	145	25864	79
LOVETT__138_69_BK 147	BK 147	138	94	130	149	26331	36
LOVETT_-BOWLINOR_138_56	56	138	234	267	281	25877	36
LOVETT_-STONYPNT_138_54	54	138	236	270	285	25885	9
LOWVILLE-BOONVLE_115_5	5-LB	115	105	114	134	26075	43
LUDLOW__-CARP HL_345_301	301	345	1240	1416	1489	25722	79
LUDLOW__-NORTHFLD_345_354	354	345	1434	1649	1936	25713	550
LUDLUM_-BENETTRD_115_161	161-3	115	168	185	206	326230	43
LUDLUM_-BENETTRD_115_162	162-2	115	168	185	206	326229	42
LUTHERFT-MALTA__115_1	1	115	197	256	287	325889	69
LUTHERFT-MALTA__115_302	2	115	197	256	287	325890	31
LUTHERFT-MULBRYNM_115_3	3	115	254	294	333	26477	3
LUTHERFT-MULBRYNM_115_308	308	115	189	228	252	325742	60
LYON_MTN-KNTFSRNC_115_1(911)	911	115	125	151	175	26205	10
MACHIAS_-VALLEY44_115_152	152	115	129	148	160	326172	0
MACHIAS_-VALLEY44_115_167	151	115	124	138	158	326169	2
MAINESBG-WATRCURE_345_30	30	345	927	927	927	25018	32
MALLORY_-WETZEL__115_7	7-CL	115	155	155	155	326206	9
MALONE_-NICHVLE_115_3	3-NM	115	129	163	183	25585	10
MALONE_-WILLIS__115_MW1-910	1-MW	115	129	159	175	25586	64
MALTA__-TAPBLSTN_115_1	1	115	220	252	280	325891	69
MALTA__-TAPBLSTN_115_302	302	115	220	252	280	325892	17
MANCHSTR-SPACKILL_115_MC	MC	115	198	226	260	325776	24
MAPLE140-BUFALO54_115_38	38	115	174	181	226	326157	64
MAPLE140-BUFALO54_115_39	39	115	174	181	226	326158	62

EQUIPMENT NAME	LINE ID	KV	NOR	LTE	STE	PTID	MW FLOW
MAPLEWOD-WTRVLARS_115_19	19	115	129	182	239	25870	61
MAPLEWOD-WTRVLARS_115_31	31	115	129	176	224	25844	70
MARCY___765_345_BK 1	BK 1	765	1488	1650	1756	25455	730
MARCY___765_345_BK 2	BK 2	765	1488	1650	1971	25456	639
MARCY_-EDIC___345_UE1-7	UE1-7	345	1488	1650	1971	25229	517
MARCY_-FRASANNX_345_UCC2-41	UCC2-41	345	1793	1793	1793	25113	879
MARCY_-N.SCTLND_345_18	18	345	1488	1650	1793	25276	595
MARION_-FARRAGUT_345_C3403	C3403	345	414	589	767	25038	150
MARSHVLE-CLINTON_115_12	12	115	125	143	154	325267	4
MASSENA_765_230_BK 1	BK 1	765	936	1207	1872	25665	144
MASSENA_765_230_BK 2	BK 2	765	936	1207	1872	25666	144
MASSENA_-MARCY___765_MSU1	MSU1	765	5115	5316	5411	25224	1369
MCADOO_-BATTHILL_115_4	6-MBH	115	76	87	94	26064	11
MCINTYRE-COLTON__115_8	8-MC	115	76	87	94	25514	2
MCINTYRE-MCADOO__115_6	6	115	128	136	137	26108	0
MCKNOWNV-NEWKRMKL_115_8	8	115	248	277	317	26499	144
MECO___-CHURCH_S_115_10	10-AM	115	125	130	130	26120	6
MENANDS_-REYNOLDS_115_2	2-MR	115	217	250	280	26135	120
MENANDS_-RIVERSDE_115_3	3-MR	115	226	274	326	26134	108
MENANDS_-WTRVLARS_115_19	19	115	128	147	159	326246	65
MERTPARK-WICCOPEE_115_WP	WP	115	194	214	240	325772	46
MEYER___-CANANDGA_230_60	60	230	483	556	634	325604	77
MEYER___-MORAINE_115_966	966	115	125	152	191	26166	56
MIDDLEOR-SHOEMAKR_138_29	29	138	506	587	671	26468	253
MIDDLETP_345_138_BK 114	BK114	345	506	587	671	26465	253
MIDDLETP-ROCKTVRN_345_CCRT-34	MTR-34	345	1704	1852	2362	26464	448
MILAN___-PLSTVYCH_115_10	10	115	129	158	192	26433	12
MILAN___-RHINEBCK_115_MR	MR	115	175	193	220	26242	2
MILLBURY-CARP HL_345_302	302	345	1313	1405	1494	25721	48
MILLERPL-HOLBROOK_138_885	885	138	392	477	564	26691	22
MILLIKEN-ETNA___115_974	974	115	185	224	255	26177	21
MILLIKEN-ETNA___115_975	975	115	185	224	255	26178	23
MILLWOOD_345_138_TA 1	TA 1	138	216	307	346	25530	50
MILLWOOD_345_138_TA 2	TA 2	138	205	297	321	25531	53
MILLWOOD-EASTVIEW_345_W82	W82	345	2296	2658	3202	25147	1068
MILLWOOD-EASTVIEW_345_W85	W85	345	2296	2658	3202	25258	1014
MILLWOOD-EASTVIEW_345_W99	W99	345	2296	2658	3202	25255	1011
MILTON_C-GRS_LOCK_115_18	18-MG	115	129	148	160	26104	15
MILTR209-SUMMIT97_115_129	129	115	239	283	283	326288	122
MNCHESTR-CARD___345_368	368	345	1240	1446	1888	25710	411
MNCHESTR-MILSTONE_345_310	310	345	1488	1912	2097	25336	361
MNCHESTR-NO.BLOOM_345_3642	3642	345	956	956	956	26399	91
MNCHESTR-SCOV RCK_345_353	353	345	1240	1604	2097	25714	234
MNTNDALE-WWDBURNY_115_957	957	115	108	120	120	325616	25

EQUIPMENT NAME	LINE ID	KV	NOR	LTE	STE	PTID	MW FLOW
MODENA__115_69_BK1	BK1	115	33	41	53	26325	1
MODENA_-OHIOVLE_115_PX	PX	115	232	253	304	25835	10
MOHANSIC_115_13_BK 2	BK 2	115	23	24	26	26482	10
MOHANSIC_115_13_BK 4	BK 4	115	23	24	26	26483	16
MOHICAN_-BATNKILL_115_15	15	115	116	120	145	26122	29
MOHICAN_-MULBRYNM_115_3	3	115	116	120	145	26687	9
MONSEY_-BURNS__138_601	601	138	425	451	475	325608	142
MONTRFL_-CODNIGTN_115_982	982	115	108	128	144	25728	14
MONTRFL_-RIDGE_RD_115_963	963-2	115	108	127	133	26196	33
MONTRFL_-RIDGE_RD_115_978	978-2	115	108	128	145	26197	31
MONTVILL-MILSTONE_345_371	371	345	1488	1912	2097	25334	690
MOONS_SW-FALCONER_115_161	161-3	115	88	101	108	26030	18
MOONS_SW-FALCONER_115_162	162-2	115	88	101	108	26031	10
MORGANRD-LANGDON__115_936	936	115	203	226	239	325224	26
MORTIMER-FAIRPORT_115_1	1	115	129	151	162	25163	37
MORTIMER-FAIRPORT_115_2	2	115	129	144	158	25240	14
MORTIMER-SHELBY76_115_114	114	115	129	149	153	326129	1
MORTIMER-STA_56__115_24	24-Jan	115	129	148	160	25096	40
MORTIMER-STA_56__115_25	25	115	114	123	142	25095	63
MOSES__230_115_BK 1	BK 1	230	401	490	646	25411	41
MOSES__230_115_BK 2	BK 2	230	401	490	646	25451	40
MOSES__230_115_BK 3	BK 3	230	192	240	287	25452	16
MOSES__230_115_BK 4	BK 4	230	537	598	773	25453	41
MOSES_-ADIRNDCK_230_MA1	MA1	230	348	386	440	25269	131
MOSES_-ADIRNDCK_230_MA2	MA2	230	348	386	440	25270	131
MOSES_-ALCOA_PA_115_MAL6	MAL6	115	218	253	291	25581	85
MOSES_-GRASRIVR_115_MAL4	MAL4	115	238	275	310	25582	87
MOSES_-GRASRIVR_115_MAL5	MAL5	115	238	275	310	25583	87
MOSES_-MASSENA_230_MMS1	MMS1	230	936	1197	1371	25274	144
MOSES_-MASSENA_230_MMS2	MMS2	230	936	1197	1394	25275	144
MOSES_-MED-ENGS_115_MRG1	MRG1	115	145	145	157	26328	24
MOSES_-MED-ENGS_115_MRG2	MRG2	115	145	145	157	26335	6
MOSES_-REYNLDPA_115_MR3	MR3	115	136	151	157	26332	0
MOSES_-WILLIS__230_MW1	MW1	230	349	386	440	25188	17
MOSES_-WILLIS__230_MW2	MW2	230	349	386	440	25271	17
MOSHIER_-TAYLORVL_115_7-MT	7-MT	115	49	49	49	26109	14
MOTTHAVN_345_138_TR6	TR6	345	457	558	603	325428	79
MOTTHAVN_345_138_TR7	TR7	345	457	558	603	325426	79
MOTTHAVN_345_138_TR8	TR8	345	457	558	603	325427	79
MOTTHAVN_345_138_TR9	TR9	345	457	558	603	325429	79
MOTTHAVN-RAINEY__345_Q11	Q11	345	707	833	1298	325430	409
MOTTHAVN-RAINEY__345_Q12	Q12	345	707	833	1298	325431	382
MOUNTAIN-SWANROAD_115_103	103	115	176	211	240	26054	81
MOUNTAIN-SWANROAD_115_104	104	115	176	211	240	26053	0

EQUIPMENT NAME	LINE ID	KV	NOR	LTE	STE	PTID	MW FLOW
MULBRYNM-EASTOVER_115_308	308	115	186	214	237	26475	88
N_SALEM-BATNKILL_115_989	989	115	40	50	57	26448	5
N.AKRON_-BATAVIA__115_107	107	115	159	159	159	25124	5
N.AKRON_-BATAVIA__115_108	108	115	125	136	154	25125	16
N.END__115_46_BK 1	BK 1	115	61	61	69	25849	30
N.END_-ASHLEYRD_115_702	702	115	287	333	388	25846	65
N.END_-PLATSBRG_115_701	701	115	217	239	239	25848	150
N.HEMPST-WHAVSTOR_138_530	530	138	236	270	285	26506	0
N.SCTLND_345_115_BK 1	BK 1	345	458	570	731	25445	52
N.SCTLND_345_115_BK 2	BK 2	345	510	690	794	25460	50
N.SCTLND-ALBANY__115_8	8-NA	115	278	321	368	25496	3
N.SCTLND-ALPS__345_2	2	345	1204	1326	1685	25217	188
N.SCTLND-ALTAMONT_115_20	20-NV	115	116	120	145	25492	89
N.SCTLND-BETHLHEM_115_4	4-NB	115	254	266	266	25497	58
N.SCTLND-FEURABSH_115_3	3-NF	115	254	292	333	25495	87
N.SCTLND-LEEDS__345_93	93	345	1331	1538	1724	25171	620
N.SCTLND-LEEDS__345_94	94	345	1331	1538	1724	25203	616
N.SCTLND-OWENSCRN_115_7	7	115	116	120	145	25491	19
N.SCTLND-OWENSCRN_115_9	9	115	116	120	145	25490	15
N.SCTLND-ROTTRDAM_115_13	13-NR	115	241	265	333	25494	77
N.SCTLND-VORHVSLE_115_19	19-NV	115	116	120	145	25493	78
N.TROY_-EASTOVER_115_306	308	115	186	214	237	326095	16
N.TROY_-EASTOVER_115_307	10	115	182	197	237	326096	15
N.TROY_-HOOSICK_115_5	5-NHF	115	200	232	232	26131	18
N.TROY_-REYNOLDS_115_16	16-NR	115	182	197	237	26139	73
N.TROY_-WYNTKLMN_115_14-988	14-NW	115	129	182	237	26137	51
NANGOLA_-DELEMTER_115_141	141	115	88	101	108	325872	19
NANGOLA_-DELEMTER_115_142	142	115	88	101	108	325879	15
NANGOLA_-SILVRCRK_115_141	141	115	88	101	108	325871	7
NANGOLA_-SILVRCRK_115_142	142	115	88	101	108	325878	4
NBRDWYNM-ERIE_ST_115_181-922	922	115	124	138	158	26011	56
NCATSKLL_115_69_TR 4	TR 4	115	48	60	74	25839	21
NCATSKLL_115_69_TR 5	TR 5	115	44	55	73	25818	21
NCATSKLL-MILAN__115_T7	T7	115	129	182	199	26243	19
NHELSEA_115/69_BK TR1	BK TR1	115	33	41	53	25836	12
NHELSEA-FISHKPLN_115_NF	NF	115	183	248	279	26228	105
NHELSEA-FORGEBRK_115_FO	FO	115	176	211	240	26230	116
NEPTUNE_-DUFFYAVE_345_NEPTUNE	NEPTUNE	345	660	785	785	325304	660
NEWBRDGE_138_69_BK 6	BK 6	138	114	141	159	26604	82
NEWBRDGE_138_69_BK 7	BK 7	138	114	141	159	26605	77
NEWBRDGE_345_138_BK_1	BK 1	345	377	469	562	325301	331
NEWBRDGE_345_138_BK_2	BK 2	345	385	469	562	325302	331
NEWBRDGE-BAGATLRD_138_563	563	138	370	524	600	25536	13
NEWBRDGE-DUFFYAVE_345_501	501	345	660	750	750	325303	660

EQUIPMENT NAME	LINE ID	KV	NOR	LTE	STE	PTID	MW FLOW
NEWBRDGE-EGRDNCTY_138_467	467	138	250	455	616	325378	51
NEWBRDGE-RULAND__138_561	561	138	238	277	305	25305	74
NEWBRDGE-RULAND__138_562	562	138	237	275	303	25306	74
NEWBRDGE-RULAND__138_567	567	138	241	322	355	325379	75
NEWKRMKL-ALBANY__115_7	7	115	275	303	354	325257	163
NEWWALDN-GARDNVLB_115_38	38	115	129	171	206	26039	41
NIAGARA_230_115_BK T1	BK T1	230	192	239	288	25409	114
NIAGARA_230_115_BK T2	BK T2	230	249	359	424	25410	25
NIAGARA_345_230_AT4	BK 4	345	697	770	881	25449	63
NIAGARA_345_230_BK 3	BK 3	345	384	479	575	25408	35
NIAGARA_345_230_BK 5	BK 5	345	384	479	575	25450	35
NIAGARA_-KINTIGH_345_NS1-38	NS1-38	345	1301	1501	1685	25074	327
NIAGARA_-LNGRD209_115_180	180	115	200	208	265	25104	123
NIAGARA_-MOUNTAIN_115_120	120	115	176	211	258	25135	81
NIAGARA_-PACKARD_115_191	191	115	273	301	351	25075	163
NIAGARA_-PACKARD_115_192	192	115	273	301	352	25099	172
NIAGARA_-PACKARD_115_193	193	115	273	301	351	25100	126
NIAGARA_-PACKARD_115_194	194	115	273	301	351	25101	126
NIAGARA_-PACKARD_115_195	195	115	331	359	424	25102	145
NIAGARA_-PACKARD_230_61	61	230	626	727	846	25186	381
NIAGARA_-PACKARD_230_62	62	230	626	717	846	25220	375
NIAGARA_-ROBNSNRD_230_64	64	230	496	550	657	25088	292
NIAGARA_-ROCHESTR_345_NR2	NR2	345	1301	1501	1685	25084	100
NIAGARA_-SANBORN_115_101	101	115	233	253	318	326180	81
NIAGARA_-SANBORN_115_102	102	115	247	275	328	25103	78
NIAGB130-FRNKYONG_115_181-922	181-922	115	174	181	226	26057	123
NIAGB130-FRNKYONG_115_182	182	115	174	181	226	326278	99
NICHLVLE-PARISHVL_115_3	3-PN	115	128	147	159	26110	5
NILE__-ANDOVER_115_157	157-2	115	105	114	134	26016	12
NINEMILE-CLAY__345_8	8	345	1032	1271	1416	25167	756
NINEMILE-FTZPK_NM_115_4	4-NF	115	119	119	159	25500	22
NINEMILE-SCRIBA__345_9	9	345	1032	1284	1562	25359	137
NOGDNBRG-MCINTYRE_115_9	9-NOM	115	159	159	159	26080	18
NORTHFLD-VRNON VT_345_381	381	345	1195	1195	1323	25707	315
NRTH1385-NOR HBR_138_601	601	138	147	182	409	325597	33
NRTH1385-NOR HBR_138_602	602	138	147	182	409	325598	33
NRTH1385-NOR HBR_138_603	603	138	147	182	409	325599	33
NRTH1385-NRTHPORT_138_NNC	1385	138	436	518	532	25035	100
NRTHPORT_138_138_PS2	138_PS2	138	386	470	555	25599	182
NRTHPORT_138N_138E_PAR 1	E_PAR 1	138	436	518	532	25598	100
NRTHPORT-ELWOOD__138_678	678	138	356	536	614	25543	129
NRTHPORT-ELWOOD__138_681	681	138	358	538	616	25544	138
NRTHPORT-PILGRIM_138_672	672	138	188	289	350	25307	141
NRTHPORT-PILGRIM_138_677	677	138	379	534	611	25308	301

