

## MISO Coordinated Flowgates as of 1/1/2012

NERC ID	MISO Description	Owner	Reciprocal Entities
1002	ThmMobThoMcc	AECI	NO
1003	ThmMobThmSal	AECI	NO
1004	MccTieAECAMRN	AECI	NO
1010	MccTieAEECAMRN_AEC	AECI	NO
1011	PalXfrPalSub	AECI	NO
1017	NewMadrid_Dell_for_loss_of_Shelby_Lagoon_Creek	AECI	NO
1018	NewMadrid_Dell_for_loss_of_Ises_Dell	AECI	NO
1019	NewMadrid_Dell_for_loss_of_Tiptonville	AECI	NO
1020	New_Madrid_345_500_1_for_Loss_of_MarshallCumberland500	AECI	NO
1021	New_Madrid_345_500_1_for_Loss_of_Shelby_LagoonCrk500	AECI	NO
1351	NewMadrid_Dell	AECI	NO
1366	NewMadrid_Dell_for_loss_of_Marshall_Cumberland	AECI	NO
1367	NewMadrid_Dell_for_loss_of_Shawnee_Marshall	AECI	NO
3175	Palmyra_345_161_Xfm_flo_Montgomery_Spencer_345	AECI	NO
5283	THMSALTHMMOB	AECI	NO
1205	8OCONEE_500_8NORCROS_500	DUK	NO
1025	Trimbl_Co_Clifty_Creek_345_Rockport_Jeffrsn_765	LGEE	MISO,PJM,LGEE,TVA
1661	Living_Earlinton161_flo_Livings_Crittenden161	LGEE	MISO,LGEE,TVA
2092	Cloverport_Green_River_Steel_138	LGEE	LGEE,MISO
2188	W_Lexington_Brown_N_345	LGEE	LGEE,MISO,EKPC,TVA
2199	Ghent_WLexington_345kV_Baker_Broadford	LGEE	LGEE,MISO,EKPC
2209	WLex_EWBrown345_flo_Baker_Broadford765	LGEE	TVA,LGEE,MISO,EKPC
2279	Paddys_West_Paddys_Run_138_flo_Cane_Run_Cane_Run_6_138	LGEE	TVA,LGEE,MISO
2285	Paddys_West_Paddys_Run_138	LGEE	TVA,LGEE,MISO
2294	Clifty_Crk_Carrollton_138_flo_Bakr_Broadford_765	LGEE	LGEE,MISO,TVA
2484	Northside_Clifty_Crk138_flo_Trimbl_Clifty_Crk345	LGEE	LGEE,TVA,MISO
2500	Newtonville_Cloverport_131_flo_Colman_Nat_Aluminum_161	LGEE	LGEE,MISO
2527	CaneRun_6_CaneRun_138_flo_Mill_Crk_PaddysWst_345	LGEE	LGEE,MISO
2870	Northside_Beargrass_138_flo_Northside_Jeffersonville_Jct_138	LGEE	LGEE,MISO
2876	Northside_Jeffersonville_Jct_138_flo_Northside_Beargrass_138	LGEE	LGEE,MISO
2879	Ghent_West_Lexington_345	LGEE	EKPC,LGEE,MISO
2883	Green_River_River_Queen_Tap_161	LGEE	LGEE,TVA,MISO
2884	Grn_Rvr_Stl_Clvprpt_138_flo_Smth_Hrdn_Cnty_345	LGEE	LGEE,MISO
2910	Middletown_345_138_Xfm_1_flo_Middletown_345_138_Xfm_3	LGEE	LGEE,MISO
2928	River_Queen_Tap_Earlinton_North_161	LGEE	LGEE,TVA,MISO
2971	Smith_138_345_flo_Ghent_West_Lexington_345	LGEE	LGEE,TVA,MISO
2972	Newtonvill_Cloverprt138_flo_Wilson_Gren_Rivr161	LGEE	LGEE,MISO
2973	SmithXmf_flo_Hardinsburg_HardinCo138	LGEE	LGEE,MISO
2977	Buckner_Middletown_345_flo_Trimble_County_Middletown_345	LGEE	EKPC,TVA,LGEE,MISO
2979	Ghent_NAS_138_flo_Ghent_W_Frankfort_345	LGEE	LGEE,MISO
6215	Akeley_Laporte_115kV_flo_Winger_Wilton_230kV	MAPP	NO
6216	Akeley_Laporte_115kV_flo_Forbes_Roseaus_500kV	MAPP	NO
6217	Heskett_Centr_230kV_flo_Stanton_SquareBute_230kV	MAPP	NO
6218	SquareBute_Centr230kV_flo_SquarBute_Stanton230kV	MAPP	NO
6219	SquareButte_Center230kV_flo_Centr_Jamestown345kV	MAPP	NO
6220	SquaBute_Cntr230kV_flo_SquaBut_Cntr230_345kVXFMR	MAPP	NO
6221	Center_SquareButte_230kV_flo_Coyote_Center345kV	MAPP	NO
6222	Center_SquareButte230kV_flo_Ellendl4_Oakes230kV	MAPP	NO
6223	Mapl_Fronter_230kV_flo_Mapl_Sheyne_230kV	MAPP	NO
6224	Centr_Jamstow345kV_flo_Cntr_SquBute345_230kVXFMR	MAPP	NO
6225	Mapl_Winger_230kV_flo_Mapl_Sheyne_230kV	MAPP	NO
6226	Mapl_Winger_230kV_flo_Jamestown_Pickert_230kV	MAPP	NO
230	Breed_Wheatland345Jefferson_Rockport765	MISO	PJM,MISO
531	Arcadian_Zion345PleasantPrairie_Zion345	MISO	PJM,MISO
532	Lakeview_282Zion138kVZion_PleasantPrarie	MISO	MISO,PJM
533	14286ZionLakeview138_Flo_ZionPleasant_Prairie345	MISO	MISO,PJM
534	Zion_Lakeview_138_flo_Zion_Arcadian345	MISO	PJM,MISO
535	Lakeview_Zion_138_flo_Zion_Arcadian345	MISO	MISO,PJM
556	StLine_Roxanna138_flo_WiltonCenter_Dumont765	MISO	PJM,MISO
1014	Lutsvle_Essx_Nmadrid_for_loss_of_Bland_Franks	MISO	SWPP,TVA,MISO
1016	LutesvilleEssexForLossOfWilhelminaNewMadridWilhelminaStFrancis	MISO	SWPP,MISO,TVA
1642	Henderson138_161_flo_Culley_Grandview138	MISO	LGEE,MISO
2022	08GIBSON_345_07MEROM5_345_1	MISO	NO
2023	07BLOMNG_345_08BLOOM_230_1	MISO	NO
2026	10NEWTVL_161_14COLE_5_161	MISO	LGEE,MISO
2034	Greentown_765_230_138_Xfm_flo_Greentown_Dumont_765	MISO	MISO,PJM
2043	07WORTH8_138_08HEOWEN_138	MISO	NO
2046	Petersburg_Lost_River_345_flo_Gibson_Bedford_345	MISO	PJM,MISO
2047	Gibson_Petersburg_345_flo_Gibson_Bedford_345	MISO	MISO,PJM
2053	Gallagher_Paddys_West_138_flo_Rockport_Jefferson_765	MISO	LGEE,MISO
2056	08GIBSON_345_ALBION_345_1	MISO	NO
2060	08BLOOM_230_07BLOMNG_345_1	MISO	NO

