

INDEX

Article/Section Number	Sheet No.
ARTICLE 1 – GENERAL PROVISIONS	
1	DEFINITIONS AND INTERPRETATION.
	1
1.1	The general provisions of this Article I shall apply to this ISO Tariff.
	1
1.2	Definitions.
	1
1.3	Rules of Interpretation.
	1
2	ACCESS TO THE ISO CONTROLLED GRID.
	2
2.1	Open Access.
	2
2.2	Eligibility of Customers for Direct Access or Wholesale Sales.
	3
3	FACILITIES FINANCED BY LOCAL FURNISHING BONDS OR OTHER TAX-EXEMPT BONDS.
	3
4	ROLES AND RESPONSIBILITIES.
	4
4.1	[Not Used]
	4
4.2	Market Participant Responsibilities.
	4
4.3	Relationship Between ISO and Participating TOs.
	5
4.4	Relationship Between ISO and UDCS.
	6
4.5	Responsibilities of a Scheduling Coordinator.
	10
4.6	Relationship Between ISO and Generators.
	23
4.7	Relationship Between ISO and Participating Loads.
	27
4.8	Relationship Between ISO and Eligible Intermittent Resources and Between the ISO and Participating Intermittent Resources.
	28
4.9	Metered Subsystems.
	28
5	RELATIONSHIP BETWEEN ISO AND SUDCS
	40
5.1	General Nature of Relationship Between ISO and SUDCs
	40
5.2	Coordinating Maintenance Outages of SUDC Facilities
	41
5.3	SUDC Responsibilities
	41
5.4	System Emergencies
	41
5.5	Load Reduction
	41
5.6	System Emergency Reports: SUDC Obligations
	42
5.7	Coordination of Expansion or Modifications to SUDC Facilities
	42
5.8	Information Sharing
	42
5.9	Installation of Equipment on and Rights of Access to SUDC Facilities
	43
6	COMMUNICATIONS.
	44

6.1	Methods of Communications.	44
6.2	Communications.	45
6.3	Communication Protocols.	46
6.4	Transmission System Information and Communications.	47
6.5	Information to be Provided By Connected Entities to the ISO.	51
6.6	Failure or Corruption of the WEnet.	51
6.7	Confidentiality.	51
6.8	Standards of Conduct.	51
6.9	ISO Postings.	51
7	SYSTEM OPERATIONS UNDER NORMAL AND EMERGENCY OPERATING CONDITIONS.	53
7.1	ISO Control Center Operations.	53
7.2	Operating Reliability Criteria.	55
7.3	Normal System Operations.	59
7.4	Management of System Emergencies.	60
7.5	Management of Overgeneration Conditions.	72
8	ANCILLARY SERVICES.	73
8.1	Scope.	73
8.2	Ancillary Services Standards.	72
8.3	Procurement of Ancillary Services, Certification and Testing Requirements for Providers of Ancillary Services, and Time-frame For Contracting for Ancillary Services	82
8.4	Technical Requirements for Providing Ancillary Services.	84
8.5	The Bidding Process.	92
8.6	Obligations for and Self-Provision of Ancillary Services.	113
8.7	Scheduling of Units to Provide Ancillary Services.	117
8.8	Black Start.	118
8.9	[Not Used]	118
8.10	Verification, Compliance Testing, and Audit of Ancillary Services.	118
8.11	Settlements For Contracted Ancillary Services.	131
8.12	Settlement for User Charges for Ancillary Services.	139
8.13	Temporary Changes To Ancillary Services Penalties.	149
8.14	Temporary Rule Limiting Adjustment Bids Applicable To Dispatchable Loads And Exports.	150
9	OUTAGES.	150
9.1	Coordination and Approval for Outages.	150

9.2	Responsibility for Authorized Work on Facilities.	151
9.3	Coordination of Outages and Maintenance.	151
9.4	Outage Coordination For New Facilities.	165
9.5	Records.	167
9.6	Facility Owner.	168
10	METERING.	168
10.1	Applicability.	168
10.2.1	Responsibilities of ISO Metered Entities.	170
10.3	Metering for Scheduling Coordinator Metered Entities.	187
11	ISO SETTLEMENTS AND BILLING.	203
11.2	Calculations of Settlements.	204
11.3	Billing and Payment Process.	232
11.4	General Principles for Production of Settlement Statements.	236
11.5	Calculation in the Event of Lack of Meter Data for the Balancing of Market Accounts.	237
11.6	Settlements Cycle.	237
11.7	Confirmation and Validation.	240
11.8	Payment Procedures.	245
11.9	Invoices.	250
11.10	Instructions for Payment.	251
11.11	ISO's Responsibilities.	251
11.12	Non-payment by a Scheduling Coordinator.	253
11.13	[NOT USED]	255
11.14	[NOT USED]	255
11.16	Alternative Payment Procedures.	255
11.17	[DELETED]	256
11.18	Payment Errors.	256
11.19	Defaults.	259
11.20	Proceedings to Recover Overdue Amounts.	259
11.21	Data Gathering and Storage.	260
11.23	Communications.	261
11.24	ISO Payments Calendar.	261
12	CREDITWORTHINESS.	264
12.1	Credit Requirements.	264
12.2	Review of Creditworthiness.	264