EQUIPMENT NAME	LINE ID	KV	NOR	LTE	STE	PTID	MW FLOW
NRTHPORT-PILGRIM_138_679	679	138	383	532	609	25309	301
OAKDALE_230_115_BK 1	BK 1	230	275	400	440	25400	15
OAKDALE_345_115_BK 2	BK 2	345	491	587	600	25401	255
OAKDALE_345_115_BK 3	BK 3	345	420	499	600	25399	210
OAKDALE_-DELHI___115_919	919	115	161	177	179	25897	6
OAKDALE_-ENDICOTT_115_938	938	115	161	177	225	26198	124
OAKDALE_-FRASER___345_32	32	345	1255	1518	1793	25235	35
OAKDALE_-GOUDEY___115_939	939	115	238	274	306	26182	172
OAKDALE_-KATTLVLE_115_943	943	115	139	163	192	26201	74
OAKDALE_-NORTHSDE_115_944	944	115	185	224	239	26199	73
OAKFIELD-BATAVIA_115_112-2	112-2	115	128	136	158	25126	23
OAKWOOD_-ELWOOD___138_674	674	138	364	479	566	25545	50
OAKWOOD_-SYOSSET___138_675	675	138	247	353	564	25547	9
OHIOVLE_115_69_BK TR1	BK TR1	115	33	41	53	25819	0
OHIOVLE-HIGHLAND_115_OR	OR	115	182	197	240	26247	9
ONEIDA_-WALESVIL_115_7	7	115	116	120	145	26115	37
ONEIDA_-YAHNUNDA_115_6	6	115	105	114	134	26113	17
OSWEGO___345_115_BK 7	BK 7	345	489	552	690	25372	310
OSWEGO_-ELBRIDGE_345_17	17	345	1207	1326	1426	25234	846
OSWEGO_-S.OSWEGO_115_3	3-OS	115	209	239	239	25507	131
OSWEGO_-S.OSWEGO_115_5	5-OS	115	209	239	239	25508	131
OSWEGO_-S.OSWEGO_115_8	8-OS	115	400	462	478	25509	46
OSWEGO_-VOLNEY___345_11	11	345	1200	1326	1685	25199	107
OSWEGO_-VOLNEY___345_12	12	345	1200	1326	1685	25201	107
OWENSCRN-SABICO___115_7	7	115	116	120	145	325736	20
OWENSCRN-SABICO___115_9	9	115	116	120	145	325737	36
PACKARD_230_115_BK 3	BK 3	230	189	250	250	25414	25
PACKARD_230_115_BK 4	BK 4	230	190	250	250	25415	90
PACKARD_-LNGRD209_115_182	182	115	200	208	265	26056	135
PACKARD_-MILTR209_115_1230	130	115	239	298	398	26059	141
PACKARD_-MILTR209_115_129	129	115	239	298	298	25906	133
PACKARD_-NIAGB130_115_181-922	181-922	115	160	166	206	26055	136
PACKARD_-SAWYER___230_77	77	230	556	644	746	25164	365
PACKARD_-SAWYER___230_78	78	230	556	644	746	25195	365
PALMITER-BENNETT_115_932	932	115	78	85	98	26165	10
PANNELL_345_115_3T	BK 3	345	255	319	336	25572	144
PANNELL_345_115_BK 1	BK 1	345	228	282	336	25396	137
PANNELL_345_115_BK 2	BK 2	345	228	282	336	25431	136
PANNELL_-CLAY___345_1	1	345	1195	1195	1195	25058	401
PANNELL_-CLAY___345_2	2	345	1195	1195	1195	25050	402
PANNELRG-FARMGTN_115_4-977	4-977	115	207	247	280	25080	113
PANNELRG-STA_56___115_24	24	115	129	148	160	26285	100
PANNELRG-STA_56___115_25	25	115	129	147	159	26284	82
PARISHVL-COLTON___115_3	3-CP	115	128	147	159	25241	8

EQUIPMENT NAME	LINE ID	KV	NOR	LTE	STE	PTID	MW FLOW
PATROON_-MCKNOWNV_115_2-6	6	115	258	321	368	25866	92
PATROON_-PATRTAP_115_15	15	115	160	176	224	25867	16
PATRTAP_-MENANDS_115_15	15	115	105	114	134	26493	16
PAVMNTRD-STOLLERD_115_926	926	115	249	287	327	325220	0
PAWLING_-CROTONFL_115_994	994	115	176	179	179	25902	45
PEAT ST_-HDSNBRDG_115_10	10	115	207	233	233	26648	49
PEAT ST_-HDSNBRDG_115_7	7	115	278	318	318	26649	14
PETERBOR-ONEIDA__115_5	5	115	116	120	145	25896	6
PIERCBRK-FIVEMILE_345_37	37	345	979	979	1013	326196	103
PILGRIM__138B_138A_PAR	138_PS2	138	308	369	443	25604	140
PILGRIM_-HAUPPAUG_138_871	871	138	259	319	351	25550	140
PILGRIM_-WEST BUS_138_881	881	138	439	498	565	25537	57
PLATSBRG-KNTFSRNC_115_PS1	PS1	115	125	151	180	25078	20
PLATTSBURGH PMLD #2	PS-1/A	115	157	179	197	69888	5
PLSNTVLE_345_13_BK 1	BK 1	138	59	67	67	25477	40
PLSNTVLE_345_13_BK 2	BK 2	138	59	67	67	25478	39
PLSNTVLE-DUNWODIE_345_W89	W89	345	1720	1977	2265	25182	819
PLSNTVLE-DUNWODIE_345_W90	W90	345	1720	1977	2265	25250	857
PLSNTVLY-EFISHKIL_345_F36	F36	345	1720	2215	2657	25256	273
PLSNTVLY-EFISHKIL_345_F37	F37	345	1720	2215	2657	25257	273
PLSNTVLY-WOOD_ST_345_F30	F30	345	1720	2214	2657	25237	756
PLSNTVLY-WOOD_ST_345_F31	F31	345	1720	2214	2657	25238	723
PLSTVYCH_115_69_TR 10	TR 10	115	107	120	143	25840	71
PLSTVYCH_345_115_BK S1	BK S1	345	396	450	450	25382	30
PLSTVYCH-INWOOD__115_X1	X-1	115	175	193	220	26209	18
PLSTVYCH-MANCHSTR_115_M	M	115	183	226	260	26208	46
PLSTVYCH-TODDHILL_115_C	C	115	183	248	295	325156	57
PORTER_-DERFIELD_115_8	8262523	115	116	120	127	26116	12
PORTER_-ROTTRDAM_230_30	30-PR	230	440	505	560	25173	215
PORTER_-ROTTRDAM_230_31	31-PR	230	440	505	560	25194	215
PORTER_-VALLEY__115_4	4-PV	115	116	120	145	25231	77
PORTER_-WATKINRD_115_5	5-PW	115	116	120	145	25232	87
PORTJEFF_138_69_BK 7	BK 7	138	112	138	156	25601	71
PORTJEFF_138_69_BK 8	BK 8	138	114	141	159	25600	55
PORTJEFF-HOLBROOK_138_862	862	138	255	314	346	25539	34
PORTJEFF-HOLBROOK_138_886	886	138	256	315	347	25540	34
PYRITES_-COLTON__115_7	7-PC	115	76	87	94	26086	3
QUAKERRD-MACEDON_115_930	930	115	60	75	112	25093	37
QUAKERRD-PANNELRG_115_914	914	115	207	247	264	25261	65
QUAKERRD-SLEIGHT_115_13-980	980(13)	115	150	169	188	25079	55
QUAKERRD-STA_204_115_908	908	115	227	251	285	26286	36
QUENBRDG-VERNON__138_31281	31281	138	363	455	602	25159	248
QUENBRDG-VERNON__138_31282	31282	138	363	455	602	25160	215
QUENSBRY-CEDAR__115_10	10	115	128	147	159	26140	45

EQUIPMENT NAME	LINE ID	KV	NOR	LTE	STE	PTID	MW FLOW
QUENSBRYSHERMAN_115_17	17-QS	115	116	120	145	26142	50
RAINEY_-FARRAGUT_345_61	61	345	651	811	1287	25152	154
RAINEY_-FARRAGUT_345_62	62	345	691	818	1281	25253	142
RAINEY_-FARRAGUT_345_63	63	345	651	811	1287	25254	154
RAINEY_-VERNON__138_36311	36311	138	233	280	317	25296	167
RAINEY_-VERNON__138_36312	36312	138	245	303	342	25297	125
RAMAPO__345_138_BK 1300	1300	345	451	546	619	25441	197
RAMAPO__345_138_BK 2300	2300	345	451	546	619	25442	201
RAMAPO__345_345_PAR3500	PAR3500	345	554	745	1001	25370	0
RAMAPO__345_345_PAR4500	PAR4500	345	575	803	1081	25371	380
RAMAPO__500_345_BK 1500	BK 1500	345	995	1304	1750	25656	380
RAMAPO_-BUCHAN_N_345_Y94	Y94	345	1703	1894	2404	25184	316
RAMAPO_-LADENTWN_345_W72	W72	345	1722	1894	2404	25233	127
RAMAPO_-SUGARLOF_345_76	76	345	1872	2037	2145	326219	463
RAMAPOOR-STRLFRST_138_26	26	138	264	300	316	326302	13
RAMAPOOR-TALLMAN__138_60	60	138	425	451	475	25880	243
RANGEHL_-CASTLEGD_115_937	937	115	149	149	149	325225	15
REYNOLDS_345_115_BK 2	BK 2	345	459	562	755	25403	244
REYNOLDS-ALPS___345_1	1	345	1670	1912	1912	25587	254
REYNOLDS-GERENSLR_115_31	31	115	217	250	280	326247	76
REYNOLDS-GREENBSH_115_9	9-RG	115	329	398	398	26129	176
REYNOLDS-RVSD_TAP_115_4	4	115	220	239	239	325648	27
RICHFELD-ESPRGFLD_115_7-942	942	115	102	113	120	26176	27
RIDGE_RD-HILLSIDE_115_963	963	115	108	128	145	26190	3
RIDGE_RD-HILLSIDE_115_978	978-1	115	108	128	145	26191	0
RIVERSDE-RVSD_TAP_115_4	4	115	220	239	239	26144	27
RIVERSDE-TRINITY__115_18	18	115	147	178	243	26491	82
RIVERSDE-TRINITY__115_19	19	115	198	242	278	26492	95
RIVRHEAD_138_69_BK 7	BK 7	138	114	141	156	26622	60
RIVRHEAD_138_69_BK 8	BK 8	138	112	138	156	26623	51
ROBNSNRD-STOLLERD_230_65	65	230	550	637	717	25065	242
ROCHESTR_345_115_BK 1	BK 1	345	494	603	630	25412	160
ROCHESTR_345_115_BK 2	BK 2	345	327	415	478	25432	190
ROCHESTR_345_115_BK 3	BK 3	345	494	603	630	25446	156
ROCHESTR_345_115_BK 5	BK 5	345	462	567	630	325381	313
ROCHESTR-PANNELL_345_RP1	RP1	345	1301	1501	1685	25192	187
ROCHESTR-PANNELL_345_RP2	RP2	345	1301	1501	1685	25172	188
ROCK_CUT-TILDEN__115_18	18	115	187	208	236	326281	0
ROCKHILL-MNTNDALE_115_957	957	115	153	163	173	325615	31
ROCKTVRN_345_115_BK TR1	BK TR1	345	396	445	445	25406	72
ROCKTVRN_345_115_BK TR3	BK TR3	345	396	459	519	26168	72
ROCKTVRN-RAMAPO__345_77	77	345	1872	2037	2145	25183	562
ROCKTVRN-SUGARLOF_345_76	76	345	1872	2037	2145	326218	628
ROCKTVRN-SUGRLOAF_115_SL	SL	115	177	204	218	25420	0

EQUIPMENT NAME	LINE ID	KV	NOR	LTE	STE	PTID	MW FLOW
ROME__-ONEIDA__115_1	1-RO	115	129	157	192	26112	43
RONKOKMA-HOLBROOK_138_875	875	138	429	488	553	25541	133
ROSA_RD_-GE_R_D__115_14	14	115	200	217	260	26145	50
ROSETON_-EFISHKIL_345_RFK305	RFK305	345	1936	2666	3133	25108	1395
ROSETON_-ROCKTVRN_345_311	311	345	1396	1623	1870	25069	253
ROTTRDAM_230_115_BK 6	BK 6	230	344	375	523	25407	116
ROTTRDAM_230_115_BK 7	BK 7	230	300	355	402	25392	112
ROTTRDAM_230_115_BK 8	BK 8	230	326	369	423	25413	90
ROTTRDAM-BURDECK__115_17	17-RB	115	116	120	145	25129	52
ROTTRDAM-BURDECK__115_19	19-RB	115	105	114	134	26146	76
ROTTRDAM-CURRY_RD_115_11	11	115	116	120	145	25869	30
ROTTRDAM-EASTOVER_230_38	38	230	443	512	574	326094	97
ROTTRDAM-FRONT_ST_115_16	16	115	220	252	280	26147	119
ROTTRDAM-SWAGRTWN_115_1	1	115	418	478	478	26429	91
ROTTRDAM-SWAGRTWN_115_2	2	115	232	241	291	26430	104
ROTTRDAM-WOODLAWN_115_35	35	115	116	120	145	25865	15
RULAND_-HOLBROOK_138_882	882	138	446	506	574	25538	22
RULAND_-PILGRIM__138_661	661	138	520	552	552	25310	97
RULAND_-PILGRIM__138_662	662	138	489	536	551	25311	97
RYAN__-PLATSBRG_230_RYP-2	RYP-2	230	249	277	318	25273	17
RYNDS_HL-HIGHLAND_115_HR	HR	115	183	230	260	325825	11
RYNDS_HL-INWOOD__115_IR	IR	115	175	193	220	26248	2
S.MAHWAH-RAMAPOOR_138_51	51	138	236	270	285	25888	95
S.OSWEGO-CURTIS__115_10	10	115	175	175	175	25511	80
S.OSWEGO-HAMRHILL_115_6	6-IH	115	114	120	142	25513	44
S.OSWEGO-NINEMILE_115_1	1-SN	115	116	120	145	25501	25
S.OWEGO_-GOUDEY__115_961	961	115	112	131	143	25725	41
S.OWEGO_-NWAVERLY_115_962	962-2	115	111	131	143	25727	13
S.PERRY_-MEYER__115_934	934	115	82	96	104	26194	54
S.RIPLEY-DUNKIRK__230_68	68	230	475	475	475	25045	0
S124__115A_115B_PS1	PS1	115	163	234	354	325930	145
S124__115A_115B_PS2	PS2	115	163	234	354	325931	145
S42__-S124__115_932	932	115	163	234	358	325827	144
S42__-S124__115_938	938	115	185	207	215	325972	144
SABICO_-LONGLANE_115_7	7	115	199	199	199	26501	6
SALAMANC_HOMER_HL_115_153	153	115	128	147	159	325763	28
SALAMANC_HOMER_HL_115_154	154	115	128	147	159	325764	32
SANBORN_-LOCKPORT_115_101	101	115	233	253	318	25267	78
SANBORN_-SHAWNERD_115_102	102	115	275	303	354	326179	78
SAND_BAR-PLATSBRG_115_PV20	PV20	115	210	245	258	25027	106
SANDDOCK-NCHELSEA_115_SC	KC	115	183	248	279	26249	67
SANDY PD-TEWKSBRY_345_337	337	345	1802	1908	2045	26366	576
SANDY PD-WACHUSST_345_314	314	345	1731	2108	2400	26352	401
SANDY PD-WACHUSST_345_343	343	345	1435	1609	1741	25716	415