## MISO Coordinated Flowgates as of 1/1/2012

2062	085PTBK1_138_16FVE_T_138_1	MISO	MISO,PJM
2063	Whitestown_Guion_345_flo_Whitestown_Hortonville_345	MISO	MISO,PJM
2072	New_London_Webster_230_flo_Jefferson_Greentown_765	MISO	MISO,PJM
2077	10ABBRWW_138_14HENDR4_138_1	MISO	LGEE,MISO
2078	Cato_Petersburg_138	MISO	NO
2079	Francisco_Elliott138_flo_Duff_Xfmr	MISO	NO
2083	Culley_Grandview_138	MISO	NO
2085	Culley_Grimm_138	MISO	NO
2086	10NEWTVL_161_10NEWTVL_138_1	MISO	LGEE,TVA,MISO
2088	Culley_Dubois_138	MISO	MISO,LGEE
2102	14HOPCO5_161_5BARKLEY_161_1	MISO	LGEE,TVA,MISO
2103	16PETE_345_16THOMPS_345_1	MISO	MISO,PJM
2184	Bay_Shore_Monroe_345_flo_Lemoyne_Majestic_345	MISO	MISO,PJM
2194	14NHAR4_138_14NHAR5_161	MISO	LGEE,TVA,MISO
2224	Reynolds_345_138_Tr_flo_Dequine_Westwood_345	MISO	MISO,PJM
2232	Michigan_City_Trail_Creek_138_flo_Olive_Green_Acre_345	MISO	NO
2233	Michigan_City_Trail_Creek_138_flo_Dumont_Stillwell_345	MISO	NO
2234	Monticello_East_Winamac_138_flo_Dumont_Stillwell_345	MISO	NO
2235	Tower_Road_345_138_Tr_flo_Schahfer_345_138_Tr	MISO	NO
2236	ALLEN_LULU_345_flo_BAY_SHORE_MONROE_345	MISO	MISO,PJM
2241	MONROE_BAY_SHORE_345_FLO_LULU_ALLEN_345	MISO	MISO,PJM
2271	Wheatland_Breed_345_flo_Rockport_Sullivan_765	MISO	MISO,PJM
2272	Batesville_Xfmr3_flo_Ghent_WLexington_Brown_345	MISO	LGEE,MISO,PJM
2281	Newtonville_138_161_flo_Henderson_138_161	MISO	LGEE,MISO
2283	Bloomington_Denois_Creek_230_flo_Bedford_Columbus_345	MISO	NO
2293	Gallagher_Paddys_West_138_flo_Speed_Northside_138	MISO	LGEE,MISO,PJM
2295	A_B_Brown_Henderson_138_flo_Culley_Grandview_138	MISO	LGEE,MISO
2336	BentnHrbr_Palisades345_Cook_Palisades345	MISO	MISO,PJM
2337	Cook_Palisades345_BentnHrbr_Palisades345	MISO	MISO,PJM
2338	Cook_Palisades345_TwinBranch_Argenta345	MISO	MISO,PJM
2339	BentnHrbr_Palisades345_TwinBranch_Argenta345	MISO	MISO,PJM
2420	Colmn_Nt_Almn_161_flo_Wiln_Grn_Rvr_Stl_161	MISO	NO
2421	Hopkin_Co_Barkley_161_flo_Wilson_Green_River_161	MISO	TVA,MISO
2422	NEW_HARDINSBG_138_161_COLEMN_NATAL_161	MISO	LGEE,TVA,MISO
2423	Hardinsburg_Paradise_161_kv	MISO	NO
2427	Michigan_City_Laporte_138_flo_wilton_cntr_dumont	MISO	MISO,PJM
2434	New_Hardinsburg_161_138kv_TF3_flo_Paradise_U2	MISO	MISO,TVA
2452	08SPEED_345_138_11GHENT_345_11W_LEXN_345	MISO	LGEE,MISO
2454	Sugar_Creek_Cayuga_CT_345_flo_Wheatland_Amo_345	MISO	MISO,PJM
2455	Gibson_345_138	MISO	NO
2456	Gibson_345_138_Gibson_Pete_345	MISO	NO
2457	Cayuga_345_230_XFMR_9_flo_Cayuga_345_230_XFMR_10	MISO	PJM,MISO
2460	08CAYUGA_VDSBRG_230_08CAYUGA_FRNKFT_230	MISO	NO
2461	08GIBSON_WHEAT_345_08GIBSON_16PETE_345	MISO	NO
2462	Wheatland_Amo_345_flo_Gibson_Petersburg_345	MISO	NO
2464	Frankfort_New_London_230_flo_Veedersburg_Cayuga_230	MISO	MISO,PJM
2485	Gallagher_Paddys_West_138_flo_Trimble_Co_Clifty_Creek_345	MISO	TVA,LGEE,MISO
2497	State_Line_Wolf_Lake_138	MISO	MISO,PJM
2511	Thetford_Jewell_345	MISO	NO
2520	Dune_Acres_Mi_City138_1_flo_Wilton_Ctr_Dumont765	MISO	NO
2521	Dune_Acres_Mi_City138_2_flo_Wilton_Ctr_Dumont765	MISO	NO
2522	Dune_Acres_Mi_City138_2_flo_Dun_Acr_Mi_City138_1	MISO	PJM,MISO
2523	Dune_Acres_Michigan_City_138_1_flo_Olive_345_138	MISO	NO
2524	Dune_Acres_Michigan_City_138_2_flo_Olive_345_138	MISO	NO
2526	Duff_Dubois138_flo_Wilson_Generation	MISO	LGEE,MISO
2531	Roxana_Praxair_138kV_flo_Inland5_Marktwn_138kV	MISO	MISO,PJM
2532	Petersburg_FranCk_flo_Rockport_Jefferson	MISO	MISO,PJM
2552	Farr_Road_Tippy_138_flo_Ludington_Keystone_345	MISO	NO
2553	Marion_Renshaw_161_flo_East_W_Frankfort_345	MISO	TVA,MISO
2554	Burr_Oak_345_138_transf_flo_BurOak_Leesburg_345	MISO	MISO,PJM
2555	Leesburg_Northeast_138_flo_Leesburg_Hiple345	MISO	NO
2556	Newton_Casey_345_flo_Neoga_Casey_345	MISO	TVA,MISO,PJM
2558	Coffn_Pana345_flo_Coffn_CoffnN345_CoffnUN2_SPS	MISO	PJM,MISO
2562	NLondon_Webster_230kV_flo_Rkport_Jefferson_765kV	MISO	PJM,MISO
2563	StLine_Roxana_138kV_flo_Sheffield_345by138kV_xf	MISO	PJM,MISO
2569	Stateline_WolfLake138_flo_Burnham_Munster345	MISO	PJM,MISO
2570	Francis_Creek_Hanna_345_FLO_Nucor_Cayuga_345	MISO	PJM,MISO
2572	Mktown_Inland_Stl_5_138_flo_Wltn_Ctr_Dumont_765	MISO	MISO,PJM
2573	Mktown_Inland_Stl_5_138_flo_Mktn_InlndStl_7_138	MISO	MISO,PJM
2576	Roxana_Praxair_1_138_FLO_Mrktwn_Inlnd_Stl_7_138	MISO	PJM,MISO
2577	Roxana_Praxair_138_flo_Wilton_Center_Dumont_765	MISO	MISO,PJM
2578	Mich_City_Trail_Creek138_flo_WiltonCtr_Dumont765	MISO	NO
2579	Michigan_City_Trail_Creek_138_flo_Olive_345_138	MISO	NO

