

A decorative graphic consisting of several overlapping, wavy blue lines that flow from the left side of the slide towards the right, creating a sense of movement and depth.

Telemetry Coordination Application

DMWG Meeting
February 21st, 2008



- Primary purpose of the new Telemetry Coordination Application:
 - Allows users to submit and track updates made to Object IDs.
 - Send notification to TO and RTO of updates.
 - Process TO and RTO request for access.

Company With Update Rights View

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Report

Pending: 1 Approved: 0 Future: 0 **Awaiting Availability: 0**

Telemetry
Notification Request

Telemetry
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Telemetry
Notification Report

Notif. Requested: 3 Notif. Granted: 2

NA Build Data Collection

Current Collection

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Company Without Update Rights View

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Pending: 1 Approved: 0 Future: 0 **Awaiting Availability: 0**

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Notif. Requested: 3 Notif. Granted: 2

NA Build Data Collection

Current Collection

Review Collections

- The following users will have access to this application: Transmission Read/Write and Read Only, Generation and Transmission Read/Write, PJM Read/Write and Read Only and Transmission Planning.

Access Data Report

Zone: Station: Incl. Retired:

Zone	Station	Voltage	Equip. Short Name	Element ID	Object ID	Effective Date
	CLOVER	22 KV	G1	ELEMENT1	PJM50104	
	CLOVER	22 KV	G1	ELEMENT2	PJM50105	
	CLOVER	22 KV	G2	ELEMENT3	PJM50106	
	CLOVER	22 KV	G2	ELEMENT4	PJM50107	

Telemetry Coordination Main Menu

Adjust Telemetry

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Access Data Report

Pending: 7 Approved: 1 Future: 1579 Awaiting Availability: 1675

Telemetry Notification Request

Telemetry Notification Review

Telemetry Notification Report

Notif. Requested: 0 Notif. Granted: 1

NA Build Data Collection

Current Collection

Review Collection

- Access Data Report displays all elements found in the Access file.
 - Note: For TO, only object IDs for units in their zone will be displayed.
- Companies will be able to download their version of the Access Data Report via XML.

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Notif. Requested: 0 Notif. Granted: 1

NA Build Data Collection

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Telemetry Adjustment Form

Company: **Company 1** Station: **09BELLBR**

[Apply Filter](#)

Zone	Station	Voltage	Equip. Short Name	Element ID	Object ID	Adjusted Object ID	Open Ticket Adj. Object ID	Available
ABC	09BELLBR	138 KV	A CB	CB	DPLC_ST_0122			<input type="checkbox"/>
	09BELLBR	138 KV	B	DIS	DPLC_ST_0178			<input type="checkbox"/>
	09BELLBR	138 KV	BB_28195	KV	DPLC_AN_0246			<input type="checkbox"/>

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Company Form

- The “Telemetry Adjustment Form” will be accessed from the **Adjust Telemetry** Button on the Telemetry Coordination Main Menu.
- Only companies designated to change Object IDs will be able to access form.

- There will be a drop down station filter:
 - This list will include the stations which the company has access to at least one facility at the station in eDART- Transmission Outage Tickets or the Gen Unit is in their transmission zone.
 - The user is required to choose a station.
- This form will display the default data from Access. If there is already a ticket in the Pending or Approved status for this Element the Adjusted value from that ticket will be displayed. If a user makes another adjustment it will override the old ticket and change it's status to Replaced.
- Once the change has been entered and Submitted, the data will be stored with the status of **“Pending.”**

Telemetry Adjustment Review

Company: **Company 1** Station:

Status: Future Pending Approved Canceled Implemented Replaced Available

If Current Object ID different than Ticket Original, Current Value displayed in blue.

