



Manual 01 Revision 34, 2nd Read



1. Section 5, 5.2.1.4, Tie Line telemetry scan rate requirements for Internal Special Cases & Transformer Tie Lines changed from 4 seconds to 10 seconds or less.
2. Attachment A, Information Access Matrix, redressed as Data Specification and Collection to meet IRO-010-2 and TOP-003-3.
3. Attachment A, minor updates and error corrections.

Before:

Meter	Accuracy	Scan Freq.	Telemetry
Primary	+/- 2%	4 sec. or less between scans (2 sec. preferred)	The meter telemeters to the owning TO/BA and other end TO/BA. Both TOs or the other BA telemeter to PJM.

After:

Meter	Accuracy	Scan Freq.	Telemetry
Primary	+/- 2%	10 sec. or less between scans (2 sec. preferred)	The meter telemeters to the owning TO/BA and other end TO/BA. Both TOs or the other BA telemeter to PJM.

Paraphrase of IRO-010-2, TOP-003-3:

[Anybody] requiring data from [anyone else] needs to publish a data specification. [Anyone] using a data specification must [meet the requirements of it] using a mutually agreeable format, process for resolving data conflicts, and security protocol.

M01 Attachment A is amended in R34 to self-identify as the data specification as called out in IRO and TOP, including the mutually agreeable format and security protocol.

- Table G removed. Long-term Planning Services does not belong in M01 and is already better addressed in Manual 3A, Section 2.2.

G: Long-term Planning Services						
	Information Services	PJM Member Regional Transmission Owner	PJM Member Generating Entity	PJM Member Load Serving Entity	PJM Member Marketer	Neighboring Control Areas
Inputs to PJM						
G.1	Capacity Information (spreadsheets)	X				
G.2	Load Information (spreadsheets)	X				
G.3	Load Flow Information	X				
G.4	Short Circuit Information	X				
G.5	Dynamics Information	X	1			
G.6	LAS Load Information	X				
G.7	Generator Events Information (GADS dataset) [submitted by plant operations]	X	1			
G.8	PROMOD information File (Generation Production Cost Information) [submitted by generation planning into central planning database]	X	1			
G.9	Generation Planning Maintenance Outage Reports (compiled from transmission planning tools)	X	1			
G.10	Long-term Capacity Planning Information [submitted by transmission planning]	X				
G.11	Performance Adequacy Assessments (financial Studies)	X	X	X	X	
G.12	Generator Planning Study [distributed to committee members]	X	O	O	O	
G.13	Supplemental Agreement (Forecast Obligation) [distributed to committee members]	X	O	O	O	
G.14	LAS Report [submitted to Reliability Committee]	X	O			
G.15	GORP Reports [distributed to generation planning]	X	O			

Key:
 X - Required Service
 O - Optional Service
 1 - Mandatory For All Generation Within the PJM RTO
 2 - Mandatory For Unit Specific Generation Bidding
 3 - Mandatory For All Capacity Resources
 4 - System Reliability Information Only
 5 - Mandatory For Joint-Owned Unit Owners
 6 - Mandatory If Not Attainable From Existing Telemetry
 7 - Mandatory For Generators Offering Regulation

Exhibit 8: Long-term Planning Services



Attachment A, Changes Since 1st Read

- Table E has been edited for the purposes of updates and error corrections. *[new left, existing right]*

E: Transmission Services						
	Information Services	PJM Member Regional Transmission Owner	PJM Member Generating Entity	PJM Member Load Serving Entity	PJM Member Marketer	Neighboring Control Areas
Inputs to PJM						
E.1	Requests for Transmission Service [reserved through OASIS]		O	X	X	
Outputs from PJM						
E.2	Available Transfer Capability (ATC) [posted on OASIS]			X	X	
E.3	Actual Energy Transactions [posted on OASIS 7 days later]	X	X	X	X	
E.4	Informational Messages [posted on OASIS]	X	X	X	X	
E.5	Transmission Service Reservations [posted on OASIS]			X	X	
Key: X – Required Service O – Optional Service 1 – Mandatory For All Generation Within the PJM RTO 2 – Mandatory For Unit Specific Generation Bidding 3 – Mandatory For All Capacity Resources 4 – System Reliability Information Only 5 – Mandatory For Joint-Owned Unit Owners 6 – Mandatory If Not Attainable From Existing Telemetry 7 – Mandatory For Generators Offering Regulation						