## MISO Coordinated Flowgates as of 1/1/2012

2580	Roxana_Praxair_138_flo_Roxana_Mitchell_Yard_138	MISO	PJM,MISO
2581	Roxana_Praxair_138_flo_Gary_Ave_Sheffield_345kV	MISO	MISO,PJM
2582	Monticello_East_Winamac_138_flo_Schahfer_Burr_Oak_345	MISO	PJM,MISO
2583	Monticello_East_Winamac_138_flo_Rockport_Jefferson_765	MISO	MISO,PJM
2584	Stateline_Roxana_138_flo_GaryAve_Sheffield_345	MISO	PJM,MISO
2585	Babcock_Stillwell_345_flo_WiltonCenter_Dumont_765	MISO	TVA,MISO,SWPP,PJM
2586	StateLine_Roxanna_138_flo_StateLine_WolfLake_138	MISO	MISO,PJM
2587	Stat_Ln_Rox_138_flo_WiltCntr_Dum_765_Pow5Jol_SPS	MISO	PJM,MISO
2588	Stat_Ln_Wiflk_138_flo_WiltCtr_Dum765_Pow5Jol_SPS	MISO	MISO,PJM
2590	Babcock_Stillwell_345_flo_WiltCent_Dumont_SPS	MISO	SWPP,MISO,PJM
2593	Dune_Acres_Mich_City_1_2_flo_WiltCent_Dum_SPS	MISO	PJM,MISO
2594	Roxana_Praxair_138_flo_Wilton_Center_Dumont_SPS	MISO	MISO,PJM
2595	Schahfer_BurrOak345_flo_WiltonCenter_Dumont_SPS	MISO	MISO,PJM
2596	StateLine_WolfLake_138_flo_GaryAve_345_138_Xfmr	MISO	PJM,MISO
2597	MichCity_Laporte_138_flo_wilton_cntr_dumont_SPS	MISO	PJM,MISO
2853	19001_CVTRY_345_120_MADRD_MAJTC	MISO	NO
2854	CVTRY_345_120_MON34_BRSTNN	MISO	NO
2859	BAYSHOREMONROE_345_FLO_ALLENLULU_345_LULUMAJESTIC_345andLULUMON	MISO	MISO,PJM
2863	Argenta_Battle_Creek_345_flo_Argenta_Tompkins_345	MISO	MISO,PJM
2864	Argenta_Morrow_138_flo_Argenta_Battle_Creek_345	MISO	NO
2865	Atlanta_Jct_Atlanta_138_flo_Thetford_Jewell_345	MISO	NO
2866	Cook_Palisades_345_flo_Cook_Benton_Harbor_345	MISO	MISO,PJM
2867	Delhi_Tompkins_138_flo_Argenta_Tompkins_345	MISO	NO
2868	Detroit_Industrial_Waterman_230_flo_DetroitIndustrialNavare_230	MISO	NO
2871	New_Hardinsburg_Hardinsburg_138	MISO	TVA,MISO
2880	GPC_Ratts_161	MISO	NO
2886	Hemphill_Hunters_Creek_120_flo_Hampton_Pontiac_345	MISO	NO
2887	Hemphill_Hunters_Creek_120_flo_Thetford_Jewell_345	MISO	NO
2888	Hampton_Pontiac_345_flo_Thetford_Jewell_345	MISO	NO
2889	Island_Rd_Canal_138_flo_Argenta_Tompkins_345	MISO	NO
2896	Latson_Genoa_138_flo_Thetford_Jewell_345	MISO	NO
2909	McGulpin_Riggsville_138_flo_McGulpin_Oden_138	MISO	NO
2916	Newtonville_Troy_161	MISO	LGEE,MISO
2922	Duff_Dubois138kV_flo_Duff_Ramsey345kV	MISO	NO
2925	Ghent_Fairview_138_flo_Ghent_Batesville_345	MISO	LGEE,MISO
2927	Roosevelt_Campbell_345_flo_Roosevelt_Tallmadg_345	MISO	NO
2933	10ABB345T1_FLO_GIBSON_FRANCISCO_345	MISO	MISO,LGEE
2940	Speed_345_138_Xfm_flo_Rockport_Jefferson_765	MISO	LGEE,MISO
2946	Taswell_Bedford_161	MISO	NO
2947	TASWELL_RATTS_161KV	MISO	NO
2948	Thetford_Jewell_345_flo_Hampton_Pontiac_345	MISO	MISO,PJM
2950	Tompkins_Majestic_345_flo_Oneida_Majestic_345	MISO	MISO,PJM
2952	Whiting_Custer_120_flo_Oneida_Majestic_345	MISO	NO
2953	Whiting_Custer_120_flo_Tompkins_Majestic_345	MISO	NO
2954	Wilson_Green_River_161	MISO	LGEE,TVA,MISO
2955	Worthington_GPC_161	MISO	NO
2958	Merom_Dresser_345_flo_Gibson_Petersburg_345	MISO	MISO,PJM
2959	Cayuga_Nucor_flo_Wheatlan_Amo	MISO	MISO,PJM
2960	Greentown_765_138_XFMR_1_flo_Greentown_765_230_138_XFMR_2	MISO	PJM,MISO
2961	Worthington_Owen_138_flo_Worthington_Bloomington_345	MISO	NO
2962	Greentown_765_138_XF2_flo_Grntown_Dum765	MISO	MISO,PJM
2964	Merom_Dresser_345_flo_Merom_Worthington_345	MISO	NO
2965	Gibson_Merom_345_flo_Gibson_Petersburg_345	MISO	NO
2966	Bloomington_Columbus_230_flo_Bedford_Columbus_345	MISO	NO
2967	Wabash_River_Whitesville_230_flo_Wabash_River_Clinton_230	MISO	NO
2974	Dune_Acres_Mi_City138_1_flo_Dun_Acr_Mi_City138_2	MISO	MISO,PJM
2980	Dune_Acres_Michigan_City_138_1and2floWiltonCenter_Dumont_765	MISO	MISO,PJM
2997	Cayuga_Nucor_345	MISO	MISO,PJM
2998	Gallagher_Paddys_West_138	MISO	LGEE,MISO
3006	EAU_CLAIRE_ARPIN_345_KV	MISO	MAPP,MISO
3012	PADDOCK_XFMR_1_WEMPLETON_ROCKDALE	MISO	MISO,PJM
3038	Paddock_Townline_138_flo_Paddock_Blackhawk_138	MISO	MISO,PJM
3067	SE_Wisconsin_Interface	MISO	PJM,MISO,MAPP,SWPP
3073	Wautma_PortEdwards138_flo_WernerWest_RockyRun345	MISO	NO
3075	Arpin_Sigel138_flo_Arpin_RockyRun345	MISO	NO
3102	BLAND_FRANKS_345_KV	MISO	MISO,SWPP
3103	CAHOKIA_345_138_XFMR_8	MISO	NO
3107	MONTGOMERY_SPENCER_345_KV	MISO	PJM,MISO,MAPP,SWPP
3108	OVERTON_SIBLEY_345_KV	MISO	MISO,SWPP
3109	RUSH_ISLAND_ST_FRANCOIS_345_KV	MISO	NO
3110	QUINCY_S_QUINCY_E_138	MISO	NO
3111	XENIA_MT_VERNON_345_KV	MISO	MISO,TVA,PJM
3112	DUCK_CREEK_IPAVA_345_KV	MISO	MISO,PJM

3113	NEWTON_CASEY_345_KV	MISO	MISO,TVA,PJM
3115	COFFEEN_PANA_345_KV	MISO	PJM,MISO
3116	ALBION_345_138_XFMR	MISO	NO
3117	Bland_Franks345_Rush_St_Francis_TR	MISO	MISO,SWPP
3118	ALBION_XFMR_BREED_CASEY	MISO	NO
3121	ALBION_XFMR_GIBSON_PETERSBURG	MISO	NO
3122	ALBION_XFMR_DUMONT_WILTON_CENTER	MISO	NO
3125	SIDNEY_RANTOUL_SIDNEY_MIRA_TAP	MISO	NO
3126	SIDNEY_RANTOUL_COFFEEN_PANA_KINCAID	MISO	NO
3127	TAYLORVILLE_PAWNEE_COFFEEN_PANA_KINCAID	MISO	MISO,PJM
3128	S_QUINCY_E_QUINCY_QUINCY_S_QUINC_E	MISO	NO
3129	MASON_XFMR_3_MASON_XFMR_2	MISO	NO
3130	ST_FRANC_XFMR_ST_FRANC_LUTESVILLE	MISO	NO
3131	PAWNE_AUBURN_KINCAID_LATHM	MISO	MISO,PJM
3132	MURDOCK_SIDNEY_SIDNEY_XFMR	MISO	NO
3133	LABADIE_MASON3_LABADIE_MASON4	MISO	NO
3134	MISS_TAP_ROXFRD1_MISS_TAP_ROXFRD_3	MISO	NO
3135	ALBION_CROSSVL_XENIA_MT_VERNON	MISO	NO
3138	MONTGMRY_GUTHRIE_MONTGMRY_MCCREDIE	MISO	NO
3139	PAWNEE_WEST_XFMR_PANA_KINCAID	MISO	MISO,PJM
3141	MIS_TAP3_ROXFRD_MIS_TAP1_ROXFORD	MISO	NO
3142	RAMSEY_PANA_COFFEEN_PANA_KINCAID	MISO	MISO,PJM
3144	RUSH_ST_FRANCOIS_BLANDS_FRANKS	MISO	NO
3145	Pana_xfmr_flo_Coffeen_CoffeenN345_CoffeenUN2_SPS	MISO	MISO,PJM
3146	MEREDOSIA_IND_PARK_DUCK_CRK_TAZEWL	MISO	NO
3147	MASON_CTY_MT_PLSKI_FOR_DUCK_CRK_TAZEWL	MISO	PJM,MISO
3150	Newton_345_138_2_for_Newt_Casey345	MISO	NO
3153	Clark_Xfmr_Bland_Franks	MISO	NO
3157	McCredie_Overton345_for_Bland_Franks_345	MISO	MISO,SWPP
3160	Bland_Franks_345_for_McCred_Overton_345	MISO	MISO,SWPP
3161	Auburn_Chatham_138_flo_Latham_Kincaid_345	MISO	PJM,MISO
3162	Marion_S_Marion_161	MISO	NO
3163	Renshaw_Livingston_161	MISO	NO
3164	Renshaw_Livingston_flo_E_W_Frankfort_Shawnee_345	MISO	NO
3165	S_Marion_Marion_161	MISO	NO
3167	St_Francois_Lutesville_345	MISO	SWPP,MISO,TVA
3168	St_Francis_Lutesville_345_flo_Bland_Franks_345	MISO	TVA,MISO,SWPP
3171	Gillespie_Tap_Laclede_Tap_138_flo_Coffeen_Roxford_345	MISO	MISO,PJM
3172	Havana_Ipava_138_flo_Havana_Monmouth_138	MISO	MISO,PJM
3173	Newton_Xenia_345	MISO	MISO,TVA,PJM
3174	Ottawa_Oglesby_138_flo_Hennepin_Oglesby_138	MISO	MISO,PJM
3179	EWFrankfort_Shawnee345_flo_StFranc_Lutesvil345	MISO	PJM,SWPP,LGEE,TVA,MISO
3180	WMTVernonEWFrankfort345floStFrancLutes345StFranc345_138Xfm1	MISO	TVA,LGEE,MISO,PJM
3181	Pana345_138Xfm_flo_Coffeen_Roxford345	MISO	PJM,MISO
3182	St_Francois_Lutes_345_flo_EWFnkft_Shawnee_345	MISO	PJM,TVA,SWPP,MISO
3186	WMTVernon_345_EWFrankfort_345	MISO	TVA,PJM,MISO,LGEE
3190	Pan_345by138_xf_flo_Kin_Lat_Pont_and_Kin_Paw_345	MISO	PJM,MISO
3191	Rising_345_138_xfmr_flo_Clinton_Brokaw_345kV	MISO	PJM,MISO
3193	Breed_Casey_345kV_flo_Rockport_Jefferson_765kV	MISO	PJM,MISO
3194	Pawnee_345by138_flo_Kin_Lat_Pon_345_Lat_345by138	MISO	PJM,MISO
3195	Pana_345by138kV_xfmr_flo_Kincaid_Pawnee_345kV	MISO	PJM,MISO
3196	Pana_345by138kV_xfm_flo_Kincaid_Lanesville_345kV	MISO	PJM,MISO
3197	IpavaS_Macomb_138kV_flo_Ipava_Hav_Monmouth_138kV	MISO	PJM,MISO
3198	Pana_345by138Xfr2_flo_Kncd_2101_2102_UN2_2106	MISO	MISO,PJM
3199	Lnesvle_345by138Xfr_flo_Kncd_2102_2105_UN2_2106	MISO	PJM,MISO
3240	2221_Zion_PlsPr_for_9922_Zion_Arcd	MISO	SWPP,PJM,MISO,MAPP
3242	9922_Zion_Arcad_for_2221_Zion_PlsP	MISO	SWPP,MISO,PJM
3270	State_Line_Wolf_Lake_138_flo_Burnham_Sheffield_345	MISO	MISO,PJM
3271	State_Line_Wolf_Lake_138_flo_Wilton_Center_Dumont_765	MISO	MISO,PJM
3272	StateLine_WolfLake138_flo_Sheffield345_138xfmr	MISO	PJM,MISO
3304	POWERTON_TAZEWELL_345_KV	MISO	MISO,PJM
3306	Holland_Mason138_Duck_Creek_Tazewell345	MISO	PJM,MISO
3309	Kickapoo_Holland_138	MISO	NO
3311	Powerton_Tazewell_345_flo_Powerton_Goodings_Gr_R	MISO	MISO,PJM
3312	Lnsville_345by138_xf_flo_Lnsville_Brokaw_Pon_345	MISO	PJM,MISO
3314	PrairieState_MtVernon345_flo_StFrancis_Lutesville345	MISO	PJM,MISO
3350	Renshaw_Livingston_161_for_Kelso_Joppa_345	MISO	NO
3351	Campbell_Hill_Campbell_Hill_Tap_138	MISO	NO
3352	Lanesville_345_138_xfmr_PawneeKincaidLatham	MISO	MISO,PJM
3353	Lnsville_345by138_flo_Kncaid_Pawnee_345_2106_SPS	MISO	PJM,MISO
3401	SIDNEY_XFMR_BUNSONVILLE_XFMR	MISO	MISO,PJM
3402	CAHOKIA_BALDWIN_COFFEEN_ROXFRD_TAP	MISO	NO
3403	SIDNEY_MIRA_TAP_SIDNEY_SW_CAMPUS	MISO	NO