Ticket ID	Station	Voltage	Equip. Short Name	Element ID	Object ID	Adjusted Object ID	Status	Last Update	Cancel	Available
9361	ADAMS	230 KV	ADA-BRUF	ENDB MR	PJM06708	PJMTESTA	Pending	01/04/2008 13:10	<input type="checkbox"/>	<input type="checkbox"/>
9344	BRANDONS	230 KV	130001OC	CB	PJM24013	PJMTEST4	Pending	01/04/2008 11:18	<input type="checkbox"/>	<input type="checkbox"/>

Telemetry Coordination Main Menu

Pending: 7 Approved: 1 Future: 1579 Awaiting Availability: 1675

Notif. Requested: 0 Notif. Granted: 1

NA Build Data Collection

- The “Telemetry Adjust Review Report” will be accessed from the Telemetry Adjustment Review Report button on the Telemetry Updates Main Menu.
- All member companies will be able to review tickets. (Why?)
- Members can cancel tickets in the Pending or Approved status.
- A ticket will be Implemented once Access is updated and the results are bridged back to eDART.
- If ticket in the status of Future, Object ID is editable. When Object ID entered Status changes to Pending.

- If ticket status is Future and Object ID now in bridge, ticket Adjusted Object ID changed to new value and status to Implemented.
- If new or updated Object ID found in bridge, ticket auto created with status of Implemented.

Telemetry Adjustment Review

Company: **Company 1** Station: Availability:

Status: Future Pending Approved Canceled Implemented Replaced

Apply Filter

If Current Object ID different then Ticket Original, Current Value displayed in blue.

Ticket ID	Station	Voltage	Equip. Short Name	Element ID	Object ID	Adjusted Object ID	Status	Last Update	Cancel	Available
172885	TSTSTN	13 KV	SK NUG	ELEMENT1	N/A	xxxxxx	Pending	02/15/2008 10:23	<input type="checkbox"/>	<input type="checkbox"/>
172884	TSTSTN	13 KV	SK NUG	ELEMENT2	N/A	TestID	Pending	02/14/2008 10:45	<input type="checkbox"/>	<input type="checkbox"/>
151841	TSTSTN	13 KV	SK NUG	ELEMENT3	N/A	TestID	Pending	02/14/2008 10:54	<input type="checkbox"/>	<input type="checkbox"/>
151797	ADKINS	13.8 KV	GT1	ELEMENT4	N/A	TestID2	Pending	02/14/2008 10:54	<input type="checkbox"/>	<input type="checkbox"/>
144026	TESTING	4 KV	CT 01	ELEMENT5	N/A	pjm021205	Pending	02/12/2008 15:43	<input type="checkbox"/>	<input type="checkbox"/>
144025	TESTING	4 KV	CT 01	ELEMENT6	N/A	pjm021203	Pending	02/12/2008 15:31	<input type="checkbox"/>	<input type="checkbox"/>
144017	FAIRTON	69 KV	FA-LAU	ELEMENT7	N/A	PJM17442 pjm021204	Pending	02/12/2008 15:29	<input type="checkbox"/>	<input type="checkbox"/>

- If the Current Object ID is different than Ticket Original, the current Value will also be displayed in blue.

- Designates when Object ID available from TO area for use.
- Used even by companies not “creating” requests.
- Outside normal status chain.
- Checkbox can be checked no matter the status.
- Awaiting Availability count designates request in Approved or Implemented status where Availability is False.

Company Menu with Telem R/W

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Notification Report

Notif. Requested: 0 Notif. Granted: 1

NA Build Data Collection

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Company Menu with Telem R/O

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Pending: 0 Approved: 0 Future: 762 Awaiting Availability: 1464

Telemetry
Notification Request

Telemetry
Notification Review

Telemetry
Notification Report

Notif. Requested: 0 Notif. Granted: 0

NA Build Data Collection

Review Collection

Telemetry Adjustment Ticket History Log

Ticket ID: 172885

User Name	Status	Available	Timestamp
User A	Pending	No	02/15/2008 10:23
User B	Future	No	02/14/2008 11:09

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- When the user clicks the ticket number, the history log will be displayed with: User Name, Status, Timestamp and Availability.

- Pending- Newly submitted request.
- Future- Request without an object ID created through NA Build Collection Process.
- Approved- Request has been accepted by PJM and will soon be implemented.
- Cancelled- Company has cancelled request.
- Implemented- Object ID now updated in PJM EMS.
- Replaced- Previously implemented request no longer applicable.
- Available- Object ID available at member location.