EQUIPMENT NAME	LINE ID	KV	NOR	LTE	STE	PTID	MW FLOW
SAWYER__230_23_TB1	TB1	230	104	128	128	325047	53
SAWYER__230_23_TB2	TB2	230	104	128	128	325048	54
SAWYER__230_23_TB3	TB3	230	104	128	128	325049	50
SAWYER_-HUNTLEY_230_77	77	230	566	654	755	325043	310
SAWYER_-HUNTLEY_230_78	78	230	566	654	755	325044	309
SAWYER_-SUNY_BUF_230_79	79	230	566	654	710	325045	263
SAWYER_-SUNY_BUF_230_80	80	230	566	654	755	325046	263
SCHODACK-GREENBSH_115_13	13	115	186	199	199	325804	95
SCHUYLER-PORTER__115_13	13	115	129	182	191	326142	41
SCOBIE_-EAGLE__345_380	380	345	1431	1431	1431	25708	405
SCOBIE_-SEABROOK_345_363	363	345	1494	1494	1494	26378	321
SCOTAFIT-MASONCR_115_909	909	115	155	179	193	325702	7
SCRIBA_-FITZPTRK_345_FS-10	FS-10	345	1434	1434	1912	25076	165
SCRIBA_-VOLNEY__345_20	20	345	1200	1396	1686	25204	557
SCRIBA_-VOLNEY__345_21	21-SV	345	1670	1912	1912	25314	729
SENECA_-GARDNVLB_230_71	71	230	306	354	370	25856	29
SENECA_-GARDNVLB_230_72	72	230	306	354	370	25857	29
SHALETON-CLVRBANK_115_141	141	115	88	101	108	325875	31
SHALETON-LAKEVIEU_115_141	141	115	88	101	108	325874	29
SHAWNERD-LOCKPORT_115_102	102	115	233	253	318	26052	70
SHAWNERD-LOCKPORT_115_103	103	115	174	181	199	26051	54
SHENDOAH-EFISHKIL_115_EF	EF	115	198	230	260	26251	27
SHERMAN_-SPIERFLS_115_17	17-SS	115	116	120	145	26148	38
SHERMCRK-ACADEMY_138_331	331	138	313	406	524	325755	154
SHERMCRK-ACADEMY_138_332	332	138	313	406	524	325754	154
SHERMCRK-E179THST_138_15031	15031	138	162	220	360	25156	125
SHERMCRK-E179THST_138_15032	15032	138	162	220	360	25157	124
SHOEMAKR_138_69_BK 711	BK 711	138	212	281	319	26694	79
SHOEMAKR_138_69_BK 811	BK 811	138	193	225	253	326024	91
SHOR_NPX-SHOREHAM_138_CSC	CSC	138	353	353	353	325153	330
SHORE_RD_345_138_BK 1	BK 1	345	428	534	641	25439	293
SHORE_RD_345_138_BK 2	BK 2	345	428	534	641	25440	292
SHORE_RD-GLENWOOD_138_365	365	138	258	317	350	25205	100
SHORE_RD-GLENWOOD_138_366	366	138	272	349	409	25154	50
SHORE_RD-LAKSUCSS_138_367	367	138	237	411	543	25145	215
SHORE_RD-LAKSUCSS_138_368	368	138	238	412	545	25150	215
SHOREHAM-MILLERPL_138_879	879	138	393	479	565	25117	26
SHOREHAM-WILDWOOD_138_863	863	138	388	472	558	25115	146
SHOREHAM-WILDWOOD_138_867	867	138	395	480	567	25114	143
SIDNEYRR-DELHI__115_949	949	115	80	110	120	326184	47
SLEIGHT_115_34_BK 1	BK 1	115	35	43	67	70523	24
SLEIGHT_115_34_BK 2	BK 2	115	35	43	67	70524	27
SLEIGHT_-CLYDE__115_3-971	971(3)	115	145	151	179	26686	4
SMAHWAH_345_138_BK 258	258	345	441	516	559	25393	162

EQUIPMENT NAME	LINE ID	KV	NOR	LTE	STE	PTID	MW FLOW
SMAHWAH_-RAMAPO__345_69	69	345	1226	1737	2268	25021	305
SMAHWAH_-RAMAPO__345_70	70	345	1720	1890	2398	25259	255
SMITHBRD-WEIBELAV_115_2	2	115	220	253	280	325903	16
SMITHBRD-WEIBELAV_115_302	302	115	220	253	280	325904	20
SOUTHADOW-CARRSCRN_115_153	153	115	128	147	159	326162	22
SOUTHADOW-CARRSCRN_115_154	154	115	128	147	159	326164	13
SPENCPRT-STA_113_115_947	947	115	113	123	135	326080	62
SPIERFLS-BUTLER__115_4	4-SFB	115	105	114	134	26136	32
SPIERFLS-CURTPALM_115_9	9	115	105	114	134	326145	47
SPIERFLS-MOHICAN__115_7	7	115	116	120	145	26435	26
SPIERFLS-QUENSBRY_115_5	5-SFQ	115	116	120	145	26141	50
SPIERFLS-TAPBROOK_115_2	2	115	232	241	291	25874	24
SPIERFLS-TAPBROOK_115_302	302	115	182	197	248	25873	47
SPRAINBROOK - SPRNBR49	R49REAC	345	693	936	1392	26725	634
SPRINGVL-ARCADE__115_151	151	115	129	148	160	326167	18
SPRINGVL-MACHIAS_115_152	152	115	129	148	160	326171	11
SPRNBRK_345_138_BK N7	BK N7	345	284	397	417	25628	229
SPRNBRK_345_138_BK S6	BK S6	345	284	397	417	25625	232
SPRNBRK_-ACADEMY_345_M29	M29	345	474	719	1351	325756	311
SPRNBRK_-DUNWODIE_138_99941	99941	138	294	416	464	25245	232
SPRNBRK_-DUNWODIE_138_99942	99942	138	330	402	464	25246	228
SPRNBRK_-DUNWODIE_345_W75	W75	345	2331	2658	3202	25071	593
SPRNBRK_-EGRDNCTR_345_Y49	Y49	345	637	900	1329	25105	634
SPRNBRK_-TREMONT_345_X28	X28	345	465	675	1182	25175	401
SPRNBRK_-W49TH_ST_345_M51	M51	345	760	927	1527	25053	559
SPRNBRK_-W49TH_ST_345_M52	M52	345	760	927	1527	25223	559
ST_60_36-LOCKPORT_115_36	36-2	115	145	151	178	26049	66
ST_60_37-LOCKPORT_115_37	37-2	115	145	151	171	26048	68
STA_128_-STA_82__115_906	906	115	129	147	159	26303	23
STA_133_-STA_1185_115_933	933	115	117	129	149	326161	57
STA_135_-STA_230_115_929	929	115	226	249	269	325839	46
STA_158_-STA_128_115_924	924	115	129	147	159	26654	20
STA_162_-S.PERRY_115_906- 7X	906-7X	115	111	131	143	25062	35
STA_162_-STA_158_115_924	924	115	129	147	159	26653	5
STA_204_115_34_BK 1	BK 1	115	56	67	112	70539	32
STA_204_115_34_BK 2	BK 2	115	56	67	112	70540	40
STA_204_-S124__115_911	911	115	218	228	261	26307	143
STA_23_-STA_33__115_901	901	115	79	94	133	70028	53
STA_230_-QUAKERRD_115_929	929	115	226	249	269	325840	33
STA_251_-MORTIMER_115_901	901	115	183	197	241	25097	112
STA_251_-STA_33__115_942	942	115	193	213	241	326100	43
STA_33__115_34_BK10	BK 1_2	115	75	90	132	70541	66
STA_37__115_34_BK 8	BK 8	115	50	59	100	70542	42
STA_37_-STA_48__115_926	926	115	275	305	355	26314	91

EQUIPMENT NAME	LINE ID	KV	NOR	LTE	STE	PTID	MW FLOW
STA_37_-STA_67__115_926	926	115	250	280	300	26313	133
STA_418_-STA_113__115_917	917_910	115	129	147	159	326069	73
STA_48__115_34__BK 6	BK 6	115	57	66	69	70544	32
STA_48__115_34__BK 9	BK 9	115	59	66	112	70543	31
STA_56__115_34__BK 1	BK 1	115	119	139	159	70473	47
STA_56__115_34__BK 2	BK 2	115	55	56	56	70545	40
STA_56_-QUAKERRD_115_23	23	115	145	151	153	26288	71
STA_56_-STA_82__115_23	23	115	145	151	185	26287	31
STA_67_-ROCHESRG_115_922	922	115	311	364	376	26321	190
STA_67_-STA_418__115_910	910	115	175	211	239	326048	120
STA_67_-STA_82__115_903	903	115	311	364	384	26322	120
STA_69_-STA_71__115_945	945	115	103	121	141	326238	18
STA_69_-STA_93__115_917	917	115	125	143	155	326237	26
STA_7_-STA_48__115_919	919	115	226	249	269	26302	65
STA_7_-STA_48__115_927	927	115	253	292	309	326039	70
STA_7_-STA_93__115_917	917	115	117	127	147	26301	33
STA_70_-SPENCPR115_947	947	115	113	123	135	326343	52
STA_71_-STA_70__115_946	946	115	113	123	135	326342	17
STA_82_-MORTIMER_115_7X8272	7X8272	115	258	358	410	25098	179
STA_82_-ROCHESRG_115_904	904	115	506	584	618	25081	297
STA_82_-ROCHESRG_115_905	905	115	506	584	618	26305	269
STA_82_-STA_251__115_902	902	115	175	211	239	70058	43
STA_82_-STA_48__115_916	916	115	301	332	373	326055	120
STATE_ST-WRGHTAVE_115_976	976	115	185	221	239	26200	112
STERLING_138_69__BK 3	BK 3	138	219	283	320	26524	141
STERLING-RULAND__138_663	663	138	219	283	320	26498	141
STJHNVLE-MARSHVLE_115_11	11	115	159	159	159	26127	31
STLAWRNC_230A_230C_PS 33	PS 33	230	240	259	334	25118	0
STLAWRNC_230B_230D_PS 34	PS 34	230	300	336	466	25119	0
STLAWRNC-MOSES__230_L33P	L33P	240	299	411	446	25026	0
STLAWRNC-MOSES__230_L34P	L34P	240	317	411	446	25037	0
STOLLERD_345_115__BK 3	BK 3	345	288	333	420	25461	19
STOLLERD_345_115__BK 4	BK 4	345	296	390	420	25462	19
STOLLERD-HISHELDN_230_67	67	230	417	479	533	25064	79
STONCREK-WETHSRFD_230_83	83	230	417	479	533	325973	91
STONER_-ROTRDAM_115_12	12-SR	115	84	84	84	25680	1
STONYRDG_230_115__BK1	BK1	230	247	336	336	325811	79
STONYRDG-HILLSIDE_230_72	72	230	498	574	653	325810	2
STURGNPL_115_69__BK8	TR 8	115	86	116	135	326293	8
STURGNPL-OHIOVLE_115_OR	OR	115	182	193	193	326294	43
SUGARISL-COLTON__115_4	4	115	181	197	248	26084	15
SUGRLOAF_138_69__BK 6108	BK 6108	115	189	222	250	26333	69
SUGRLOAF_345_138__BK1112	BK1112	345	456	542	775	326220	162
SUGRLOAF_69_138__BK 7108	BK 7108	138	192	226	253	25891	60

EQUIPMENT NAME	LINE ID	KV	NOR	LTE	STE	PTID	MW FLOW
SUGRLOAF-STRLFRST_138_261	26	138	264	300	316	25326	70
SULLVNP-K-STONYRDG_115_712	712	115	235	272	313	325809	78
SUMMIT97-WALCK_RD_115_129	129	115	239	298	298	326289	90
SUNY_BUF-GARDNVLB_230_79	79-1	230	566	654	699	25165	253
SUNY_BUF-GARDNVLB_230_80	80-1	230	566	654	722	25196	248
SWAGRTWN-TAPBLSTN_115_1	1	115	271	314	359	325895	88
SWAGRTWN-TAPBROOK_115_2	2	115	232	241	291	325894	90
SWANROAD-LOCKPORT_115_104	104	115	168	181	199	26050	0
SWANROAD-SHAWNERD_115_103	103	115	168	181	206	326181	63
SWEDEN_-MORTIMER_115_111	111	115	129	149	153	25347	13
SWEDEN_-MORTIMER_115_113	113	115	129	149	153	25348	21
SWEDEN_-SHELBY76_115_113	113	115	143	165	180	326131	19
SYLVANLK-PAWLING_115_990	990	115	203	227	239	26156	106
SYOSSET_138_69_BK 5	BK 5	138	227	263	302	26565	111
SYOSSET_-LOCUSTGR_138_559	559	138	388	472	557	25904	173
TALLMAN_-MONSEY__138_602	602	138	425	451	475	325609	187
TAPBLSTN-TAPBROOK_115_302	302	115	220	252	280	325898	4
TAYLORVL-BULYMO__115_6	6	115	105	114	124	26070	56
TAYLORVL-LOWVILLE_115_5	5-TL	115	102	114	134	26107	61
TEALLAVE-ASH____115_7-TA	7-TA	115	120	148	148	26063	45
TEALLAVE-ASH____115_8-AT	8-AT	115	120	148	148	26117	45
TEALLAVE-BM_CC_GM_115_6	6	115	187	213	236	26154	48
TEALLAVE-CURTIS__115_13	13	115	182	182	182	326066	11
TEALLAVE-ONEIDA__115_2	2-OT	115	116	120	145	25895	30
TEALLAVE-PETERBOR_115_5	5	115	116	120	145	325164	41
TELGRAPH_115_34_114_ BK 2	BK 2	115	52	63	63	26509	19
TELGRAPH-N.AKRON_115_107	107	115	179	179	179	26508	29
TELGRAPH-SHELBY76_115_114	114	115	129	149	153	25349	13
TEMPLE_-PEAT ST_115_10	10-TP	115	119	152	179	26715	49
TERMINAL-PORTER__115_6	6	115	200	208	265	326140	49
TERMINAL-SCHUYLER_115_7	7	115	116	120	145	326141	13
TICONDRG-REPUBLIC_115_914(2)	914(2)	115	64	64	64	26470	6
TILDEN_-DEWITT__115_19	19-TD	115	182	197	236	26092	66
TODDHILL-FISHKPLN_115_A	A	115	232	253	304	325157	33
TREMONT_138A_138B_BK 11	BK 11	138	243	279	312	25649	200
TREMONT_138C_138D_BK 12	BK 12	138	243	279	312	25650	200
TREMONT_345_138_BK 11	BK 11	345	245	299	339	25473	200
TREMONT_345_138_BK 12	BK 12	138	246	299	339	25474	200
TREMONT_-PARKCHTR_138_38X01	38X01	138	180	320	526	25120	100
TREMONT_-PARKCHTR_138_38X02	38X02	138	180	320	526	25121	100
TREMONT_-PARKCHTR_138_38X03	38X03	138	190	318	526	25122	100
TREMONT_-PARKCHTR_138_38X04	38X04	138	190	318	526	25123	100
TULLERHL-CLRKSCRN_115_1-716	1-716	115	128	147	159	26192	0
URBAN154-DALEROAD_115_39	39	115	174	181	226	326152	50