## MISO Coordinated Flowgates as of 1/1/2012

3404	STALLINGS_XFMR_COFFEEEN_ROXFORD_TAP	MISO	NO
3405	BUNSONVILLE_EUGENE_BREED_CASEY	MISO	MISO,PJM
3406	CAHOKIA_BALDWIN_STALLING_ROXFD_TP	MISO	NO
3407	STALLING_XFMR_STALLINGS_ROXFORD	MISO	NO
3408	PANA_MOWEAQ_T_KINCAID_LATHAM	MISO	MISO,PJM
3411	SIDNEY_MIRA_SIDNEY_RANTOUL	MISO	NO
3412	FAYET_TILDEN_BALDWIN_MT_VR345_138	MISO	NO
3413	COFFN_ROXFD_IP_FOR_XENIA_MT_VRNON	MISO	PJM,MISO
3419	Xenia_MtVernon_345_for_Coffeen_Roxfd_345	MISO	TVA,PJM,MISO
3421	Rush_Isl_St_Francios_345_for_Franks_Salem_345	MISO	NO
3422	Rush_Isl_St_Francios345_for_Wfrank_Mt_Vern345	MISO	SWPP,MISO
3423	Bland_Franks_345_for_Lutes_Ess345Kelso_Guid_	MISO	MISO,SWPP
3424	Salem_W_Mt_Vernon_Xenia_W_MT_Vernon_	MISO	NO
3426	Baldwin_Cahokia_345_for_Baldw_StallingsStal_TR_	MISO	NO
3427	Campbell_Hill_Tap_Campbell_Hill_138	MISO	NO
3428	Galesburg_Xfm_2_flo_Electric_Jct_Nelson_B_345	MISO	PJM,MISO
3429	Oak_Grove_Galesburg_flo_Nelson_ElectricJct	MISO	PJM,MISO
3430	StLouis_East_Interface	MISO	SWPP,LGEE,TVA,PJM,MISO
3432	Pawnee345by138_flo_Kincaid_Lanesville345	MISO	PJM,MISO
3433	Pana345by138_flo_KncaidUnit2_Kncaid_Lnesvle345	MISO	PJM,MISO
3435	Rising_TR1_FLO_WiltonCenter_Dumont765	MISO	PJM,MISO
3436	TR2_345by138_PANA_flo_CofN_Rmsy_Hlnd345_RmsyT1	MISO	PJM,MISO
3438	PoweronJct_Lilly138_FLO_Kewanee_Toulon138	MISO	PJM,MISO
3440	Rising_XFMR_TR1_FLO_Kincaid_Latham_BlueMound345	MISO	PJM,MISO
3441	PoweronJct_Lilly138_flo_DuckCreek_Tazewell_345	MISO	PJM,MISO
3442	Rising_XFMR_TR1_flo_Dresden_Pontiac345	MISO	PJM,MISO
3443	Coffeen_N_Rmsy345flo_PraireSt_W_MtV345W_MtV_TR4	MISO	PJM,MISO
3445	GooseCreek_Rising_345_FLO_Loretta_WiltonCtr_345	MISO	PJM,MISO
3446	Tazewell_345_138kv_T1_flo_Tazewell_345_138kv_T2	MISO	PJM,MISO
3447	Hennepin_LTV_Stl_138_flo_Duck_Crk_Tazewell_345	MISO	PJM,MISO
3448	Flint_E_Peoria_138kv_flo_Edwards_Keystone_138kv	MISO	PJM,MISO
3449	IP_1352_Powerton_JCT_FLO_Clinton_Unit_1	MISO	PJM,MISO
3450	IP_1352_Pwr_Jct_flo_Nelson_Electric_Jct	MISO	PJM,MISO
3451	Edwards_Kewan_138_FLO_Pwrton_Goodings_R_345_SPS	MISO	MISO,PJM
3452	OAKGROVE_GALESBURG161_flo_STERLING_STL_NELSON345	MISO	MISO,PJM
3454	Ottawa_Tap_Oglesby_138_FLO_Kewanee_CrescentR_138	MISO	MISO,PJM
3455	Ottawa_Tap_Oglesby138_FLO_Kewan_IP_Kewan_CE_138	MISO	PJM,MISO
3456	Coffeen_North_Ramsey_345_flo_Newton_Casey_345	MISO	PJM,MISO
3457	Rantoul_Rantoul_J138_flo_Loretta_WiltonCenter345	MISO	PJM,MISO
3458	Rantoul_RantoulJct138_FLO_WiltonCenter_Dumont765	MISO	PJM,MISO
3459	PrairieState_WestMtVernon_FLO_CoffeenRoxford345	MISO	PJM,MISO
3460	BUNSONVILLESIDNEY345IP4501FLOCASEYBREED345	MISO	MISO,PJM
3461	RantoulJct_Sidney138_FLO_Rising_N_Champaign_Mahomet138	MISO	MISO,PJM
3462	Brokaw_N_Leroy_138_FLO_Clinton_Oreana_GooseCrk_345	MISO	MISO,PJM
3463	Rantoul_RantJct_138_flo_NChmpgn_Mahmet_Rsng_138	MISO	MISO,PJM
3464	Edwds_Kewan_138kv_flo_dk_Crk_Tazewell_345kv_AMRN	MISO	PJM,MISO
3465	Rtl_Rtl_JCT_138_AMN_FLO_Clitn_Brk_345_Brk_T2_AMN	MISO	PJM,MISO
3466	Marblehead_N_161_138_xf_FLO_Hills_Sub_T_Louisa	MISO	NO
3467	St_Louis_South_Interface	MISO	MISO,PJM,TVA,SWPP
3468	Brokaw_StateFarm138_FLO_SBloomington_Brokaw138	MISO	PJM,MISO
3469	Rantl_RantJct138_FLO_WiltonCenter_Dumont765_SPS	MISO	MISO,PJM
3470	Rising_TR1_FLO_WiltonCenter_Dumont765_SPS	MISO	PJM,MISO
3471	Brokaw_Cornbelt_138_FLO_Clinton_Oreana_GooseCrk_345	MISO	PJM,MISO
3472	LanesvilleXFMR_flo_Kncid_Latam_Blu_Mnd_LathamXF	MISO	PJM,MISO
3473	Brokaw_Cornbelt138_FLO_Pontiac_Bluemound345	MISO	MISO,PJM
3518	BUTLER_GRANVILLE_ARCADIAN_GRANVILLE	MISO	NO
3529	N_Appleton_WrnrWest_345kv	MISO	PJM,MISO,MAPP,SWPP
3532	Ellington_Hintz_138_flo_NAppleton_WernerWest_345	MISO	NO
3537	Kenosha_Lakeview_138_for_PleasPr_Zion_345	MISO	PJM,MISO
3557	PleasPrairie_Arcadian138_FLO_PleasPrairie_Racine345	MISO	MISO,PJM
3558	PleasPrairie_Arcadian345_FLO_Zion_Arcanian345	MISO	MISO,PJM
3567	Flow_South	MISO	NO
3570	PleasantPrairie_ZionCherryValley_SilverLakeR	MISO	MISO,PJM,MAPP,SWPP
3571	Pleasant_Prairie_Zion_345_flo_Zion_Arcadian_345	MISO	SWPP,PJM,MISO,MAPP
3587	Zion_Pleasant_Prairie_345	MISO	PJM,SWPP,MAPP,MISO
3595	Pleasant_PrairieRacine_345Pleasant_PrairieArcadian	MISO	MISO,PJM
3596	Fox_RiverEC_ForestJct345_flo_PtBeach_ForestJct34	MISO	NO
3598	Werner_WhiteLake138_flo_WernerWest_RockyRun345	MISO	NO
3599	SW_Wisconsin_Interface	MISO	PJM,MISO,MAPP
3629	N_Fond_du_Lac_Aviation_138kv_FLO_Fitzgerald_345_138_xfmr	MISO	NO
3638	Rivrmnes_NFarmngton138_flo_StFranc_Lutville345	MISO	NO
3639	StFrancois_xfmr2_flo_StFrancois_Lutesville345	MISO	NO
3640	StFrancois_xfmr1_flo_StFrancois_xfmr2	MISO	NO