	12.3	Limitation on Trading.	264
13		DISPUTE RESOLUTION.	268
	13.1	Applicability.	268
	13.2	Negotiation and Mediation.	269
	13.3	Arbitration.	271
	13.4	Appeal of Award.	277
	13.5	Allocation of Awards Payable by or to the ISO.	279
14		FORCE MAJEURE INDEMNIFICATION AND LIMITATIONS ON LIABILITY.	280
	14.1	Uncontrollable Forces.	280
	14.2	Market Participant's Indemnity.	281
	14.3	Limitation on Liability.	281
	14.4	Potomac Economics, Ltd. Limitation Of Liability.	281
15		REGULATORY FILINGS.	282
16		EXISTING CONTRACTS.	282
	16.1	Existing Contracts for Transmission Service.	282
	16.2	ISO Administration of Existing Contracts for Transmission Service.	283
17		[Not Used]	301
18		[Not Used]	301
19		DEMAND FORECASTS.	301
	19.1	Scheduling Coordinator Demand Forecast Responsibilities.	301
	19.2	UDC Responsibilities.	302
	19.3	ISO Responsibilities.	304
20		CONFIDENTIALITY.	305
	20.1	ISO.	305
	20.2	Confidential Information.	305
	20.3	Other Parties.	306
	20.4	Disclosure.	306
	20.5	Confidentiality.	308
21		SCHEDULE VALIDATION TOLERANCES.	308
	21.1	Temporary Simplification of Schedule Validation Tolerances.	308
	21.2	Application.	309
	21.3	Notices of Full-Scale Operations.	309
22		MISCELLANEOUS.	309
	22.1	Audits.	309

22.2	Assignment.	311
22.3	Term and Termination.	311
22.4	Notice.	312
22.5	Waiver.	313
22.6	Staffing and Training To Meet Obligations.	313
22.7	Accounts and Reports.	313
22.8	Applicable Law and Forum.	313
22.9	Consistency with Federal Laws and Regulations.	314
22.10	ISO Grid Operations Committee; Changes To ISO Protocols.	315
22.11	ISO Protocol Amendment Process.	315
22.13	Scheduling Responsibilities and Obligations.	315
ARTICLE II – TRANSMISSION SERVICE		315
23	CATEGORIES OF TRANSMISSION CAPACITY.	315
24	TRANSMISSION EXPANSION.	316
24.1	Determination of Need.	317
24.2	Transmission Planning and Coordination.	319
24.3	Studies to Determine Facilities to be Constructed.	320
24.4	Operational Review.	321
24.5	State and Local Approval and Property Rights.	321
24.6	WECC and Regional Coordination.	322
24.7	Cost Responsibility for Transmission Additions or Upgrades.	322
24.8	Ownership of and Charges for Expansion Facilities.	324
24.9	Expansion by “Local Furnishing” Participating TOs	324
25	INTERCONNECTION OF GENERATING UNITS AND GENERATING FACILITIES TO THE ISO CONTROLLED GRID.	324
25.1	Applicability.	324
25.2	Interconnections to the Distribution System.	324
25.3	Maintenance of Encumbrances.	324
26	TRANSMISSION RATES AND CHARGES.	324
26.1	Access Charges.	324
26.2	Tracking Account.	333
26.3	Addition of New Facilities After ISO Implementation.	333
26.4	Effect on Tax-Exempt Status.	333
26.5	Transition Mechanism.	333
ARTICLE III – MARKET OPERATIONS		334

27	OVERVIEW OF MARKETS.	334
	27.1 Congestion Management.	334
28	TRADES BETWEEN SCHEDULING COORDINATORS.	357
29	[Not Used]	357
30	BIDS AND BID SUBMISSION.	357
	30.1 ISO Operations.	357
	30.2 Information to Be Submitted by Scheduling Coordinators to the ISO.	358
	30.3 The Scheduling Process.	367
	30.4 Verification of Information.	371
	30.5 [Not Used]	379
	30.6 RMR.	379
31	DAY-AHEAD MARKET.	388
	31.1 Timing of Day-Ahead Scheduling.	388
32	[Not Used]	396
33	HOOR AHEAD.	396
	33.1 Timing of Hour-Ahead Scheduling.	396
34	REAL-TIME.	398
	34.1 Energy Bids.	398
	34.2 Supplemental Energy Bids.	401
	34.3 Real-Time Dispatch.	405
	34.4 Notification of Non-Compliance With A Dispatch Instruction.	421
	34.5 Dispatch Instructions for Generating Units and Curtailable Demand.	421
	34.6 Response Required by Generators to ISO Dispatch Instructions.	422
	34.7 Qualifying Facilities.	422
	34.8 Failure to Conform to Dispatch Instructions.	423
	34.9 Pricing Imbalance Energy.	424
35	[Not Used]	426
36	FIRM TRANSMISSION RIGHTS.	426
	36.1 General.	426
	36.2 Characteristics of Firm Transmission Rights.	426
	36.3 Maximum Number of Firm Transmission Rights.	428
	36.4 Issuance of Firm Transmission Rights by the ISO.	428
	36.5 Distribution of Auction Revenues Received by the ISO for Firm Transmission Rights.	433