EQUIPMENT NAME	LINE ID	KV	NOR	LTE	STE	PTID	MW FLOW
URBAN154-NEWWALDN_115_38	38	115	174	181	226	326151	53
VALKIN_-FT_ORAN_115_15	15	115	186	214	237	325685	104
VALLEY_-FAIRFIEL_115_12	12	115	116	120	145	325743	53
VALLYSTR_138A_138B_PAR	B_PAR	138	307	368	441	25607	123
VALLYSTR-BARRETT_138_291	291	138	184	271	393	25312	131
VALLYSTR-BARRETT_138_292	292	138	181	271	330	25313	148
VALLYSTR-EGRDNCTY_138_262	262	138	206	286	344	25244	148
VERNON_-GREENWD_138_31231	31231	138	174	226	247	25337	90
VERNON_-KENTAVE_138_31232	31232-1	138	174	226	247	26123	49
VINGR_TP-VINEGAR_115_917 TAP	917 TAP	115	125	152	193	26455	3
VOLNEY_-CLAY___345_6	6	345	1109	1344	1686	25198	859
VOLNEY_-MARCY___345_19	19	345	1434	1650	1971	25345	634
VRNON VT-FITZWILL_345_379	379	345	896	896	896	26388	13
VT YANK_-VRNON VT_345_3340	3340	345	1224	1230	1434	25717	31
W.NYACK_138_69_BK 221	BK 221	138	212	281	319	26334	88
W.NYACK_-SNKEHLRD_138_562	563	138	317	363	383	325906	88
W_ERIAVE-HICKLING_115_935	935	115	120	120	120	325568	7
W_ERIAVE-SULLVNPK_115_711	711	115	245	272	313	325808	58
W49TH_ST-E13THSTA_345_M54	M54	345	753	986	1566	25228	114
W49TH_ST-E13THSTA_345_M55	M55	345	753	986	1566	25222	50
WADNGRIV-NSHORBCH_138_878	878	138	442	489	597	325642	15
WADNGRIV-SHOREHAM_138_891	891	138	391	476	562	25342	15
WALCK_RD-BUFALO78_115_133	133	115	239	298	298	26153	149
WALDEN_-WALDN_A2_115_BK 1	BK 1	115	38	39	42	25429	15
WALDENNG-GARDNVLB_115_182	182	115	129	182	236	26015	58
WALDENNG-INGCALTN_115_54-921	54-921	115	187	215	236	26024	20
WALDWICK_345_230_BK1	BK1	345	549	713	806	25479	134
WALDWICK_345_230_BK2	BK2	345	557	716	794	25480	134
WALDWICK_345_230_BK3	BK3	345	609	794	901	25481	130
WALDWICK-SMAHWAH_345_J3410	J3410	345	672	1043	1920	25032	143
WALDWICK-SMAHWAH_345_K3411	K3411	345	675	1041	1920	25039	255
WALESVIL-CAVANARD_115_7	7	115	116	120	145	325213	51
WARNSBRG-SCOFDRD_115_10	10	115	105	114	119	326148	42
WARREN_-FALCONER_115_171	171	115	116	120	140	25015	26
WATKINRD-INGHAM_C_115_2	2-WI	115	116	120	145	25805	62
WATRCURE_345_230_BK 1	BK 1	345	426	520	600	25402	203
WATRCURE-OAKDALE_230_71	71	230	275	400	440	25179	15
WATRCURE-OAKDALE_345_31	31	345	963	1074	1076	25178	172
WBALMVLE-MARLBORO_115_MW	MW	115	198	230	260	326090	37
WEST BUS-SILLSRD_138_873	873	138	493	540	618	325618	8
WETHSRFD-MEYER___230_85/87	85	230	417	479	533	325623	103
WETZEL_-CLAY___115_7	7-CL	115	220	252	280	326207	7
WHAVSTOR-LOVETT___138_53	53	138	236	270	285	25884	8
WHAVSTOR-STONYPNT_138_542	542	138	236	270	285	326049	19

EQUIPMENT NAME	LINE ID	KV	NOR	LTE	STE	PTID	MW FLOW
WHAVSTRW_345_138_BK 194	BK 194	345	451	546	619	25447	238
WHITEHAL-COMSTKNM_115_13	13	115	116	120	145	25903	15
WHITEHAL-TICONDRG_115_3	3	115	116	120	145	26471	40
WICCOPEE-SHENDOAH_115_FS	FS	115	194	214	240	325773	46
WILDWOOD_138_69_BK 4	BK 4	138	227	263	302	26550	77
WILDWOOD-RIVRHEAD_138_890	890	138	295	325	377	25905	146
WILLET_-ENORWICH_115_945	945-1	115	108	128	145	25732	44
WILLIS__230_115_BK 1	BK 1	230	150	184	216	25388	26
WILLIS__230_115_BK 2	BK 2	230	150	184	216	25390	26
WILLIS_-CHAT_TAP_115_1(911)	911	115	135	159	175	26204	0
WILLIS_-PATNODE__230_WPN-1	WPN-1	230	434	500	532	325565	40
WILLIS_-RYAN___230_WRY-2	WRY-2	230	396	459	524	325566	46
WILLWBRK-FRESHKLS_138_29211	29211-2	138	182	262	439	25319	162
WILLWBRK-FRESHKLS_138_29212	29212-2	138	182	262	439	25320	176
WOLF_RD_-MENANDS_115_10	10	115	116	117	117	26255	85
WOOD_ST_345_115_BK 1	BK 1	345	302	354	420	25437	116
WOOD_ST_345_115_BK 2	BK 2	345	311	368	420	25438	99
WOOD_ST_-MILLWOOD_345_W80	W80	345	1720	2215	2657	25148	653
WOOD_ST_-MILLWOOD_345_W81	W81	345	1720	2215	2657	25525	727
WOOD_ST_-PLSNTVLE_345_Y87	Y87	345	1775	1977	2265	25132	860
WOODARD_-ELBRIDGE_115_4	4	115	156	179	195	325316	64
WOODLAWN-STATE_CA_115_12	12	115	116	120	145	26490	27
WOODSTNY-AMAWALK_115_996	996	115	215	247	275	25574	99
WRGHTAVE-MILLIKEN_115_973	973	115	185	221	249	26195	68
WTRVLARS-GERENSLR_115_31	31	115	128	147	159	26423	74
WWDBURNY_115_69_BK 1	BK 1	115	48	50	50	25404	16
WYNTKLNLM-REYNOLDS_115_13-988	13-WR	115	186	214	237	26143	93
YAHNUNDA-PORTER__115_3	3	115	116	120	145	26515	72
YAWGERRD-RIDGE_RD_115_963	963	115	217	227	262	326312	36
YOUNG214-HUNTLEY__115_133	133	115	168	181	206	26042	115

Appendix E – INTERFACE DEFINITIONS

NYISO OPERATING INTERFACES & OASIS TRANSMISSION PATHS

DYSINGER EAST		
West (Zone A) – Genesee (Zone B)		
Name	Line ID	Voltage (kV)
*Somerset-Rochester (Station 80)	SR1-39	345
Niagara-Rochester*	NR2	345
*Lockport-N. Akron	108	115
*Lockport-Oakfield	112	115
*Lockport-Sweden 1	111	115
*Lockport-Shelby	113	115
*Lockport-Telegraph	107	115
*Lockport-Telegraph	114	115
West (Zone A) – Central (Zone C)		
*Stolle Road-High Sheldon	67	230
*Andover-Palmiter	157-932	115

SPRAIN BROOK-DUNWOODIE SOUTH		
Dunwoodie (Zone I) – NYC (Zone J)		
Name	Line ID	Voltage (kV)
*Dunwoodie-Mott Haven	71	345
*Dunwoodie-Mott Haven	72	345
Sprain Brook-Tremont*	X28	345
*Sprain Brook-West 49 th Street	M51	345
*Sprain Brook-West 49 th Street	M52	345
*Sprain Brook-Academy	M29	345
*Dunwoodie-Sherman Creek	99031	138
*Dunwoodie-Sherman Creek	99032	138
*Dunwoodie-East 179 th Street	99153	138
Long Island (Zone K) – NYC (Zone J)		
*Lake Success-Jamaica	903	138
*Valley Stream-Jamaica	901L_M	138

* indicates the metered end of the circuit

MOSES SOUTH		
North (Zone D) – Mohawk Valley (Zone E)		
Name	Line ID	Voltage (kV)
*Massena-Marcy	MSU1	765
*Moses-Adirondack	MA1	230
*Moses-Adirondack	MA2	230
*Dennison-Norfolk	4	115
*Dennison-Sandstone	5	115
*Alcoa-N. Ogdensburg	13	115
Parishville-Colton*	3	115

UPNY-CONED		
Hudson Valley (Zone G) – Millwood (Zone H)		
Name	Line ID	Voltage (kV)
*Ladentown-Buchanan South	Y88	345
*Pleasant Valley-Wood St.	F30	345
*Pleasant Valley-Wood St.	F31	345
*Pleasant Valley-East Fishkill	F36	345
*Pleasant Valley-East Fishkill	F37	345
*Ramapo-Buchanan North	Y94	345
Roseton-East Fishkill*	RFK305	345
*Fishkill Plains–Sylvan Lake	FP/990	115
East Fishkill 115/345*	BK1	115/345
East Fishkill 115/345*	BK2	115/345

CENTRAL EAST		
Mohawk Valley (Zone E) – Capital (Zone F)		
Name	Line ID	Voltage (kV)
Edic-New Scotland*	14	345
Marcy-New Scotland*	18	345
Porter-Rotterdam*	30	230
Porter-Rotterdam*	31	230
East Springfield-Inghams*	7-942	115
Inghams PAR	PAR	115
Inghams Bus Tie	R81	115
North (Zone D) – ISONE (Zone N)		
*Plattsburgh-Sand Bar	PV20	115

* indicates the metered end of the circuit

TOTAL EAST		
Mohawk Valley (Zone E) – Capital (Zone F)		
Name	Line ID	Voltage (kV)
Edic-New Scotland*	14	345
Marcy-New Scotland*	18	345
*Fraser-Gilboa	GF5-35	345
Porter-Rotterdam*	30	230
Porter-Rotterdam*	31	230
East Springfield-Inghams*	7-942	115
Inghams PAR	PAR	115
Inghams Bus Tie	R81	115
Mohawk Valley (Zone E) – Hudson Valley (Zone G)		
Middletown-Rock Tavern*	CCCRT34	345
Coopers Corners-Dolson Ave.*	CCDA42	345
Middletown 345*/138	BK114	345/138
West Woodbourne 115/69*	BK1	115/69
North (Zone D) – ISONE (Zone N)		
*Plattsburgh-Sand Bar	PV20	115
PJM East (Zone P) – Hudson Valley (Zone G)		
Hopatcong-Ramapo*	5018	500
*Waldwick-S. Mahwah	J3410	345
*Waldwick-S. Mahwah	K3411	345
PJM East (Zone P) – NYC (Zone J)		
Marion-Farragut*	C3403	345
Hudson-Farragut*	B3402	345
Linden-Goethals*	A2253	230
PJM (Rockland Electric) – Hudson Valley (Zone G)		
*Cresskill-Sparkill	751	69
*Harings Corners-W. Nyack	701	69
*Harings Corners-Corporate Drive	703	138
*Montvale-Bluehill	44	69
*Montvale-Bluehill	43	69
*Montvale-Pearl River	491	69
*Harings Corners-Pearl River	45	34
*S. Mahwah-Ramapo	51	138
*S. Mahwah-Hilburn	65	69
S. Mahwah 138*/345	BK258	138/345

* indicates the metered end of the circuit

CONED - LIPA		
Dunwoodie (Zone I) - Long Island (Zone K)		
Name	Line ID	Voltage (kV)
*Dunwoodie-Shore Road	Y50	345
*Sprain Brook-East Garden City	Y49	345
NYC (Zone J) - Long Island (Zone K)		
Jamaica-Valley Stream*	901L_M	138
Jamaica-Lake Success*	903	138

NYISO-ISONNE		
North (Zone D) - ISONNE (Zone N)		
Name	Line ID	Voltage (kV)
*Plattsburgh-Sand Bar	PV20	115
Capital (Zone F) - ISONNE (Zone N)		
*Alps-Berkshire	393	345
Eastover-Bear Swamp*	E205W	230
*Hoosick -Bennington	K6	115
*Whitehall-Blissville	K7	115
Hudson Valley (Zone G) - ISONNE (Zone N)		
Name	Line ID	Voltage (kV)
*Pleasant Valley-Long Mountain	398	345
Smithfield-Salisbury*	690/FV	69

IESO (Ontario)-NYISO		
Ontario East (Zone O) - North (Zone D)		
Name	Line ID	Voltage (kV)
St. Lawrence-Moses*	L33P	230
St. Lawrence-Moses*	L34P	230
Ontario South (Zone O) - West (Zone A)		
Beck-Niagara*	PA301	345
Beck-Niagara*	PA302	345
Beck-Niagara*	PA27	230
*Beck-Packard	BP76	230

* indicates the metered end of the circuit

PJM-NYISO		
PJM East (Zone P) – NYC (Zone J)		
Name	Line ID	Voltage (kV)
Marion-Farragut*	C3403	345
Hudson-Farragut*	B3402	345
Linden-Goethals*	A2253	230
PJM West – Central (Zone C)		
*Mainesburg-Watercure	30	345
*Mainesburg-Mainesburg NY	47	345
*Homer City-Homer City NY	47	345
E. Towanda-Hillside*	70	230
Laurel Lake-Goudey*	952	115
*E. Sayre-N. Waverly	956	115
PJM West – West (Zone A)		
*Pierce Brook-Five Mile Road	37	345
*Pierce Brook-Pierce Brook NY	48	345
*Homer City-Homer City NY	48	345
Erie East-South Ripley*	69	230
*Warren-Falconer	171	115
PJM East (Zone P) – Hudson Valley (Zone G)		
Hopatcong-Ramapo*	5018	500
*Waldwick-S. Mahwah	J3410	345
*Waldwick-S. Mahwah	K3411	345
PJM (Rockland Electric) – Hudson Valley (Zone G)		
*Cresskill-Sparkill	751	69
*Harings Corners- W. Nyack	701	69
*Harings Corners-Corporate Drive	703	138
*Montvale-Bluehill	44	69
*Montvale-Bluehill	43	69
*Montvale-Pearl River	491	69
*Harings Corners- Pearl River	45	34
*S. Mahwah-Ramapo	51	138
*S. Mahwah-Hilburn	65	69
S. Mahwah 138*/345	BK258	138/345

* indicates the metered end of the circuit

Appendix F – ANNOTATED MUST OUTPUT

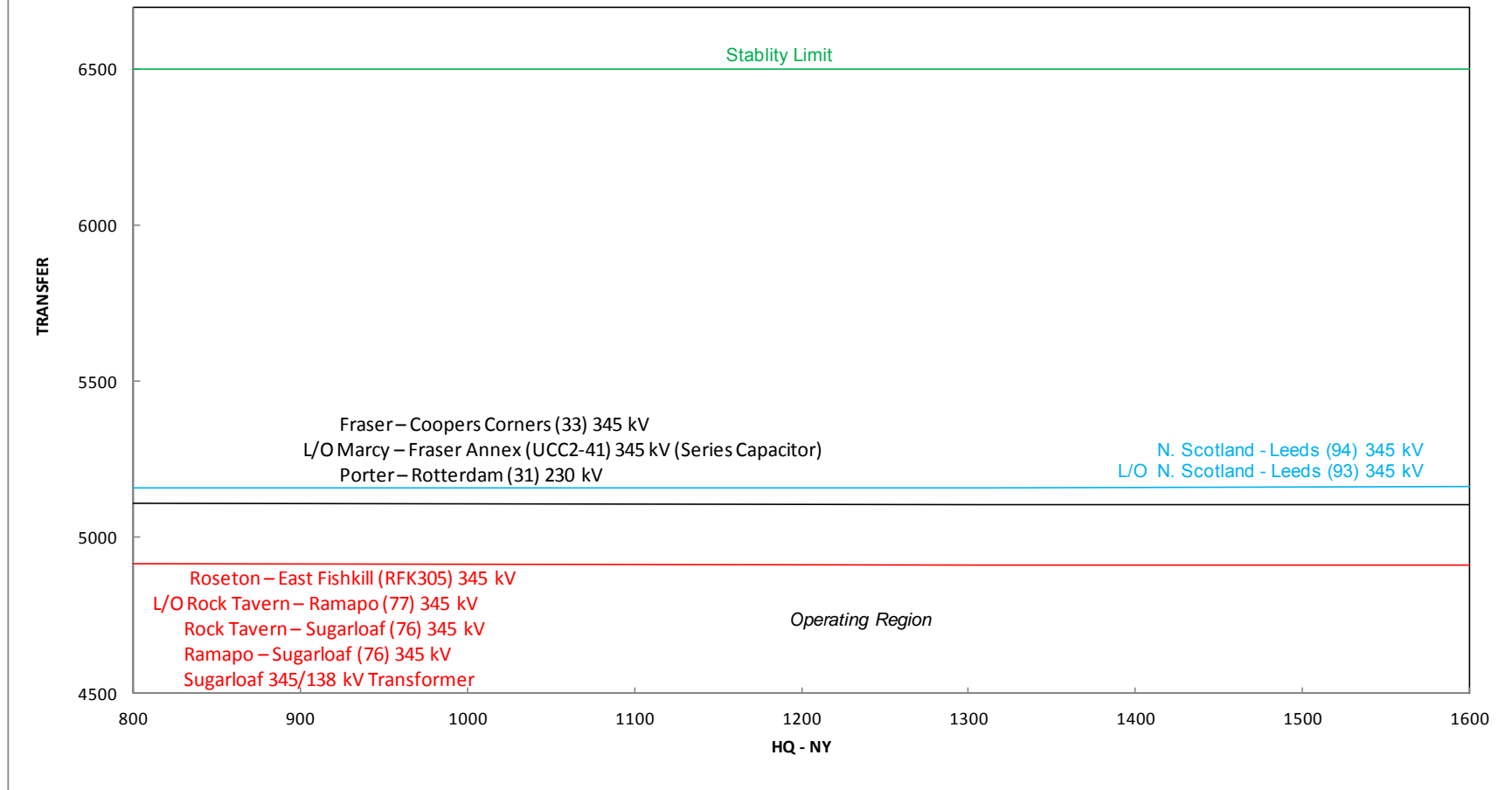
This Section Is Available Electronically If Requested