## MISO Coordinated Flowgates as of 1/1/2012

3641	Schahfer_BurrOak345_flo_WiltonCenter_Dumont765	MISO	PJM,MISO
3645	Cumberland_Bush_138_FLO_Westwood_Tippecanoelabs_138	MISO	MISO,PJM
3646	Nucor_Whitestown_345_flo_Rockport_Jefferson_765	MISO	PJM,MISO
3647	Cumberland_Bush_138_flo_Rockport_Jefferson_765	MISO	PJM,MISO
3648	Cumberland_Bush_138_FLO_Westwood_LafayetteCat_138	MISO	PJM,MISO
3649	Cumberland_Bush_138_FLO_Cayuga_Veedersburg_230	MISO	PJM,MISO
3650	Westwood_345_138_TR2_FLO_Olive_MeadowLake_345	MISO	MISO,PJM
3651	Westwood_345_138_TR2_FLO_Cayuga_Eugene_345	MISO	PJM,MISO
3652	Bush_Lafayette_FLO_Cayuga_Veedersburg_230	MISO	PJM,MISO
3653	Bush_Lafayette_FLO_Westwood_LafayetteCat	MISO	MISO,PJM
3654	Bush_Lafayette_FLO_Westwood_Tippecanoelabs_138	MISO	PJM,MISO
3655	BushLafayette_FLO_RockportJefferson	MISO	PJM,MISO
3656	Cayuga_345_230_Bank_10_FLO_Jefferson_Rockport765	MISO	MISO,PJM
3657	Overton345_161XF_FLO_Montgmry_McCredi_Overton345	MISO	MISO,SWPP
3658	Purdue_LafyetCin_138_FLO_Westwood_Tippecanoelabs_138	MISO	PJM,MISO
3659	LafCin_LafyetCat_138_FLO_Westwood_Tippecanoelabs_138	MISO	PJM,MISO
3661	Cumberland_Bush_138kV_flo_Cayuga_Cayuga3_345kV	MISO	MISO,PJM
3662	WLafayette_Cumberland_138_flo_Cayuga_Cayuga3_345	MISO	MISO,PJM
3663	W_Lafayette_Cumberland_138_flo_Cayuga_Eugene_345	MISO	MISO,PJM
3665	WLafayte_Cmbrlnd138_FLO_Wstwood_Tippcanoelbs138	MISO	PJM,MISO
3706	Arnold_Hazleton_	MISO	SWPP,MISO,MAPP,PJM
3707	Lore_Turkey_River_161_flo_Wempletown_Paddock_345	MISO	NO
3714	Lakefield_Jct_Fox_Lk_161_for_Arnold_Hazelton_345_	MISO	NO
3715	Quad_Cities_Rock_Creek_345_MEC_Cordova_Sub_39	MISO	MISO,PJM
3716	Rock_Creek_345_161_TR_for_Quad_Sub_91_345_	MISO	MISO,PJM
3717	Rock_Creek_Dewitt_161_Quad_Cities_Sub91_345_	MISO	NO
3718	RockCreek_Dewitt_161_for_meccord3_sub39_345kV_	MISO	NO
3719	Salem_345_161_flo_Quad_Cities_Sub_91_	MISO	MISO,PJM
3720	Salem_345_161_TR_for_MEC_Cordova_Sub_39_345kV_	MISO	MISO,PJM
3721	Salem_345_161_for_Quad_Sub_91_TR_	MISO	MISO,PJM
3724	Arnold_Vinton_161_for_DArnold_Hazleton_345_	MISO	MISO,MAPP
3725	Sub_56_Davnprt_ECalamus161_for_Quad_RockCr345_	MISO	MISO,PJM
3726	Ames_BooneJct_115_for_Montezuma_Bondurant_345_	MISO	NO
3727	Lakefield_Fox_Lk_161_for_Lakefield_LGS_345_	MISO	NO
3728	Dysart_Washburn_161_for_DArnold_Hazleton_345_	MISO	MISO,MAPP
3729	Bondurant_BooneJct_161_for_Sycamr_Lehigh_345_	MISO	MAPP,MISO
3730	Bondurant_BooneJct_161_for_Lehigh_Webster_345_	MISO	MAPP,MISO
3731	Lakefield_Jct_Fox_Lake_161_flo_Lakefield_Jct_Triboji_161	MISO	NO
3733	Hazleton_Dundee_161_Eau_Claire_Arpin_345_	MISO	NO
3734	ECalamus_Calamus_115_for_Arnold_Tiffin_345_	MISO	NO
3735	Cayler_Triboji161_flo_Raun_Lakefield345_	MISO	MISO,MAPP
3736	Salem_345_161_flo_Wempletown_Paddock_345_	MISO	MISO,PJM
3737	Alliat_Hills_345_161_Xfmr_flo_Tiffin_Duane_Arnold_345_	MISO	MISO,MAPP
3738	8th_St_Lore_161_flo_Wempletown_Paddock_345_	MISO	NO
3739	8th_St_Lore_161_flo_Arnold_Hazleton_345_	MISO	NO
3742	Lime_Creek_Emerly_161_flo_Lehigh_Webster_345_	MISO	MISO,MAPP
3744	Vinton_Dysart_161_flo_Arnold_Hazelton_345_	MISO	MISO,MAPP
3745	Lime_Creek_Emerly_161_flo_Adams_Hazleton_345_	MISO	MISO,MAPP
3746	Salem_Julian_Center_161_flo_Wempletown_Paddock_345_	MISO	NO
3747	Lakefield_Fox_lake_161_flo_Lakefield_Wilmarth_345_	MISO	NO
3752	Salem_345_161_XFMR_flo_Tiffin_Arnold_345_	MISO	MISO,MAPP
3753	Salem_345_161_XFMR_flo_Hills_Tiffin_345_	MISO	MISO,MAPP
3755	Alliant_Hills_345_161_XFMR_flo_Duane_Arnold_Unit	MISO	NO
3756	Emerly_Lime_Creek_161_flo_Emerly_Floyd_161	MISO	MAPP,MISO
3757	Rock_Creek_345_161_XFMR	MISO	MISO,PJM
3758	Hzlton_345by161_xf_21_flo_Hzlton_345by161_xf_22	MISO	MISO,MAPP
3760	Dnmark_Henry_County_161_flo_Hills_Mntezuma_345_	MISO	NO
3763	Quad_Cities_Rock_Creek_345kV	MISO	PJM,MISO
3764	FoxLk_Rutland_161kV_flo_LkfldGS_Wilmarth_345kV	MISO	MISO,MAPP
3765	Rutland_Winbago_161kV_flo_LkfldGS_Wilmarth_345kV	MISO	MISO,MAPP
3766	Dundee_Hazleton161_flo_Arnold_Hazleton345	MISO	MAPP,MISO
3767	Presque_Isle_Generation_Injection	MISO	NO
3769	Overton345_161XFM_flo_KingdomCity345_161XFM	MISO	NO
3771	PleasantPrairie_Zion_345kV	MISO	SWPP,MISO,MAPP,PJM
3773	Beaver_Channel_Albany_161_flo_Cordova_Nelson_345_	MISO	PJM,MISO
3800	Paris_Albers138kV_flo_Plsant_Prairie_Racine345kV	MISO	PJM,MISO
3802	NAppleton_Fox345_flo_NAppleton_Kewaunee345	MISO	NO
3803	Saukville_PleasantValley138_flo_Jeffrsn_Rockdle138	MISO	NO
3804	Saukville_PleasantVally138_flo_Saukville_Bartn138	MISO	NO
3805	Empire_Forsyth138_flo_DeadRiver_Plains345	MISO	NO
3807	Coffeen_PanaNorth345_flo_Holland_Neoga345	MISO	PJM,MISO
3808	Northpoint_RockyRun115_flo_GardPark_RockyRun345	MISO	NO
3809	Whiting_Hoover115_flo_RockyRun_WernerWest345	MISO	NO