36.6	Distribution of Usage Charges to FTR Holders.	434
36.7	Scheduling Priority of FTR Holders.	435
36.8	Assignment of Firm Transmission Rights.	437
37	ENFORCEMENT PROTOCOL.	438
37.1	Objectives, Definitions, and Scope.	438
37.2	Comply with Operating Orders.	439
37.3	Submit Feasible Energy and Ancillary Service Bids and Schedules.	442
37.4	Comply with Availability Reporting Requirements.	442
37.5	Provide Factually Accurate Information.	444
37.6	Provide Information Required by ISO Tariff.	445
37.7	No Market Manipulation.	447
37.8	Process for Investigation and Enforcement.	449
37.9	Administration of Sanctions	451
37.10	Miscellaneous.	455
	ARTICLE IV – MARKET MONITORING AND MARKET POWER MITIGATION	458
38	MARKET MONITORING.	458
38.1	Objectives and Scope.	458
38.2	Practices Subject to Scrutiny – General.	459
38.3	Scrutiny of Participant Changes Potentially Affecting Market Structure.	460
38.4	Response Action by ISO.	460
39	RULES LIMITING CERTAIN ENERGY AND ANCILLARY SERVICE BIDS.	462
39.1	Damage Control Bid Cap.	462
39.2	Maximum Bid Level.	462
39.3	Negative Decremental Energy Bids.	463
	ARTICLE V – RESOURCE ADEQUACY	463
40	RESOURCE ADEQUACY.	463
40.1	Must-Offer Obligations.	463
40.2	Procurement of RMR.	477
40.3	Assurance of Adequate Generation and Transmission to meet Applicable Operating and Planning Reserve.	477
	APPENDIX A MASTER DEFINITIONS SUPPLEMENT	480
	APPENDIX B PRO FORMA AGREEMENTS	539
B.1	Scheduling Coordinator Agreement	540
B.2	Participating Generator Agreement	545

B.3	Qualifying Facility Participating Generator Agreement	561
B.4	Participating Load Agreement	578
B.5	Dynamic Scheduling Agreement for Scheduling Coordinators	593
B.6	Meter Service Agreement for ISO Metered Entities	606
B.7	Meter Service Agreement for Scheduling Coordinators	623
B.8	Utility Distribution Company Operating Agreement	643
B.9	Dynamic Scheduling Host Control Area Operating Agreement	676
B.10	Small Utility Distribution Company Operating Agreement	692
APPENDIX C	ISO SCHEDULING PROCESS	716
APPENDIX D	BLACK START UNITS	720
APPENDIX E	VERIFICATION OF SUBMITTED DATA FOR ANCILLARY SERVICES	722
APPENDIX F	RATE SCHEDULES	725
APPENDIX G	MUST-RUN AGREEMENTS	756
APPENDIX H	METHODOLOGY FOR DEVELOPING THE WEIGHTED AVERAGE RATE FOR WHEELING SERVICE	757
APPENDIX I	ISO CONGESTION MANAGEMENT ZONES	759
APPENDIX J	END-USE METER STANDARDS & CAPABILITIES	761
APPENDIX K	ANCILLARY SERVICES REQUIREMENTS PROTOCOL	764
APPENDIX L	[NOT USED]	785
APPENDIX M	TRANSMISSION RIGHTS/CURTAILMENT INSTRUCTIONS TEMPLATE	786
APPENDIX N	SETTLEMENTS AND BILLING	788
APPENDIX O	METERING	867
APPENDIX P	ISO DEPARTMENT OF MARKET ANALYSIS AND MARKET SURVEILLANCE COMMITTEE	957
APPENDIX Q	ELIGIBLE INTERMITTENT RESOURCES PROTOCOL	973
APPENDIX R	UDP AGGREGATION PROTOCOL (UDPAP)	980
APPENDIX S	[RESERVED FOR STATION POWER PROTOCOL]	985
APPENDIX T	SCHEDULING COORDINATOR APPLICATION	986
APPENDIX U	STANDARD LARGE GENERATOR INTERCONNECTION PROCEDURES (LGIP)	993
APPENDIX V	STANDARD LARGE GENERATOR INTERCONNECTION AGREEMENT (LGIA)	1065
APPENDIX W	INTERCONNECTION PROCEDURES IN EFFECT PRIOR TO JULY 1, 1995 (“AMENDMENT 39 PROCEDURES”)	1139
APPENDIX X	DYNAMIC SCHEDULING PROTOCOL (DSP)	1149

APPENDIX Y SCHEDULING PROTOCOL (SP)

1157