Appendix G – TRANSFER LIMIT SENSITIVITY GRAPHS

INDEX

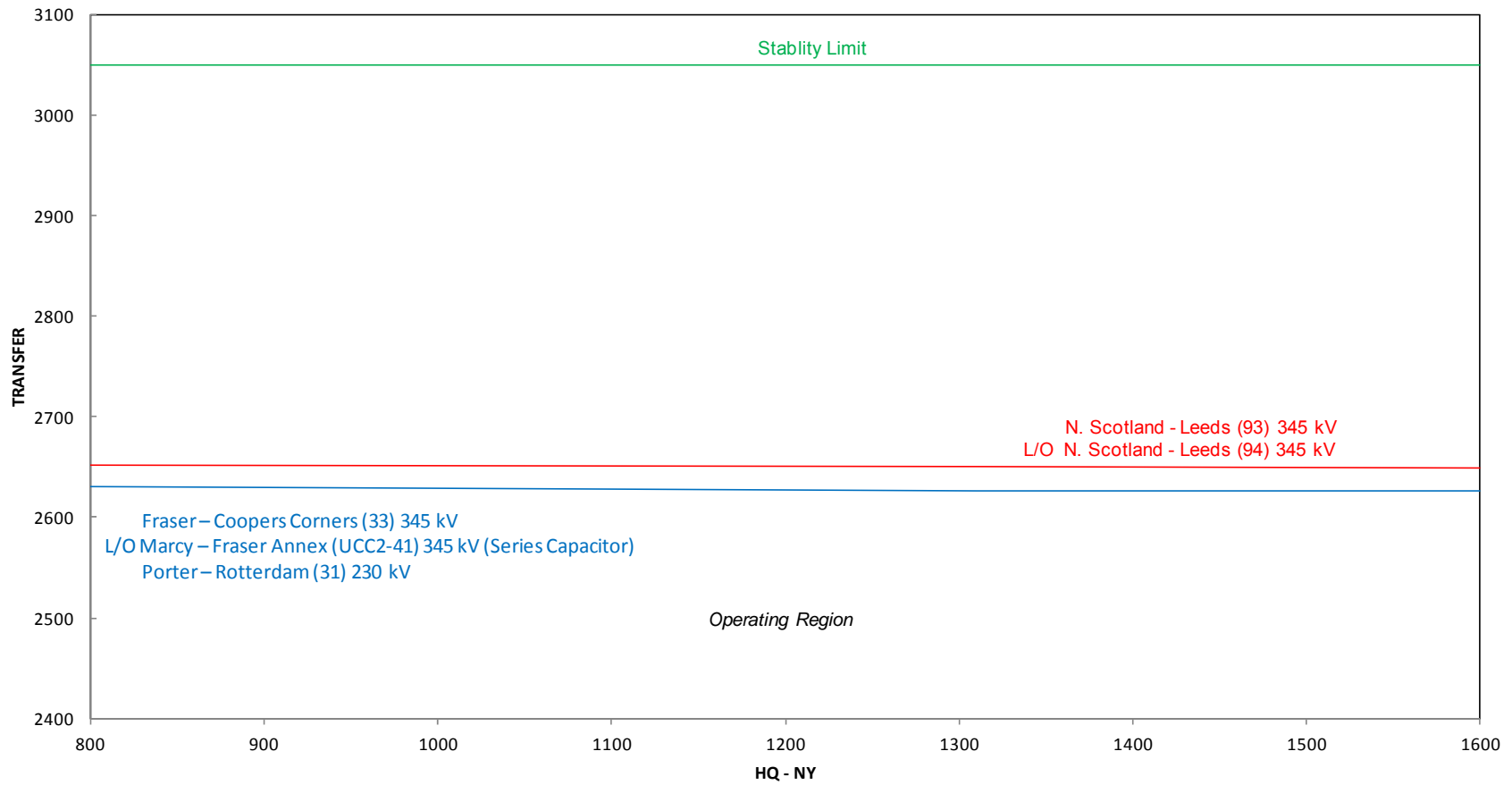
1. Total East vs. HQ-NY	.....	G-1
2. Central East vs. HQ-NY	.....	G-2
3. Moses South vs. HQ Export to New York	.....	G-3
4. NE-NY vs. Norwalk-Northport PAR flow for Normal Transfer	.....	G-4
5. NY-NE vs. Norwalk-Northport PAR flow for Normal Transfer	.....	G-5
6. IESO (ONTARIO) – NY Transfer vs. NYCA System Load (All Lines In-Service)	.....	G-6
7. IESO (ONTARIO) – NY Transfer vs. NYCA System Load (68&171 Lines Out-of-Service)	.....	G-7