## MISO Coordinated Flowgates as of 1/1/2012

3810	WernerW_Werner138_flo_WernerW_NAppleton345	MISO	NO
3811	Whitcomb_Caroline115_flo_RockyRun_WernerWest345	MISO	NO
3812	Indian_LakXF_T2_flo_Indian_LakeXF_T1	MISO	NO
3813	Straits_PRiver6905_flo_Hiawatha_Strait9902	MISO	NO
3814	McGulpin_Straits138kV	MISO	NO
3815	Straits_PRiver6904_flo_Straits_Hiawath9902	MISO	NO
3816	PtBeach_Sheboygan345_flo_Eggewater_Saukville345	MISO	NO
3817	PtBeach_Sheboygan345_flo_Cypress_Arcadian345	MISO	NO
3818	Cypress_Arcadian345_flo_Sheboygan_Granville345	MISO	NO
3819	ForestJt_Cypress345_flo_PtBeach_Sheboygan345	MISO	NO
3820	Plains_Arnold138_flo_DeadRiver_Plains345	MISO	NO
3821	Winona_Twin_Lakes_69_flo_Atlantic_138_69_fr_T1	MISO	NO
3824	PleasantPrairie_Zion_345_flo_ElmRoad_Arcadian345	MISO	MAPP,MISO,PJM,SWPP
3825	ATC_Presque_Isl_Area_Import_Interface	MISO	NO
3826	Kenosha_Lakeview138_flo_Arcadian_Zion345	MISO	MISO,PJM
6001	NDEX	MISO	SOCO,MISO
6002	MHEX_S	MISO	MISO,MAPP
6003	MHEX_N	MISO	MISO,MAPP
6012	PRI_BYN	MISO	MISO,MAPP
6060	D602F_500KV	MISO	MISO,MAPP
6061	R50M_230KV	MISO	NO
6072	L20D_230kV	MISO	MISO,MAPP
6100	MHEB_SPC_W	MISO	NO
6112	ByronMapleLeaf_161_flo_Byron_Pleasant_Valley_345	MISO	MISO,MAPP
6113	ByronMapleLeaf_161_flo_Pleasant_Valley_Adams_345	MISO	MISO,MAPP
6114	Wabaco_Alma_161_flo_Prairie_Island_Byron_345	MISO	MISO,MAPP
6116	Alma_Elk_Mound_161_kV_flo_King_Eau_Claire_345kV	MISO	NO
6120	Glenboro_Rugby_230kV_line_G82R_South_Flow	MISO	MISO,MAPP
6124	Tiffin_Arnold_345kV	MISO	SWPP,MISO,MAPP
6134	MH_ONT_W	MISO	NO
6135	MH_SPC_E	MISO	NO
6138	Rugby_Glenboro_230kV_line_G82R_North_Flow	MISO	MISO,MAPP
6142	MH_ONT_E	MISO	NO
6151	Adams_345_161_flo_Hazleton_Adams_345_	MISO	MAPP,MISO
6160	LaVerendry_Letellier_230kV_line_Y51L	MISO	MISO,MAPP
6164	Plymth_Sioux_City_161_flo_Raun_Sioux_City_345	MISO	MISO,MAPP
6168	Hills_Parnell_161kV_flo_Hills_Montezuma_345kV	MISO	NO
6172	Coal_Creek_Stanton_flo_Coal_Creek_Tap_Stanton	MISO	MAPP,MISO
6173	Coal_Creek_Tap_Coal_Creek_flo_Coal_Creek_Stanton	MISO	NO
6174	Coal_Creek_Tap_Stanton_flo_Coal_Creek_Stanton	MISO	MAPP,MISO
6175	Wabaco_Rochester161_FLO_PrairieIsland_Byron345	MISO	NO
6181	Reasnor_DesMoines_161_flo_Montezuma_Bondurant_345	MISO	MAPP,MISO,SWPP
6183	QuadSub91	MISO	SWPP,PJM,MISO,MAPP
6184	CoordovaSub39	MISO	SWPP,PJM,MISO,MAPP
6185	Sub92Hills_LouisaSubstation	MISO	SWPP,PJM,MISO,MAPP
6186	Genoa_Lacrosse_Tap_161_flo_Genoa_Coulee_161	MISO	MISO,MAPP
6187	Adms_Rchstr_161_flo_Byrn_PVS_Adms_Adms_345by161	MISO	MISO,MAPP
6188	Adams_Rochester_161_flo_Byron_345by161	MISO	MISO,MAPP
6189	Adams_Rochester_161_FLO_Byron_Pleasant_Valley345	MISO	MISO,MAPP
6190	Hazleton_Black_Hawk161_FLO_Hazleton_Washburn161	MISO	MISO,MAPP
6192	Arrowhead_StoneLake345kV	MISO	MISO,MAPP
6193	MWEX	MISO	SWPP,MISO,MAPP
6195	Sub91_TR1_345_161_FLO_Cordova_Sub39_345	MISO	MISO,PJM
6196	Lansing_Genoa161_FLO_Harmony_Genoa161	MISO	MAPP,MISO
6197	Bondurant_Sycamore345_flo_GDMEC_SEPolk345	MISO	SWPP,PJM,MISO,MAPP
6200	Adams_BeaverCreek_FLO_MitchellCounty_Hazleton345	MISO	MISO,MAPP
6201	Rochester_Wabaco161_FLO_JPMUnit	MISO	NO
6202	Rochester_Wabaco161_FLO_King_EauClaire_Arp34	MISO	NO
6203	Adams_Beaver_Creek161_FLO_Genoa_unit3	MISO	MISO,MAPP
6206	Hazleton_Washburn161_FLO_Hazleton_BlackHawk161	MISO	MISO,MAPP
6207	Sub_39_345_161_Xfmr_flo_Quad_Rock_Creek_345	MISO	PJM,MISO
6208	Sub_39_345_161_Xfmr_flo_Quad_Oak_Grove_345	MISO	MISO,PJM
6209	Sub_39_345_161_Xfmr_flo_Quad_Sub_91_345	MISO	PJM,MISO
6210	Drayton_Letellier_230kV_L20D_North_Flow	MISO	MISO,MAPP
6211	Glenboro_Cornwallis_230_FLO_Tioga_Boundary_230	MISO	MISO,MAPP
6212	Glenboro_Cornwl_G37C_FLO_Forbes_Roseau_Dorsey	MISO	NO
6213	Rugby_Glenboro_230_FLO_Dorsey_Roseau_Forbes_500	MISO	MAPP,MISO
6214	BungeHastings_161kV_FLO_Cooper_StJoe_345kV	MISO	MAPP,SWPP,MISO
6227	Webster_345_161kV_flo_Raun_Lakefield_345kV	MISO	MISO,MAPP
6228	Webster_TR_345_161kV_flo_Arnold_Tiffin_345_kV	MISO	MAPP,MISO
6229	Oakgrove_Galesburg_161_FLO_Cordova_Nelson_345	MISO	MISO,PJM
9021	AEP_METC	MISO	PJM,MISO
6085	Genoa_Coulee_FLO_Genoa_LaCrosse_Marshland_161	MISO	NO