Exhibit 6: Transmission Services

E: Transmission Services						
	Information Services	PJM Member Regional Transmission Owner	PJM Member Generating Entity	PJM Member Load Serving Entity	PJM Member Marketer	Neighboring Control Areas
Inputs to PJM						
E.1	Transmission Reservations [reserved through OASIS]		O	X	X	
E.2	Network Transmission Services			X		
Outputs from PJM						
E.3	Available Transmission Capacity [posted on OASIS]			X	X	
E.4	Actual Energy Transactions [posted on OASIS 7 days later]	X	X	X	X	
E.5	Informational Messages [posted on OASIS]	X	X	X	X	
E.6	Ancillary Services [posted on OASIS]	X	X	X	X	
E.7	Approved Transmission Reservation Requests			X	X	
E.8	Summary of Month End Transactions	X				
Key: X – Required Service O – Optional Service 1 - Mandatory For All Generation Within the PJM RTO 2 - Mandatory For Unit Specific Generation Bidding 3 - Mandatory For All Capacity Resources 4 - System Reliability Information Only 5 - Mandatory For Joint-Owned Unit Owners 6 - Mandatory If Not Attainable From Existing Telemetry 7 - Mandatory For Generators Offering Regulation						

Exhibit 6: Transmission Services

- Text added in the prologue to better clarify conflict resolution.

In the event that a PJM Member or an external entity has a conflict or cannot provide PJM the data or provide the data in the timeframe PJM needs to perform Operational Planning Analyses, Real-time monitoring, or Real-time Assessments as required in IRO-010-2 or TOP-003-3, PJM will work with the entity on a case by case basis to determine a mutually agreeable format and timeframe to ensure PJM has access to such data. IRO-010-2 R3.2 and TOP-003-3 R5.2

- Text added in the prologue to explicitly state Attachment A requirements only apply to entities involved in that particular service.

The following tables in Attachment A detail specific information services, entities that may take part in that information service, and criteria or conditions of that service. Required information services are only applicable if that service is being utilized. For example, B.1 is an information service for “CT Generator Availability Updates via Markets Gateway, eDART”, but applies only if the “PJM Member Generating Entity” has CTs.

- OC and MRC 1st reads in January, 2017 *[complete]*
- Month of February spent on member communications, research and edits.
- OC endorsement on March 7th. MRC endorsement on March 23rd.
- NERC IRO and TOP becomes enforceable on April 1st.

Forward questions and comments to Ryan Nice,
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R3: Each Reliability Coordinator, Balancing Authority, Generator Owner, Generator Operator, Load-Serving Entity, Transmission Operator, Transmission Owner, and Distribution Provider **receiving a data specification in Requirement R2*** shall satisfy the obligations of the documented specifications using:

- 3.1 A mutually agreeable format
- 3.2 A mutually agreeable process for resolving data conflicts
- 3.3 A mutually agreeable security protocol

R2*: The Reliability Coordinator shall distribute its data specification to entities that have data required by the Reliability Coordinator's Operational Planning Analyses, Realtime monitoring, and Real-time Assessments.

R5: Each Transmission Operator, Balancing Authority, Generator Owner, Generator Operator, Load-Serving Entity, Transmission Owner, and Distribution Provider **receiving a data specification in Requirement R3* or R4*** shall satisfy the obligations of the **documented specifications using:**

- 5.1. **A mutually agreeable format**
- 5.2. **A mutually agreeable process for resolving data conflicts**
- 5.3. **A mutually agreeable security protocol**

R3*: Each Transmission Operator shall distribute its data specification to entities that have data required by the Transmission Operator's Operational Planning Analyses, Realtime monitoring, and Real-time Assessment.

R4*: Each Balancing Authority shall distribute its data specification to entities that have data required by the Balancing Authority's analysis functions and Real-time monitoring.