Total East vs. HQ Export to New York
For Normal Transfer Criteria
Summer 2017



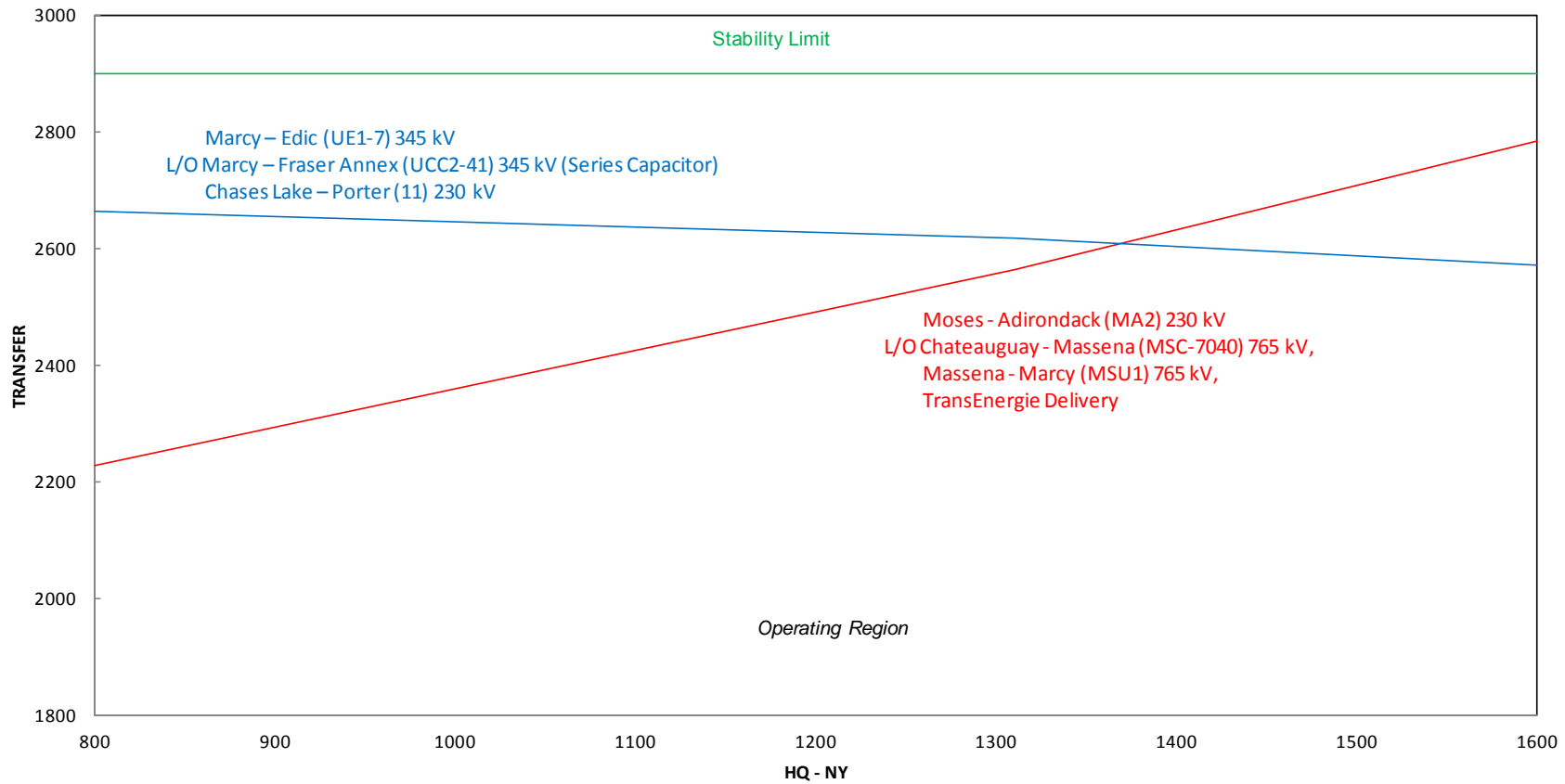
G-1

Central East vs. HQ Export to New York
For Normal Transfer Criteria
Summer 2017



G-2

Moses South vs. HQ Export to New York
For Normal Transfer Criteria
Summer 2017

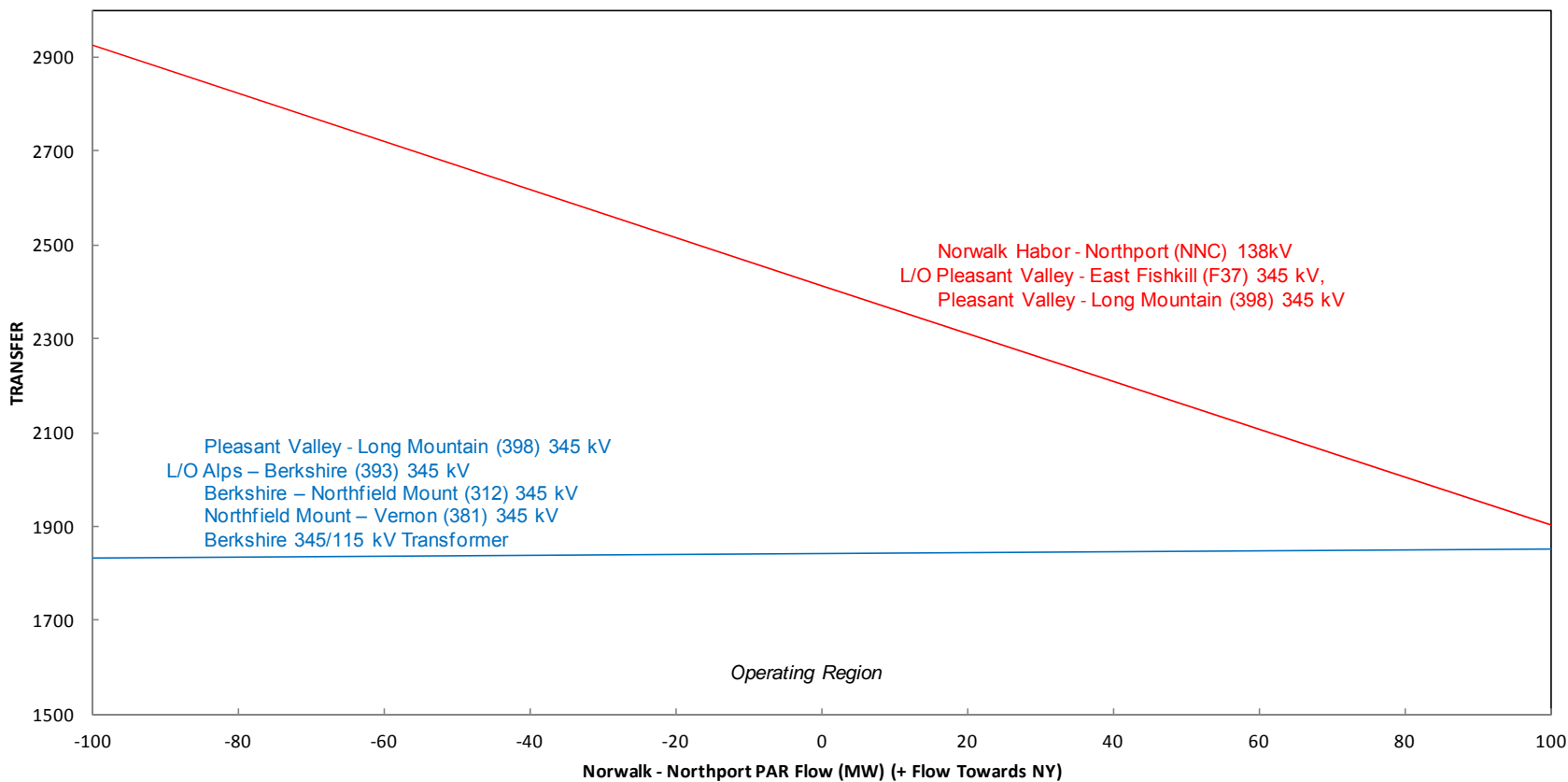


G-3

NE-NY vs. NORWALK-NORTHPORT PAR Flow

For Normal Transfer Criteria

Summer 2017

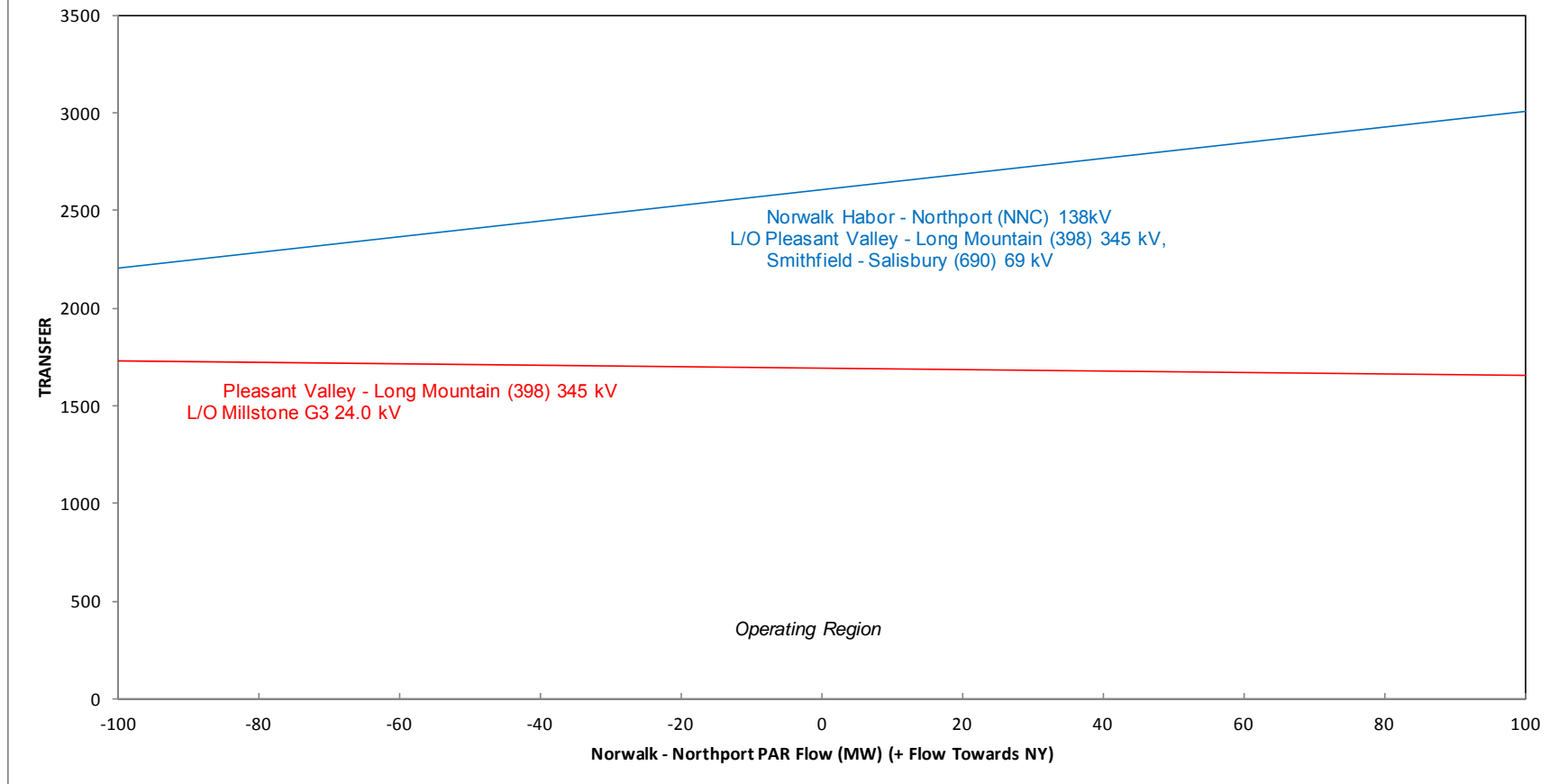


G-4

NY-NE vs. NORWALK-NORTHPORT PAR Flow

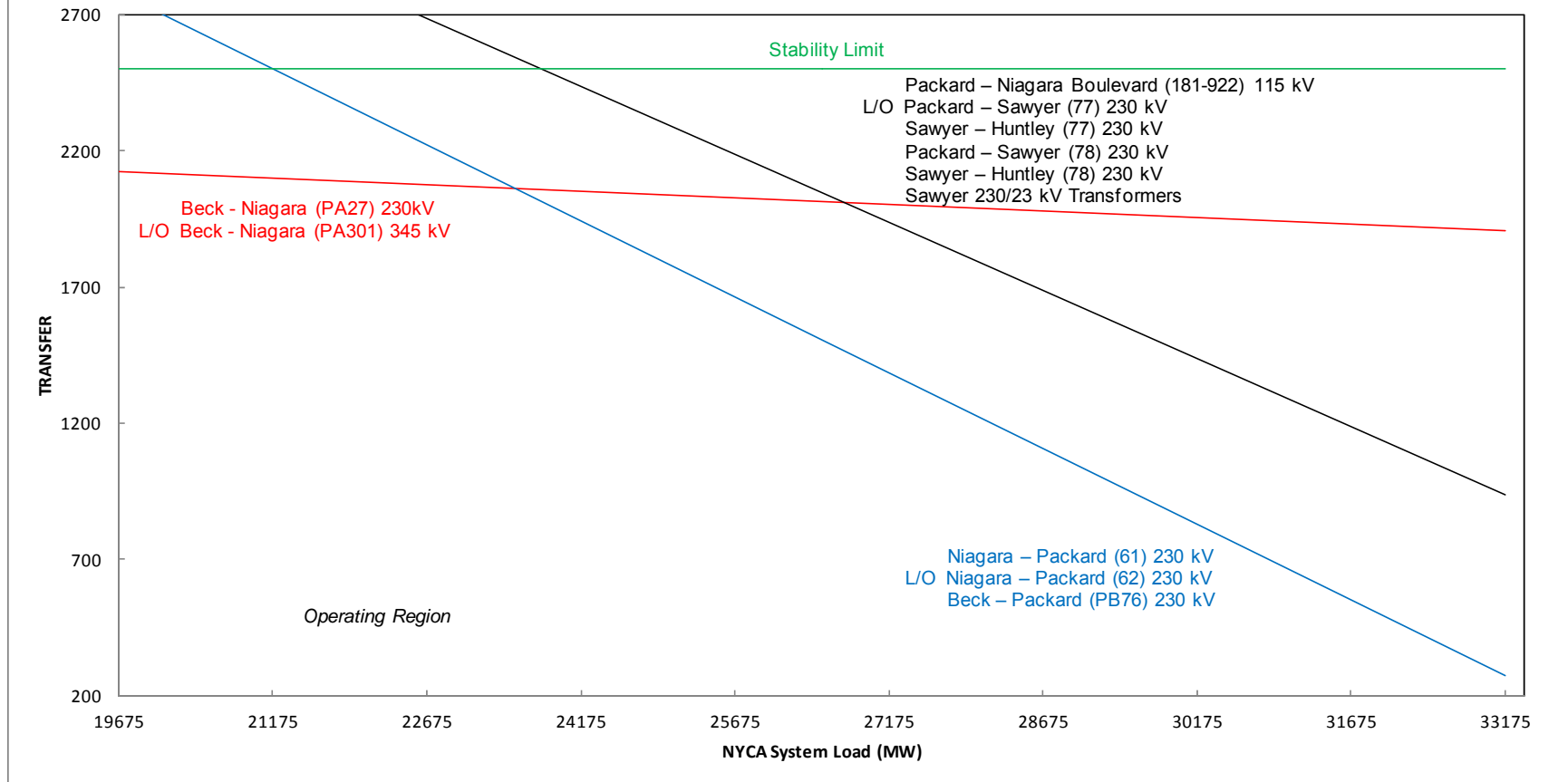
For Normal Transfer Criteria

Summer 2017



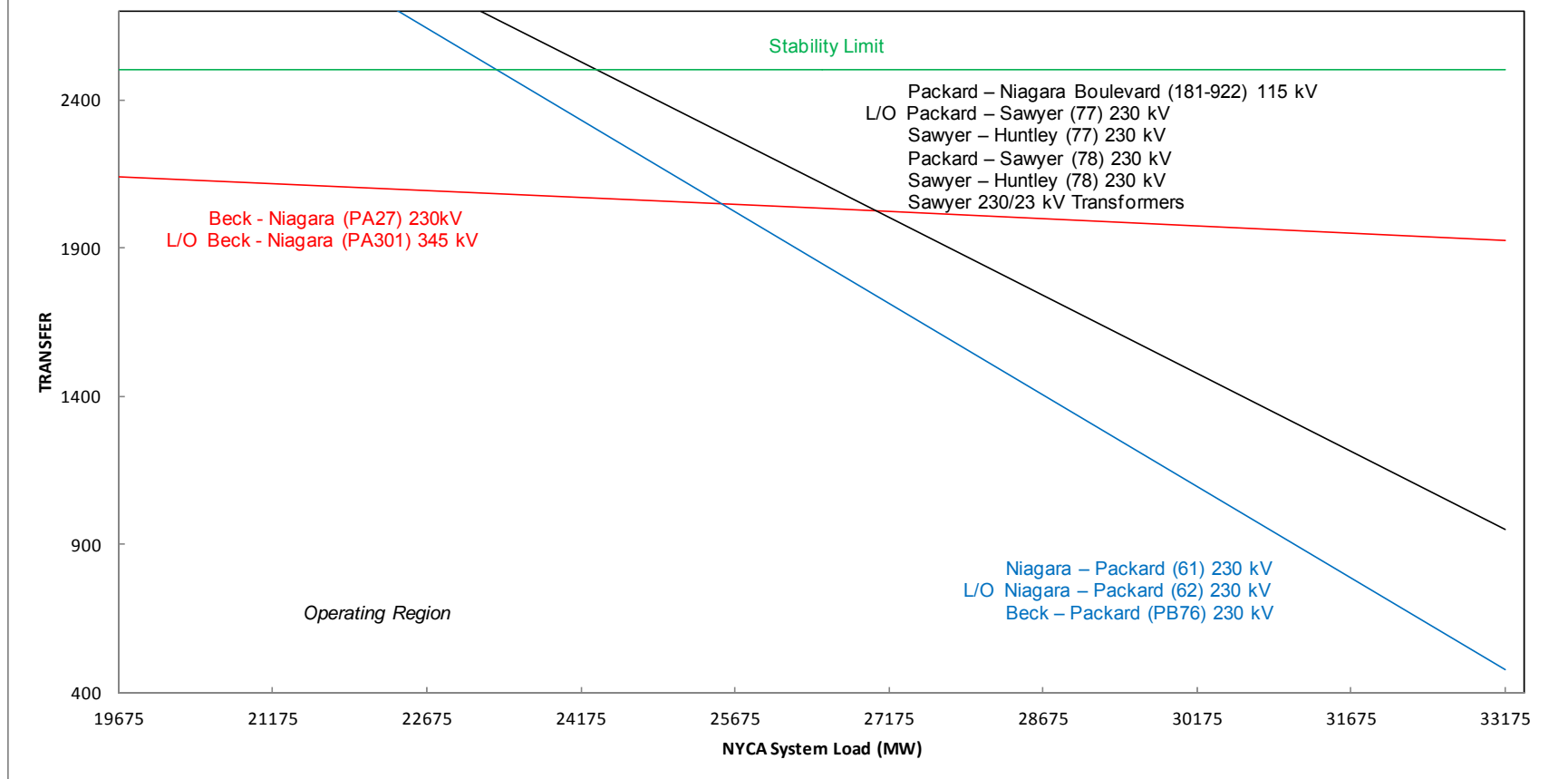
G-5

IESO (Ontario) - NY Transfer vs. NYCA System Load
For Normal Transfer Criteria (All Lines In-Service)
Summer 2017



G-6

IESO (Ontario) - NY Transfer vs. NYCA System Load
For Normal Transfer Criteria (68 & 171 Lines Out-of-Service)
Summer 2017



G-7

Appendix H – COMPARISON OF TRANSFER LIMITS SUMMER 2017 VS. 2016

Comparison of Summer 2017 to Summer 2016 Thermal Limits

Interface		SUMMER 2017		SUMMER 2016		Delta
		Limit (MW)	Contingency	Limit (MW)	Contingency	
Dysinger East	Normal	1025	1	950	2	75
	Emergency	1725	3	1700	4	25
UPNY - ConEd	Normal	4900	5	4175	5	725
	Emergency	5625	6	4900	6	725
Sprain Brook Dunwoodie- South	Normal	4200	7	4200	7	0
	Emergency	4225	8	4225	8	0
Con Ed - LIPA	Normal	875	9	875	9	0
	Emergency	1500	10	1500	10	0
Central East	MSC-7040 FLOW	1600 MW		1600 MW		
	Normal	2625	11	2700	12	-75
	Emergency	2750	13	2775	14	-25
	MSC-7040 FLOW	1310 MW		1310 MW		
	Normal	2625	11	2700	12	-75
	Emergency	2750	13	2775	14	-25
	MSC-7040 FLOW	800 MW		800 MW		
	Normal	2625	11	2700	12	-75
	Emergency	2750	13	2775	14	-25
Total East ⁴	MSC-7040 FLOW	1600 MW		1600 MW		
	Normal	4900	15	5350	12	-450
	Emergency	5300	16	5425	17	-125
	MSC-7040 FLOW	1310 MW		1310 MW		
	Normal	4900	15	5350	12	-450
	Emergency	5300	16	5425	17	-125
	MSC-7040 FLOW	800 MW		800 MW		
	Normal	4900	15	5350	12	-450
	Emergency	5300	16	5425	17	-125
Moses - South	MSC-7040 FLOW	1600 MW		1600 MW		
	Normal	2550	18	2625	19	-75
	Emergency	2675	19	2625	19	50
	MSC-7040 FLOW	1310 MW		1310 MW		
	Normal	2550	20	2525	20	25

⁴ Limits in this report do not include Neptune in the Total East Interface.

Emergency	2700	19	2575	21	125
MSC-7040 FLOW	800 MW		800 MW		
Normal	2225	20	2150	20	75
Emergency	2225	22	2200	21	25

NYISO SUMMER 2017 CROSS-STATE THERMAL LIMIT CONTINGENCY LIST

	Limiting Element				Contingency
(1)	Niagara – Packard (61) 230 kV	STE	846 MW	L/O	Niagara – Packard (62) 230 kV Beck – Packard (BP76) 230 kV
(2)	Packard – Sawyer (77) 230 kV	LTE	644 MW	L/O	Niagara – Packard (61) 230 kV Packard – Sawyer (78) 230 kV Sawyer – Huntley (78) 230 kV Packard 230/115 kV Transformer BK3
(3)	Young – Huntley (133) 115 kV	STE	206 MW	L/O	Buffalo – Huntley (130) 115 kV
(4)	Packard – Sawyer (77) 230 kV	STE	746 MW	L/O	Packard – Sawyer (78) 230 kV
(5)	Leeds – Pleasant Valley (92) 345 kV	LTE	1538 MW	L/O	Athens – Pleasant Valley (91) 345 kV
(6)	Leeds – Pleasant Valley (92) 345 kV	STE	1724 MW	L/O	Athens – Pleasant Valley (91) 345 kV
(7)	Mott Haven – Rainey (Q11) 345 kV	MTE	1066 MW	L/O	(SB:RAIN345_7W) Mott Haven – Rainey (Q12) 345 kV Rainey 345/138 kV Transformer 7W Rainey – East 75 St. 138 kV East 75 St. – West 110 St. 138 kV
(8)	Dunwoodie – Mott Haven (71) 345 kV	NORM	707 MW		Pre-Contingency Loading
(9)	Dunwoodie – Shore Rd. (Y50) 345 kV	LTE	914 MW	L/O	Sprain Brook – E.G.C. (Y49) 345 kV Sprain Brook – Academy (M29) 345 kV
(10)	Dunwoodie – Shore Rd. (Y50) 345 kV	NORM	653 MW		Pre-Contingency Loading
(11)	Fraser – Coopers Corners (33) 345 kV	LTE	1721 MW	L/O	Marcy – Fraser Annex (UCC2-41) 345 kV (Series Capacitor) Porter – Rotterdam (31) 230 kV
(12)	New Scotland – Leeds (94) 345 kV	LTE	1538 MW	L/O	New Scotland – Leeds (93) 345 kV
(13)	Fraser – Coopers Corners (33) 345 kV	STE	1793 MW	L/O	Marcy – Fraser Annex (UCC2-41) 345 kV (Series Capacitor)
(14)	Fraser – Coopers Corners (33) 345 kV	STE	1703 MW	L/O	Marcy – Fraser Annex (UCC2-41) 345 kV (Series Capacitor)
(15)	Roseton – East Fishkill (RFK305) 345 kV	LTE	2666 MW	L/O	Rock Tavern – Ramapo (77) 345 kV Rock Tavern – Sugarloaf (76) 345 kV Ramapo – Sugarloaf (76) 345 kV Sugarloaf 345/138 kV Transformer

(16)	Coopers Corners – Middletown TAP (CMT34) 345 kV	STE	1793 MW	L/O	Coopers Corners – Dolson Ave. (CCDA42) 345 kV
(17)	Coopers Corners – Middletown TAP (CMT34) 345 kV	STE	1793 MW	L/O	Coopers Corners – Rock Tavern (CRT-42) 345 kV
(18)	Marcy – Edic (UE1-7) 345 kV	LTE	1650 MW	L/O	Marcy – Fraser Annex (UCC2-41) 345 kV (Series Capacitor) Chases Lake – Porter (11) 230 kV
(19)	Marcy 765/345 kV T2 Transformer	STE	1971 MW	L/O	Marcy 765/345 kV T1 Transformer
(20)	Moses – Adirondack (MA2) 230 kV	LTE	386 MW	L/O	Chateauguay–Massena (MSC-7040) 765 kV Massena – Marcy (MSU1) 765 kV and TransÉnergie delivery
(21)	Browns Falls – Taylorville (4) 115 kV	STE	126 MW	L/O	Chateauguay–Massena (MSC-7040) 765 kV Massena – Marcy (MSU1) 765 kV and TransÉnergie delivery
(22)	Browns Falls – Taylorville (4) 115 kV	STE	134 MW	L/O	Chateauguay–Massena (MSC-7040) 765 kV Massena – Marcy (MSU1) 765 kV and TransÉnergie delivery