## MISO Coordinated Flowgates as of 1/1/2012

7009	ONT_FRONTIER	ONT	NO
7101	BLIP_Buchanan_Longwood_Input	ONT	NO
7102	QFW_Queenston_Flow_West	ONT	NO
7104	NEGATIVE_Blip_Negative_Buch_Lgwd_Input	ONT	NO
7106	FRONTIER_ONT	ONT	NO
9084	ITC_ONT	ONT	NO
9156	NYIS_ONT	ONT	NO
9159	ONT_ITC	ONT	NO
9160	ONT_NYIS	ONT	NO
280	CliftyCr_Drborn_345kV_flo_Jefferson_Grtwn_765kV	OVEC	NO
2000	CliftyCrk_Dearborn1_345_lo_HangRock_Jefferson765	OVEC	NO
2069	08BUFTN1_345_06DEARB2_345_1	OVEC	NO
2070	08BUFTN1_345_06PIERCE_345_1	OVEC	NO
2089	Clifty_Creek_Trimble_County_345	OVEC	NO
53	AEP_DOM_flo_Pruntytown_MtStorm500kV	PJM	PJM,MISO
54	AEP_DOM_flo_Culloden_Wyoming765kV	PJM	PJM,MISO,SWPP
56	AEP_DOM_flo_Bedington_BlackOak500kV	PJM	PJM,MISO
57	AEP_DOM_flo_Cloverdale_Jacksons765kV	PJM	PJM,MISO,SWPP
58	AEP_DOM_flo_Cloverdale_765_345_T10_PRESEC	PJM	PJM,MISO
59	AEP_DOM_Interface	PJM	PJM,MISO
111	Sammis_Wylie_Ridg_345_kV_line_l_o_Perry_Ashtabula_Erie_West	PJM	MISO,PJM
114	Sammis_WylieRidge345_FLO_Tidd_Collier345	PJM	PJM,MISO
204	Olive_345_138_Xfm_flo_Olive_Cook345	PJM	PJM,MISO
220	Dumont_765_345_DumontWilton_Center_765	PJM	MISO,PJM
250	Culloden_Wyoming765_flo_Baker_Broadford765	PJM	SWPP,PJM,MISO
282	KygerCreek_Sporn345_kV	PJM	PJM,MISO
499	Lrtto_Wiltctr_345kV_flo_Pntc_Drsdn345_Pntc_TR82	PJM	PJM,MISO
500	Pontiac_Wilton_Ctr_345_Pontiac_Dresden_345	PJM	TVA,MISO,PJM
501	PntiacWiltonCenter345_flo_DresdenElectricJct345	PJM	PJM,MISO
503	Lee_Byron345_flo_Nelson_ElectricJunction345	PJM	SWPP,PJM,MISO,MAPP
504	Lee_Nelson_345	PJM	PJM,MISO
505	Cordova_Nelson_345_Quad_CitiesH471_345	PJM	MAPP,SWPP,PJM,MISO
506	Nelson_345_138_xfmr_84_Nelson_345_138_xfmr_82	PJM	MISO,PJM
507	Nelson_345_138_xfmr_82_Nelson_345_138_xfmr_84	PJM	MISO,PJM
508	Nelson_Dixon15507_flo_Nelson_ElectricJunction345	PJM	MISO,PJM
510	Mareng_PValley138_flo_CherryValley_SilverLake345	PJM	PJM,MISO
512	QuadCities_Cordova345_flo_QuadCities_H471	PJM	PJM,MISO
513	QuadCities_Cordova345_flo_155Nelson_H471_15504	PJM	PJM,MISO
514	Cordova_Nelson345_flo_H471_Nelson345	PJM	PJM,MISO
519	Dixon_McGirrRd_138kV_flo_Nelson_ElectJct_345kV	PJM	MISO,PJM
520	E_Frankfort_GoodingsGr345B	PJM	MISO,PJM
521	E_Frankfort_GoodingsGr345_R	PJM	MISO,PJM
522	EFrankfort_Crete345_flo_Dumont_WiltonCenter765	PJM	MISO,PJM
523	EFrank_Crete345_flo_Braidwd_DavisCrk_DavisTR83	PJM	PJM,MISO
536	Waukegan_Zion138_flo_Zion_Arcadian345	PJM	PJM,MISO
540	PoweronJct_Pow_138kV_flo_Hava_Cant_Monmo_138kV	PJM	PJM,MISO
546	Waukegan_Zion_138kV_flo_Zion_PIPrairie_345kV	PJM	PJM,MISO
547	Zion_Waukegan138_flo_Zion_Pleasant_Prairie345	PJM	PJM,MISO
549	DresdnElwood1222_345_flo_DresdnElectric1223_345	PJM	PJM,MISO
552	CherryValley_SilverLake15616_345kV_line	PJM	PJM,MISO
554	Wilton_Center_xfmr_flo_Wilton_Center_Collins	PJM	PJM,MISO
555	EFrankfort_Crete345_flo_Wilto_Collins765_TR93	PJM	PJM,MISO
557	EFrankfort_Crete345_flo_EFrankfort_UParkNorth345	PJM	PJM,MISO
562	Wilton_Center_TR94_765_345_kV	PJM	MISO,PJM
563	Wilton_Center_TR93_765_345_kV	PJM	MISO,PJM
565	CherryVly_SlrLake_345_lo_Wempletown_Rockdal_345	PJM	PJM,MISO
2005	05MARYSV_05E_LIMA_345_MARYSV_SWLIMA_345	PJM	MISO,PJM
2032	Cayuga_Eugene_345_flo_Cayuga_Nucor_345	PJM	MISO,PJM
2055	Pierce_Foster_345_flo_Stuart_Foster_345	PJM	EKPC,MISO,PJM,LGEE
2131	Sammis_Wylie_Ridge_345	PJM	MISO,PJM
2197	Kyger_Sporn345_for_Amos_765_345XFMR	PJM	MISO,PJM
2259	Sammis_Wylier_345_flo_Kam_Har_FtM_3_Term_line_500	PJM	MISO,PJM
2261	Sammis_Wylier_345_flo_Sammis_S_Canton_345	PJM	MISO,PJM
2278	Avon_Beaver_345_1_flo_Avon_Beaver_345_2	PJM	MISO,PJM
2280	Bay_Shore_Fostoria_345_flo_Lemoine_Fostoria_345	PJM	MISO,PJM
2282	Beaver_Davis_Besse_345_flo_Galion_Fostoria_345	PJM	MISO,PJM
2286	Burnham_Munster_345_flo_Dumont_Wilton_Center_765	PJM	MISO,PJM
2288	Burnham_Sheffield345_flo_Dumont_WiltonCenter765	PJM	MISO,PJM
2299	Dumont_Stillwell_345_flo_Dumont_Wilton_Center_765	PJM	SWPP,PJM,MISO
2314	DAVIS_BESSE_BAY_SHORE_345_flo_DAVIS_BESSE_LEMOYNE_345	PJM	MISO,PJM
2315	DAVIS_BESSE_LEMOYNE_345_flo_DAVIS_BESSE_BAY_SHORE_345	PJM	MISO,PJM
2316	ALLEN_345_138_Tr_flo_MONROE_BAY_SHORE_345	PJM	PJM,MISO
2340	TwinBranch_Argenta345_Cook_Palisades345	PJM	MISO,PJM