Appendix I – DISTRIBUTION FACTORS

Table-1 DISTRIBUTION FACTORS FOR DYSINGER EAST CIRCUITS											
Monitored Element				Base Flow	TRANSFER	NIAGAR-ROCH	SOMMERSET-ROCH	STOLLE-HIGHSHELDON	LOCKPT-SHEL	LOCKPT-SOUR	NIAGAR-ROCH
NIAG 345	345 ROCH 345	345 1		99.67	37.03%	TRIP	54.43%	22.22%	20.29%	22.35%	TRIP
SOMERSET345	345 ROCH 345	345 1		347.82	25.26%	44.89%	TRIP	15.15%	13.84%	15.25%	O/S
STOLE230	230 SHLDN230	230 1		79.24	11.62%	7.38%	6.11%	TRIP	5.81%	6.40%	13.40%
LOCKPORT	115 SHEL-113	115 1		27.88	2.83%	4.34%	3.59%	3.74%	TRIP	15.08%	7.87%
LOCKPORT	115 NAKR-108	115 1		31.68	1.01%	1.56%	1.29%	1.34%	3.51%	3.79%	2.82%
LOCKPORT	115 OAKFLDTP	115 1		31.67	1.18%	1.82%	1.50%	1.57%	4.10%	4.43%	3.30%
LOCKPORT	115 SOUR-111	115 1		21.35	2.87%	4.40%	3.64%	3.79%	13.88%	TRIP	7.98%
LOCKPORT	115 TELRD107	115 1		49.5	1.37%	2.11%	1.74%	1.81%	6.36%	6.27%	3.82%
LOCKPORT	115 TELRD114	115 1		32.99	2.82%	4.32%	3.57%	3.72%	18.63%	11.46%	7.84%
PALMT115	115 ANDOVER1	115 1		0	0.00%	O/S	O/S	O/S	O/S	O/S	O/S
SUB-TOTALS					85.99%	70.80%	75.86%	53.34%	86.42%	85.03%	47.03%
L33P-L34P				-0.49	0.00%	10.99%	9.09%	9.54%	4.09%	4.51%	19.94%
PJM-NYISO				736.79	14.01%	18.20%	15.05%	37.12%	9.49%	10.46%	33.03%
TOTALS					100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Table-2 DISTRIBUTION FACTORS FOR WEST CENTRAL CIRCUITS

Table-2 DISTRIBUTION FACTORS FOR WEST CENTRAL CIRCUITS										
Monitored Element				Base Flow	TRANSFER	CLAY-PANNELL	STOLLE-SHLDN	PANNEL-FARM	S121-SLEGH	PANNEL-CLAY
CLAY	345	PANNELL3	345 1	-400.56	30.97%	TRIP	11.27%	20.80%	19.90%	O/S
CLAY	345	PANNELL3	345 2	-401.83	31.07%	57.40%	11.30%	20.87%	19.96%	TRIP
STOLE230	230	SHLDN230	230 1	79.24	11.62%	3.20%	TRIP	8.33%	2.74%	7.51%
FRMGTN-4	115	PANNELLI	115 1	114.68	3.37%	6.24%	8.81%	TRIP	16.31%	14.65%
LAWLER-1	115	MORTIMER	115 1	37.48	2.62%	2.70%	1.43%	14.21%	4.35%	6.34%
MACDN115	115	QUAKER	115 1	37.34	0.34%	0.51%	0.42%	3.32%	19.03%	1.19%
MORTIMER	115	LAWLER-2	115 1	14.11	2.68%	2.93%	1.27%	5.92%	4.77%	6.87%
SLEIG115	115	S121 B#2	115 1	55.84	2.78%	3.98%	1.93%	10.87%	TRIP	9.34%
PALMT115	115	ANDOVER1	115 1	0	0.00%	O/S	O/S	O/S	O/S	O/S
S.PER115	115	STA 162	115 1	34.96	0.55%	2.01%	16.91%	4.81%	2.18%	4.71%
SUB-TOTALS					85.99%	78.97%	53.34%	89.12%	89.22%	50.62%
L33P-L34P				-0.49	0.00%	8.04%	9.54%	2.54%	3.50%	18.87%
PJM-NYISO				736.79	14.01%	13.00%	37.12%	8.34%	7.28%	30.51%
TOTALS					100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Table-3 DISTRIBUTION FACTORS FOR TOTAL EAST CIRCUITS

Monitored Element	Base Flow	TRANSFER	EDIC34-NSCOT	FRASER-GILBA	MARCY3-NSCOT	WALDWK-SMAWA	PORTER-RTRDM	HOPATCONG-RAMPO	HUDSON-FARGT	LINDEN-GOETH	WALDWK-SMAWA	MARION-FARGT
COOPC345 345 DOLSON_AVE 345 2	633.57	19.17%	7.97%	18.11%	8.42%	0.54%	4.76%	4.81%	0.47%	1.17%	5.06%	0.59%
EDIC 345 N.SCOT77 345 1	515.29	16.04%	TRIP	18.88%	29.97%	0.19%	13.27%	2.30%	1.31%	1.62%	1.81%	2.00%
FRASR345 345 GILB 345 345 1	-28.55	17.05%	23.99%	TRIP	24.68%	0.19%	10.39%	2.75%	2.20%	2.53%	1.75%	3.37%
N.SCOT99 345 MARCY T1 345 1	594.93	17.63%	32.20%	20.87%	TRIP	0.21%	14.43%	2.52%	1.46%	1.80%	1.98%	2.21%
ROCK TAV 345 MDTN TAP 345 1	448.53	17.09%	7.48%	16.88%	7.90%	0.57%	4.46%	4.01%	0.69%	1.26%	4.02%	0.97%
SMAHWAH1 345 WALDWICK 345 1	-143.9	-0.14%	1.66%	1.21%	1.69%	89.57%	1.03%	25.93%	16.06%	10.32%	O/S	26.43%
SMAHWAH2 345 WALDWICK 345 1	-255.42	0.14%	1.63%	1.29%	1.66%	TRIP	1.01%	25.34%	15.39%	9.89%	TRIP	25.33%
PORTER 2 230 ROTRDM.2 230 1	207.76	4.23%	5.40%	3.33%	5.47%	0.05%	TRIP	0.59%	0.35%	0.43%	0.46%	0.53%
PORTER 2 230 ROTRDM.2 230 2	207.73	4.23%	5.40%	3.33%	5.46%	0.05%	32.11%	0.59%	0.35%	0.43%	0.46%	0.53%
MDTN TAP 345 SHOEMTAP 138 1	253.02	2.91%	0.68%	1.75%	0.73%	-0.04%	0.42%	1.11%	-0.31%	-0.12%	1.46%	-0.53%
SMAHWAH1 345 SMAH138 138 1	-161.54	0.41%	-0.02%	0.12%	-0.02%	-3.44%	-0.01%	-0.64%	-0.83%	-0.55%	0.53%	-1.36%
CORPORATE DR 138 HCOR138 138 1	-81.2	-0.02%	0.00%	-0.01%	0.00%	0.04%	0.00%	0.02%	0.00%	0.00%	0.02%	-0.01%
RAMP138 138 SMAH138 138 1	-94.99	-0.25%	0.02%	-0.06%	0.02%	2.76%	0.01%	0.60%	0.61%	0.39%	-0.29%	0.99%
E.SPR115 115 INGHAM-E 115 1	-30.68	1.02%	-0.07%	2.18%	-0.05%	0.01%	0.93%	0.17%	0.10%	0.11%	0.12%	0.14%
INGMS-CD 115 INGHAM-E 115 1	119.93	0.00%	3.40%	0.94%	3.43%	0.02%	9.13%	0.27%	0.16%	0.20%	0.21%	0.24%
NE_PV20_NY 115 PLAT T#3 115 1	106.88	0.00%	2.71%	1.77%	2.88%	0.05%	3.17%	0.59%	0.36%	0.44%	0.47%	0.54%
W.WDB115 115 W.WDBR69 69.0 1	15.55	0.63%	0.53%	1.11%	0.56%	0.00%	0.39%	0.06%	0.10%	0.10%	0.00%	0.15%
BLUHILL 69.0 MONTVALE 69.0 1	5.33	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
BLUHILL 69.0 MONTVALE 69.0 2	5.33	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
HILB69 69.0 SMAH69 69.0 1	-41.46	-0.31%	-0.05%	-0.14%	-0.05%	0.44%	-0.03%	0.01%	0.11%	0.06%	-0.15%	0.18%
L491T 69.0 MONTVALE 69.0 1	-39.99	0.03%	0.01%	0.02%	0.01%	0.10%	0.01%	0.02%	0.03%	0.03%	-0.02%	0.06%
SPARKILL 69.0 CRESSKIL 69.0 1	-10.49	0.03%	0.01%	0.02%	0.01%	0.02%	0.01%	0.00%	0.02%	0.02%	-0.02%	0.03%
WNYA69 69.0 HCOR69 69.0 1	-2.78	0.11%	0.03%	0.06%	0.03%	0.08%	0.02%	-0.01%	0.07%	0.06%	-0.07%	0.11%
PEARL34 34.5 HCOR34 34.5 1	-0.24	-0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.01%
SUB-TOTALS		100.00%	92.99%	91.65%	92.80%	91.41%	95.49%	71.02%	38.67%	30.17%	17.80%	62.51%
RAMAPO 5 500 HOPATCONG 500 1	380.37	0.00%	1.99%	1.87%	2.03%	2.57%	1.25%	TRIP	6.29%	9.19%	24.42%	9.15%
NEPTCONV 345 NWBRG 345 1	661.1	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
COGNTECH 345 G22_VFT345KV 345 1	271.71	0.00%	0.40%	0.49%	0.41%	0.29%	0.26%	2.60%	4.33%	17.28%	2.80%	6.57%
B3402 PAR1 345 HUDSON1 345 1	149.68	0.00%	1.46%	1.93%	1.51%	2.01%	0.95%	8.10%	TRIP	19.35%	19.29%	O/S
C3403 PAR2 345 MARION 345 1	149.72	0.00%	1.82%	2.43%	1.88%	2.77%	1.19%	9.50%	36.39%	24.01%	26.51%	TRIP
GOETHALS 230 LINDEN 230 1	101.63	0.00%	1.34%	1.64%	1.38%	0.96%	0.87%	8.77%	14.33%	TRIP	9.18%	21.77%
TOTALS		100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Table-4 DISTRIBUTION FACTORS FOR UPNY-CONED CIRCUITS

Monitored Element	Base Flow	TRANSFER	LADNTW-BUCHS	RAMAPO-BUCHN	PLVLLY-FISHK	PLVLLY-MILLW	ROSETN-FISHK	HUDSON-FARGT	LINDEN-GOETH
BUCHANAN S 345 LADENTWN 345 1	795.46	17.68%	TRIP	53.61%	-4.04%	19.66%	26.68%	18.22%	14.93%
BUCHANAN N 345 RAMAPO 345 1	316.4	15.80%	40.08%	TRIP	-0.41%	4.28%	14.75%	12.48%	10.37%
E FISHKILL 345 PLTVLLEY 345 1	273.5	7.70%	-7.71%	-1.05%	TRIP	23.88%	31.77%	0.32%	0.53%
E FISHKILL 345 PLTVLLEY 345 2	273.5	7.70%	-7.71%	-1.05%	65.89%	23.88%	31.77%	0.32%	0.53%
MILLWOOD 345 PLTVLLEY 345 1	726.99	15.58%	13.89%	4.05%	8.85%	TRIP	-9.92%	1.81%	2.03%
PLTVLLEY 345 WOOD B 345 1	756.21	15.39%	13.44%	4.00%	9.24%	33.81%	-9.60%	1.81%	2.02%
ROSETON 345 E FISHKILL 345 1	1395.42	17.57%	25.65%	18.98%	16.02%	-13.49%	TRIP	7.66%	6.71%
E FISH I 115 E FISHKILL 345 1	-51.88	1.71%	0.91%	0.82%	2.62%	-0.48%	6.00%	0.40%	0.38%
E FISH I 115 E FISHKILL 345 2	0	0.00%	O/S	O/S	O/S	O/S	O/S	O/S	O/S
FISHKILL 115 SYLVN115 115 1	122.03	0.88%	0.67%	0.39%	-0.05%	0.73%	0.40%	0.18%	0.18%
SUB-TOTALS		100.00%	79.22%	79.75%	98.12%	92.27%	91.85%	43.19%	37.67%
B3402 PAR1 345 HUDSON1 345 1	149.68	0.00%	6.34%	5.81%	0.06%	0.89%	2.77%	TRIP	19.35%
C3403 PAR2 345 MARION 345 1	149.72	0.00%	8.44%	7.72%	0.07%	1.13%	3.65%	36.39%	24.01%
GOETHALS 230 LINDEN 230 1	101.63	0.00%	3.85%	3.57%	0.07%	0.74%	1.80%	14.33%	TRIP
COGNTECH 345 G22_VFT345KV 345 1	271.71	0.00%	1.16%	1.08%	0.02%	0.22%	0.54%	4.33%	17.28%
NRTHPT P 138 NRTHPT1 138 1	100.32	0.00%	1.00%	2.08%	1.66%	4.74%	-0.61%	1.76%	1.68%
TOTALS		100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Table-5 DISTRIBUTION FACTORS FOR SPRAINBROOK DUNWOODIE SOUTH CIRCUITS

Table-5 DISTRIBUTION FACTORS FOR SPRAINBROOK DUNWOODIE SOUTH CIRCUITS											
Monitored Element				Base Flow	TRANSFER	DUNWDE-RAINY	SPRAIN-TRMNT	SPRAIN-W49TH	VSTR-JAMAICA	LKSUC-JMAICA	REAC72-MOTT
REAC71	345	MOTT HAVEN	345 3	554.78	25.61%	TRIP	3.77%	18.69%	5.59%	5.70%	26.77%
REAC72	345	MOTT HAVEN	345 4	550.94	25.43%	22.33%	3.74%	18.56%	5.55%	5.66%	TRIP
SPRAINBROOK	345	TREMONT	345 1	400.75	0.00%	2.28%	TRIP	2.49%	4.90%	4.73%	2.83%
SPRAINBROOK	345	ACADEMY	345 1	310.97	0.00%	2.07%	22.41%	2.27%	4.47%	4.31%	2.57%
W 49 ST	345	REACM51	345 1	559.64	24.48%	18.31%	4.03%	TRIP	5.61%	5.48%	O/S
W 49 ST	345	REACM52	345 2	559.64	24.48%	18.31%	4.03%	20.81%	5.61%	5.48%	22.86%
DUN NO1R	138	S CREEK W	138 1	114.57	0.00%	1.23%	12.09%	1.15%	2.42%	2.38%	1.49%
DUN NO2R	138	S CREEK E	138 1	114.59	0.00%	1.38%	13.58%	1.30%	2.72%	2.67%	1.67%
DUN SO1R	138	E179 ST W	138 1	179.39	0.00%	1.94%	19.24%	1.84%	3.85%	3.78%	2.36%
JAMAICA	138	V STRM P	138 1	122.26	0.00%	4.16%	6.03%	4.26%	TRIP	52.41%	5.11%
JAMAICA	138	L SUCSPH	138 1	177.7	0.00%	4.12%	5.65%	4.05%	50.91%	TRIP	5.02%
SUB-TOTALS					100.00%	76.13%	94.56%	75.41%	91.61%	92.59%	70.67%
B3402 PAR1	345	HUDSON1	345 1	149.68	0.00%	7.71%	1.44%	7.94%	2.65%	2.35%	9.47%
C3403 PAR2	345	MARION	345 1	149.72	0.00%	10.14%	1.91%	10.51%	3.49%	3.09%	12.47%
GOETHALS	230	LINDEN	230 1	101.63	0.00%	4.64%	1.62%	4.72%	1.73%	1.52%	5.69%
COGNTECH	345	G22_VFT345KV	345 1	271.71	0.00%	1.39%	0.49%	1.42%	0.52%	0.46%	1.71%
TOTALS					100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Table-6 DISTRIBUTION FACTORS FOR MOSES SOUTH CIRCUITS

Monitored Element				Base Flow	TRANSFER	MASSEN_CHAT	MASSEN-MARCY	MOSES2-ADRON	MOSES2-ADRONB1
MARCY765	765 MASS 765	765 1		1377.6	74.22%	66.55%	TRIP	43.89%	O/S
ADRON B1	230 MOSES W	230 1		134.75	9.48%	3.35%	18.67%	TRIP	TRIP
ADRON B2	230 MOSES W	230 1		134.8	9.48%	3.35%	18.67%	36.33%	48.51%
ALCOA-NM	115 BRADY	115 1		23.62	1.11%	0.44%	2.16%	0.75%	1.85%
ALLENS F	115 COLTON	115 1		7.84	1.56%	0.28%	1.84%	0.66%	1.60%
ANDRWS-4	115 DENNISON	115 1		26.73	2.08%	0.82%	4.05%	1.41%	3.47%
DENNISON	115 LWRNCE-B	115 1		24.57	2.08%	0.82%	4.06%	1.41%	3.48%
SUB-TOTALS					100.00%	75.59%	49.45%	84.45%	58.90%
MOSES E	230 ST_LAWR_L33P	230 1		0.3	0.00%	9.81%	17.74%	5.33%	14.28%
MOSES E	230 ST_LAWR_L34P	230 1		0.19	0.00%	10.93%	19.77%	5.94%	15.92%
MOSES W	230 WILLIS E	230 1		-16.66	0.73%	1.95%	7.32%	2.43%	6.15%
MOSES W	230 WILLIS W	230 1		-16.57	0.72%	1.93%	7.28%	2.42%	6.11%
TOTALS					101.45%	100.21%	101.56%	100.56%	101.36%