## MISO Coordinated Flowgates as of 1/1/2012

2341	Twin_Argenta_345_Robison_Park_Argenta_345	PJM	PJM,MISO
2349	TwnBrnchArgnta345_flo_CookPalisd_CookBntnHrbr345	PJM	PJM,MISO
2377	Darwin_Eugen_345_flo_Jefferson_Rockport_765	PJM	PJM,MISO
2378	Breed_Darwin345kV_flo_Jefferson_Rockport765kV	PJM	PJM,MISO
2381	TwinBranch_Argenta345_flo_BentHarbor_Palisade345	PJM	PJM,MISO
2400	DUMONT765_345TX_COOK765_345TX	PJM	MISO,PJM
2401	DUMONT765_345TX_DUMONT_WILTON_C_765	PJM	MISO,PJM
2412	Waterford_Muskingum_345_kv_Mountaineer_Belmont_765_kv	PJM	MISO,PJM
2417	J_Ferry_Antioch_500kV_Broadford_Sullivan_500_kv	PJM	EKPC,PJM,MISO
2428	Crete_StJohn_flo_Burnham_Munster	PJM	PJM,MISO
2429	Crete_StJohn_flo_Burnham_Sheffield	PJM	MISO,PJM
2430	CreteStJohn345_flo_BurnhmMunstr345WltoDumont765	PJM	MISO,PJM
2431	CreteStJohn345_flo_BurnhmShfeld45WltoDumont765	PJM	MISO,PJM
2432	Crete_StJohns_flo_Wltn94xfmr_WltnColns_WltnDumon	PJM	PJM,MISO
2471	Avon_Beaver_2_345_flo_Avon_Beaver_1_345	PJM	PJM,MISO
2513	Monroe_Bay_Shore_345	PJM	MISO,PJM
2516	Burnham_Munster345	PJM	MISO,PJM
2530	Pierce_Beckjord138_ckt1889_flo_Pierce_Foster345	PJM	MISO,PJM
2566	MiamiFt_345by138kV_xf9_flo_Tanner_Drborn_345kV	PJM	PJM,MISO
2568	Pierce_Foster345_FLO_KygerCreek_Sporn345	PJM	LGEE,PJM,MISO,EKPC
2873	Fostoria_Lemoyne_345_flo_Davis_Besse_Lemoyne_345	PJM	MISO,PJM
2875	Galion_Fostoria_345_flo_Beaver_Davis_Besse_345	PJM	MISO,PJM
2908	Miami_Fort_345_138_Xfm_flo_East_Bend_Terminal_345	PJM	MISO,PJM
2951	Twin_Branch_Argenta_345_flo_CookB_Harbor_345	PJM	MISO,PJM
2968	Miami_Fort_345_138_Xfm_9_flo_Zimmer_Unit_1	PJM	MISO,PJM
2969	Miami_Fort_345_138_Xfm_9_flo_Jefferson_Hanging_Rock_765	PJM	MISO,PJM
2975	Crete_St_Johns_Tap_345_kv_I_o_Dum_Wi_Cent_765_kv	PJM	MISO,PJM
2981	Wylie_Ridge_Sammis_345	PJM	MISO,PJM
2982	Bay_Shore_Monroe_345	PJM	MISO,PJM
2983	Beaver_Davis_Besse_345	PJM	MISO,PJM
2986	Davis_Besse_Beaver_345	PJM	MISO,PJM
2996	Pierce_Foster_345	PJM	EKPC,LGEE,MISO,PJM
3202	Wilton_Center_Dumont_765kV	PJM	SWPP,PJM,MISO
3216	0621_Byron_ChV_B_for_0622_Byr_ChV_R	PJM	MISO,PJM
3217	0621_Byron_ChV_B_for_0624_Byr_Wemp	PJM	PJM,MISO
3218	0622_Byron_ChV_R_for_0621_Byr_ChV_B	PJM	MISO,PJM
3222	11601_EFrk_GoodiB_for_11602_EF_GG_R	PJM	MISO,PJM
3223	11602_EFrk_GoodiR_for_11601_EF_GG_B	PJM	MISO,PJM
3227	0404_Quad_H471_for_15503_Cordo_Nelson	PJM	MAPP,SWPP,PJM,MISO
3228	0403_Quad_Cord_Nelson_for_0404_Quad_H471	PJM	SWPP,MISO,PJM
3245	15616_Cher_Silv_for_15502_Nels_EJ	PJM	MAPP,PJM,SWPP,MISO
3250	15502_Nels_EJ_for_15616_Cher_Silv	PJM	MAPP,PJM,SWPP,MISO
3252	11622_Elwd_GG_R_345_for_1223_Dres_EJ_R_Dres_Tr_81	PJM	MISO,PJM
3261	Nelsn_RckFl15509_138_flo_Nels_ElctrJntn15502_345	PJM	PJM,MISO
3268	Munster_Burnham345_flo_Dumont_WiltonCenter765	PJM	MISO,PJM
3274	Nelson_ElectricJct345_flo_Byron_CherryValley345	PJM	MAPP,PJM,MISO,SWPP
3275	Burnham_Munster345_flo_Dumont_Wilton_Center_SPS	PJM	PJM,MISO
3276	Brnhm_Shfld345_flo_Dmnt_WilCtr765_Pwrtn5_Joliet7	PJM	MISO,PJM
3277	Crete_StJhn345_flo_Dmnt_WilCtr765_Pwrtn5_Joliet7	PJM	MISO,PJM
3278	Dumont_Xfmr2_flo_Dumont_WilCtr765_Pwrtn5_Joliet7	PJM	PJM,MISO
3279	Dumont_Xfmr1_flo_Dumont_WilCtr765_Pwrtn5_Joliet7	PJM	MISO,PJM
3280	Dumont_Stil345_flo_Dmnt_WilCtr765_Pwrtn5_Joliet7	PJM	MISO,SWPP,PJM
3281	Mnstr_Brnhm345_flo_Dmnt_WilCtr765_Pwrtn5_Joliet7	PJM	PJM,MISO
3282	Shfld_Brnhm345_flo_Dmnt_WilCtr765_Pwrtn5_Joliet7	PJM	MISO,PJM
3283	Stil_Dumont345_flo_Dmnt_WilCtr765_Pwrtn5_Joliet7	PJM	SWPP,PJM,MISO
3284	Byron_CherryValley345_flo_ByronUnit2	PJM	PJM,MISO
3285	EFrnk_Crete345_flo_Dmnt_WilCtr765_Pwrtn5_Joliet7	PJM	PJM,MISO
3431	Stillwell_Dumont345_flo_WiltonCenter_Dumont765	PJM	MISO,PJM
3642	Pierce_Foster345_FLO_EastBend_Terminal345	PJM	PJM,MISO
3643	ToddHunter_Trenton138_flo_Wmilton_Miami345_XFMR	PJM	PJM,MISO
3644	Toddhunter_Trenton138_flo_TannersCreek_Xfmr_AB	PJM	PJM,MISO
3664	MiamiFort_345_138_BK10_FLO_TannersCreek_Dearborne_1_345	PJM	MISO,PJM
1510	8NORCROS_500_80CONEE_500_1	SOCO	NO
1035	NODAWAY_MARYVILLE_161_STJOSEPH_MIDWAY_161	SWPP	SWPP,MISO
1321	ANO_FtSmith_FLO_Pleasant_Hill_ANO	SWPP	NO
5022	LacNeoLanWic	SWPP	MISO,SWPP
5050	SjHaLkNalaSc	SWPP	MAPP,MISO,SWPP
5221	RedWillMingo	SWPP	SWPP,MISO
5228	laScLkNaSjHa	SWPP	MAPP,MISO,SWPP
5393	latan_XFMR_345_161_FLOlatan_Stranger_Creek_345	SWPP	SWPP,TVA,MISO
5400	Strangr_Craig_345_flo_StJoe_Hawthorn_345	SWPP	SWPP,TVA,MISO
6006	GGs	SWPP	SWPP,MISO,MAPP
6007	GENTLMN3_345_REDWILO3_345_1	SWPP	SWPP,MISO,MAPP

## MISO Coordinated Flowgates as of 1/1/2012

6008	GRIS_LNC	SWPP	SWPP,MISO,MAPP
6009	COOPER_S	SWPP	SWPP,MAPP,PJM,MISO
6014	FTCAL_S	SWPP	SWPP,MISO,MAPP
6030	Nebraska_City_Cooper_345kV	SWPP	SWPP,MISO
6034	RAUN_TEKAMAH_161KV	SWPP	SWPP,MISO
6102	St_Joe_Midway_161kV	SWPP	SWPP,MISO
6104	Iatan_St_Joe_345kV	SWPP	SWPP,MISO
6126	S1226_Tekamah_161kV_flo_S3451_Raun_345kV	SWPP	SWPP,MISO,MAPP
6146	Tekamah_Raun_161kV_flo_Sub_3451_Raun_345kV	SWPP	SWPP,MISO,MAPP
6147	Sub_3451_Raun_345kV	SWPP	SWPP,MISO
6152	SJoe_Mdw_161_flo_Frprt_Cooper_and_Frprt_SJoe_345	SWPP	SWPP,MISO
1023	Volunteer_PhippsBnd500_FLO_Jefferson_Rockport765	TVA	LGEE,SWPP,PJM,TVA,MISO
1024	Volunteer_PhippsBnd500_FLO_Conasauga_Mosteler500	TVA	SWPP,TVA,LGEE,PJM,MISO
1609	Shawnee_C37A_161	TVA	TVA,MISO
1612	Shawnee_161_500_Transformer	TVA	MISO,TVA
1613	Volunteer_Phipps_Bend_500	TVA	TVA,PJM,SWPP,LGEE,MISO
1620	Cumbland_DavidsonandCumbland_Jvill	TVA	TVA,LGEE,MISO
1621	Cumbland_JvillandCumbland_Davidson	TVA	SWPP,TVA,LGEE,MISO
1634	Volunteer_Bull_RunandWBN_Volunteer	TVA	EKPC,TVA,PJM,SWPP,LGEE,MISO
1635	Marshall_Bank	TVA	LGEE,MISO,TVA
1638	Shelby_Dell_500_kV	TVA	NO
1644	Bull_Run_Volunteer_500kV	TVA	TVA,PJM,LGEE,MISO