Table-7 DISTRIBUTION FACTORS FOR NEISO NYISO CIRCUITS

Monitored Element				Base Flow	TRANSFER	NHHAR_GEN	YRMTH_GEN	SBRK_GEN	HIGATE_DC	ELLRIVER	MADWAS_DC	ALPS34-MANY	PV.345-LNGMT
NE_393_NY	345	ALPS345	345 1	-65.92	34.19%	19.03%	30.79%	30.55%	21.06%	30.78%	30.78%	TRIP	36.90%
NE_398_NY	345	PLTVLLEY	345 1	73.66	52.85%	49.11%	34.00%	34.36%	21.59%	33.97%	33.97%	44.62%	TRIP
NE_E205W_NY	230	EASTOVER RD	230 1	-7.79	8.86%	4.79%	8.12%	8.20%	4.19%	8.11%	8.11%	17.47%	8.35%
NE_K7_NY	115	WHITEHAL	115 1	24.93	0.00%	2.31%	4.70%	4.56%	6.77%	4.71%	4.71%	8.92%	4.26%
NE_K6_NY	115	HOOSICK	115 1	-6.76	2.92%	1.57%	2.54%	2.56%	1.40%	2.54%	2.54%	8.15%	2.83%
NE_PV20_NY	115	PLAT T#3	115 1	-106.88	0.00%	4.08%	7.23%	7.04%	36.35%	7.27%	7.27%	7.64%	5.10%
NE_690_NY	69.0	SMITHFLD	69.0 1	-2.6	1.17%	1.07%	0.82%	0.83%	0.50%	0.82%	0.82%	1.18%	2.72%
NE_601_NY	138	NRTHPT P	138 1	33.62	0.00%	6.04%	3.95%	3.99%	2.73%	3.95%	3.95%	4.03%	13.34%
NE_602_NY	138	NRTHPT P	138 2	33.51	0.00%	6.02%	3.94%	3.98%	2.72%	3.94%	3.94%	4.01%	13.30%
NE_603_NY	138	NRTHPT P	138 3	33.29	0.00%	5.98%	3.92%	3.95%	2.70%	3.91%	3.91%	3.99%	13.21%
SHM DC	138	SHOREHAM2	138 1	329.5	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TOTALS					100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Table-8 DISTRIBUTION FACTORS FOR ONTARIO NYISO CIRCUITS

Monitored Element				Base Flow	TRANSFER	BECKB-NIAGAR	PA27-NIAGAR	BP76-PACKD2	STLAWR34-MOSES	STLAWR33-MOSES	BECKA-PA301
NIAG 345	345	BECK_#2_H301	345 1	-46.22	33.70%	56.53%	34.05%	31.82%	8.33%	8.87%	TRIP
NIAG 345	345	BECK_#2_H302	345 1	-46.22	33.70%	TRIP	34.05%	31.82%	8.33%	8.87%	O/S
NIAGAR2W	230	BECK_#2_PA27	230 1	8.03	17.14%	20.69%	TRIP	30.04%	4.34%	4.63%	47.60%
PACKARD2	230	BECK_#2_BP76	230 1	89.59	15.47%	16.79%	26.08%	TRIP	3.93%	4.19%	38.62%
MOSES E	230	ST_LAWR_L33P	230 1	-0.3	0.00%	1.17%	1.01%	1.05%	TRIP	57.59%	2.70%
MOSES E	230	ST_LAWR_L34P	230 1	-0.19	0.00%	1.31%	TRIP	1.17%	60.22%	TRIP	3.01%
SUB-TOTALS					100.00%	96.49%	95.20%	95.90%	85.14%	84.16%	91.92%
ON-MICH				-1.16	0.00%	3.30%	3.46%	3.85%	13.78%	14.68%	7.59%
TOTALS					100.00%	99.79%	98.65%	99.75%	98.92%	98.85%	99.51%

Table-9 DISTRIBUTION FACTORS FOR PJM-NYISO CIRCUITS

Monitored Element				Base Flow	TRANSFER	HOPATCONG-RAMPO	HUDSON-FARGT	LINDEN-GOETH	WALDWK-SMAWA	PIERCE-5MILE	MAIN-WATER	E.TOWD-HILLS	WALDWK-SMAWA	MARION-FARGT
RAMAPO 5	500	HOPATCONG	500 1	380.37	0.00%	TRIP	6.29%	9.19%	2.57%	5.05%	6.82%	6.57%	24.42%	9.15%
COGNTECH	345	G22_VFT345KV	345 1	271.71	0.00%	2.60%	4.33%	17.28%	0.29%	0.75%	1.01%	0.81%	2.80%	6.57%
B3402 PAR1	345	HUDSON1	345 1	149.68	0.00%	8.10%	TRIP	19.35%	2.01%	2.47%	3.30%	2.82%	19.29%	O/S
C3403 PAR2	345	MARION	345 1	149.72	0.00%	9.50%	36.39%	24.01%	2.77%	2.98%	3.98%	3.42%	26.51%	TRIP
GOETHALS	230	LINDEN	230 1	101.63	0.00%	8.77%	14.33%	TRIP	0.96%	2.55%	3.45%	2.75%	9.18%	21.77%
NEPTCONV	345	NWBRG	345 1	661.1	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
SMAHWAH1	345	WALDWICK	345 1	-143.9	-0.06%	25.93%	16.06%	10.32%	89.57%	5.08%	6.96%	5.82%	O/S	26.43%
SMAHWAH2	345	WALDWICK	345 1	-255.42	0.06%	25.34%	15.39%	9.89%	TRIP	4.78%	6.55%	5.48%	TRIP	25.33%
5MILE345	345	26PIERCEBRK	345 1	103.34	22.90%	2.24%	0.85%	1.18%	0.22%	TRIP	13.46%	4.66%	2.08%	1.26%
NY_HOMER_STO	345	26HOMER CY	345 Z1	237.76	18.69%	1.84%	0.71%	1.00%	0.18%	-66.30%	9.18%	1.84%	1.74%	1.05%
NY_PIERCEBRK	345	26PIERCEBRK	345 Z1	-235.41	-18.69%	-1.84%	-0.71%	-1.00%	-0.18%	66.30%	-9.18%	-1.84%	-1.74%	-1.05%
WATRC345	345	26MAINESBURG	345 1	31.69	26.83%	3.44%	1.29%	1.82%	0.34%	15.34%	TRIP	22.83%	3.25%	1.92%
NY_HOMER_WAT	345	26HOMER CY	345 Z1	139.72	22.88%	2.73%	1.06%	1.52%	0.28%	11.59%	-62.96%	8.82%	2.67%	1.57%
NY_MAINESBUR	345	26MAINESBURG	345 Z1	-138.71	-22.88%	-2.73%	-1.06%	-1.52%	-0.28%	-11.59%	62.96%	-8.82%	-2.67%	-1.57%
HILSD230	230	26E.TWANDA	230 1	-70.36	24.54%	3.98%	1.33%	1.75%	0.34%	6.37%	27.42%	TRIP	3.26%	1.98%
SMAHWAH1	345	SMAH138	138 1	-161.54	0.18%	-0.64%	-0.83%	-0.55%	-3.44%	-0.38%	-0.53%	-0.45%	0.53%	-1.36%
FALCONER	115	26WARREN	115 1	-26.09	10.15%	0.95%	0.36%	0.50%	0.09%	23.24%	2.37%	2.57%	0.89%	0.54%
N.WAV115	115	26E.SAYRE	115 1	-16.82	8.31%	1.32%	0.44%	0.59%	0.11%	2.41%	8.60%	24.82%	1.09%	0.66%
WESTOVER115	115	26LAUREL L	115 1	-101.56	7.27%	1.23%	0.41%	0.54%	0.11%	1.09%	3.65%	8.78%	1.01%	0.61%
CORPORATE DR	138	HCOR138	138 1	-81.2	-0.01%	0.02%	0.00%	0.00%	0.04%	0.00%	0.00%	0.00%	0.02%	-0.01%
RAMP138	138	SMAH138	138 1	-94.99	-0.11%	0.60%	0.61%	0.39%	2.76%	0.26%	0.36%	0.31%	-0.29%	0.99%
BLUHILL	69.0	MONTVALE	69.0 1	5.33	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
BLUHILL	69.0	MONTVALE	69.0 2	5.33	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
HILB69	69.0	SMAH69	69.0 1	-41.46	-0.14%	0.01%	0.11%	0.06%	0.44%	0.11%	0.16%	0.14%	-0.15%	0.18%
L491T	69.0	MONTVALE	69.0 1	-39.99	0.02%	0.02%	0.03%	0.03%	0.10%	0.00%	0.00%	0.00%	-0.02%	0.06%
SPARKILL	69.0	CRESSKIL	69.0 1	-10.49	0.01%	0.00%	0.02%	0.02%	0.02%	0.00%	0.00%	0.00%	-0.02%	0.03%
WNYA69	69.0	HCOR69	69.0 1	-2.78	0.05%	-0.01%	0.07%	0.06%	0.08%	0.00%	0.00%	0.00%	-0.07%	0.11%
PEARL34	34.5	HCOR34	34.5 1	-0.24	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.01%
SUB-TOTALS					100.00%	93.40%	97.47%	96.43%	99.36%	72.10%	87.57%	91.32%	93.78%	96.22%
MICH-ON				1.16	0.00%	6.16%	2.37%	3.34%	0.60%	26.17%	11.66%	8.12%	5.82%	3.53%
TOTALS					100.00%	99.56%	99.83%	99.76%	99.96%	98.27%	99.22%	99.45%	99.59%	99.75%

Table-10a GENERATION SHIFT FACTORS WITH ALL PARS HOLDING MW FLOW

Monitered Element	CENTRAL-EAST	ONT-NYISO	ONTARIO-MICH	PJM-NYISO	WEST-CENTRAL	BBURG-RAMAPO	MARCY-SOUTH	UTICA-ALBANY
Base Flow	1721.84	4.9	-1.37	815.53	-428.48	381.61	1667.83	1525.75
DUM1	41.68%	0.00%	0.00%	0.00%	83.60%	0.00%	28.72%	40.48%
DUM2	41.68%	0.00%	0.00%	0.00%	83.60%	0.00%	28.72%	40.48%
NIAGARA	41.68%	0.00%	0.00%	0.00%	83.60%	0.00%	28.72%	40.48%
OSWEGO	45.49%	0.00%	0.00%	0.00%	-1.73%	0.00%	36.78%	44.77%
GILBOA	0.04%	0.00%	0.00%	0.00%	0.20%	0.00%	2.37%	-0.28%
BETH	-18.20%	0.00%	0.00%	0.00%	-0.19%	0.00%	14.23%	-16.25%
ATHENS	-7.20%	0.00%	0.00%	0.00%	-0.05%	0.00%	6.60%	-7.08%
ROSETON	-0.12%	0.00%	0.00%	0.00%	0.00%	0.00%	0.12%	-0.12%
BOWLINE	1.82%	0.00%	0.00%	0.00%	0.01%	0.00%	-1.62%	1.76%
INDIANPT2	1.43%	0.00%	0.00%	0.00%	0.01%	0.00%	-1.27%	1.38%
BRAYTON	-10.18%	0.00%	0.00%	0.00%	-0.11%	0.00%	8.33%	-9.49%
SBRK	-10.75%	0.00%	0.00%	0.00%	-0.12%	0.00%	8.80%	-10.03%
BECK	42.05%	100.00%	0.00%	0.00%	85.99%	0.00%	29.48%	40.89%
CONEMAUGH	37.20%	0.00%	0.00%	100.00%	32.22%	0.00%	19.38%	35.49%
SALEM	37.11%	0.00%	0.00%	100.00%	30.93%	0.00%	19.19%	35.38%
PORTLAND	37.07%	0.00%	0.00%	100.00%	30.32%	0.00%	19.10%	35.33%
EDDYSTONE	37.11%	0.00%	0.00%	100.00%	30.90%	0.00%	19.19%	35.38%
BRANDON	37.17%	0.00%	0.00%	100.00%	31.74%	0.00%	19.32%	35.45%
KARNS	37.24%	0.00%	0.00%	100.00%	32.73%	0.00%	19.47%	35.53%
ZEEL	37.24%	0.00%	0.00%	100.00%	32.73%	0.00%	19.47%	35.53%
BOWEN	37.23%	0.00%	0.00%	100.00%	32.54%	0.00%	19.44%	35.52%
BAYSHORE	37.25%	0.00%	0.00%	100.00%	32.84%	0.00%	19.49%	35.54%
MTSTORM	37.21%	0.00%	0.00%	100.00%	32.33%	0.00%	19.41%	35.50%
HATFIELD	37.22%	0.00%	0.00%	100.00%	32.47%	0.00%	19.43%	35.51%
NEWTON	37.24%	0.00%	0.00%	100.00%	32.64%	0.00%	19.46%	35.53%
HOPATCONG-RAMAPO	-7.02%	-6.60%	6.16%	6.60%	-6.29%	TRIP	-5.57%	-5.99%

Table-10b GENERATION SHIFT FACTORS WITH ALL PAR ANGLES FIXED

Monitered Element	CENTRAL-EAST	ONT-NYISO	ONTARIO-MICH	PJM-NYISO	WEST-CENTRAL	BBURG-RAMAPO	MARCY-SOUTH	UTICA-ALBANY
Base Flow	1721.84	4.9	-1.37	815.53	-428.48	381.61	1667.83	1525.75
DUM1	26.59%	-19.40%	18.19%	19.40%	51.30%	4.05%	18.21%	22.99%
DUM2	26.59%	-19.40%	18.19%	19.40%	51.30%	4.05%	18.21%	22.99%
NIAGARA	26.59%	-19.40%	18.19%	19.40%	51.30%	4.05%	18.21%	22.99%
OSWEGO	36.43%	-9.87%	9.23%	9.87%	-12.98%	0.25%	29.19%	32.59%
GILBOA	-5.93%	-5.07%	4.73%	5.07%	-5.07%	-2.00%	-1.42%	-6.19%
BETH	-24.44%	-5.49%	5.12%	5.49%	-4.93%	-2.03%	11.17%	-19.62%
ATHENS	-11.98%	-4.14%	3.87%	4.14%	-3.95%	-2.65%	3.83%	-11.40%
ROSETON	-3.27%	-2.51%	2.34%	2.51%	-2.40%	-3.80%	-1.38%	-2.97%
BOWLINE	0.11%	-1.02%	0.96%	1.02%	-1.00%	-5.89%	-1.86%	0.08%
INDIANPT2	-0.28%	-1.04%	0.98%	1.04%	-1.01%	-5.26%	-1.54%	-0.26%
BRAYTON	-16.52%	-4.34%	4.05%	4.34%	-3.38%	-2.50%	6.84%	-10.33%
SBRK	-17.90%	-4.60%	4.29%	4.60%	-3.46%	-2.41%	7.60%	-10.53%
BECK	26.97%	74.85%	23.59%	25.15%	48.03%	4.04%	18.67%	23.18%
CONEMAUGH	11.51%	10.17%	-9.52%	89.83%	10.36%	10.57%	5.68%	9.81%
SALEM	7.84%	6.55%	-6.11%	93.45%	6.18%	11.77%	3.33%	6.68%
PORTLAND	6.62%	4.68%	-4.37%	95.32%	4.44%	10.97%	2.46%	5.64%
EDDYSTONE	7.85%	6.49%	-6.06%	93.51%	6.13%	11.87%	3.32%	6.68%
BRANDON	10.61%	10.79%	-10.05%	89.21%	9.64%	10.91%	5.21%	9.03%
KARNS	15.98%	26.13%	-25.13%	73.87%	17.99%	8.71%	9.39%	13.55%
ZEEL	15.81%	25.49%	-24.41%	74.51%	17.69%	8.78%	9.25%	13.41%
BOWEN	13.63%	17.97%	-16.33%	82.03%	14.09%	9.66%	7.47%	11.58%
BAYSHORE	15.63%	24.36%	-23.58%	75.64%	17.35%	8.84%	9.08%	13.26%
MTSTORM	12.36%	14.08%	-13.12%	85.92%	12.07%	10.18%	6.47%	10.51%
HATFIELD	12.58%	13.84%	-12.93%	86.16%	12.24%	10.09%	6.57%	10.70%
NEWTON	14.31%	20.08%	-18.14%	79.92%	15.17%	9.38%	8.01%	12.15%
HOPATCONG-RAMAPO	-7.02%	-6.60%	6.16%	6.60%	-6.29%	TRIP	-5.57%	-5.99%