- A new batch job will be run once a day to look for any tickets which were implemented the previous day. The following emails will be sent to any TO or RTO who has a verified email address in the database:
 - An email will be sent to the TOs for any non-gen type implemented ticket.
 - Another email will be sent to the RTOs for all Telemetry (gen & non-gen) implemented.
 - A third email will be sent to the TOs for gen units in their zone with implemented tickets.



955 Jefferson Ave.
Valley Forge Corporate Center
Norristown, PA 19403

Telemetry Coordination Email Setup Form

I _____ on behalf of my company

Your Name (Printed)

Company Name

have been given permission by my company to coordinate the email notifications for Telemetry Updates. I understand that Object IDs for these facilities may be deemed *market sensitive*; therefore, I agree that those who are members of the email group below are employees of the company I represent. I also agree that those in the email group understand their responsibility to not divulge this information to other companies and have agreed to be bound by this fact.

New Revision

Group Email Address¹: _____
 File Access Password²: _____

Requestor Info:

Printed Name: _____
 Title: _____
 Signature: _____
 Date: _____
 Email: _____
 Phone: _____

Approver Info:

Printed Name: _____
 Title: _____
 Signature: _____
 Date: _____

PJM Only Section

Send completed form to:
 PJM Interconnection, LLC
 c/o Jim Ortlieb
 955 Jefferson Avenue
 Valley Forge Corporate Center
 Norristown, PA 19403



¹ No more than one group email address is allowed per company. Your company will be responsible for managing who is in the email group. Please be certain to review all addresses in the email groups on a yearly basis.

² Please provide password (7-16 alphanumeric characters). Passwords must contain a minimum of seven non-blank characters. Passwords must use characters from all four character sets noted below:

- o lowercase alphabetic
- o uppercase alphabetic
- o numeric
- o special characters - such as !"#%&'()*+,-/;<>?_`{|}~
- Each of the four sets of characters must appear within the first eight characters of the password.

Passwords must differ from previous password by at least two characters. Please make sure all in email group know password.

- A verification email will be sent to the listed email address containing a URL to verify email going to the correct party. Company uses URL to verify.

Telemetry Notification Request

Implemented Tickets All Equipment

Zone: Station:

From Date: To Date: Last 30 days:

(mm/dd/yyyy) (mm/dd/yyyy)

Only first 395 records will be displayed.

Zone	Type	Station	Voltage	Equipment Name	Element ID	Object ID	Request Notification
AE	LINE	FAIRTON	69 KV	FAI-LAU	ENDB MR	PJM17442	<input type="checkbox"/>
AE	LINE	FAIRTON	69 KV	FAI-LAU	ENDB MW	PJM17441	<input type="checkbox"/>
APSS	LINE	CABOT	500 KV	CAB-KEY	ENDB MR	PJM02101	<input type="checkbox"/>
APSS	LINE	CABOT	500 KV	CAB-KEY	ENDB MW	PJM00019	<input type="checkbox"/>
APSS	LINE	CORNER	138 KV	COR-WAS	ENDA MW	PJM_AN90122	<input type="checkbox"/>
APSS	LINE	DOUBS	500 KV	DOU-MTS	ENDA MW	PJM_AN90209	<input type="checkbox"/>
APSS	LINE	DOUBS	500 KV	DOU-MTS	ENDB MR	PJM06335	<input type="checkbox"/>
APSS	LINE	DOUBS	500 KV	DOU-MTS	ENDB MW	PJMVAPMTSTORM_ZBR_551Z_MW	<input type="checkbox"/>
APSS	LINE	MEADOWBR	500 KV	MEA-GRE	ENDA MW	PJM_AN90220	<input checked="" type="checkbox"/>
APSS	LINE	MEADOWBR	500 KV	MEA-MOR	ENDA MW	PJM_AN90211	<input type="checkbox"/>
APSS	LINE	MEADOWBR	500 KV	MEA-MTS	ENDA MW	PJM_AN90212	<input type="checkbox"/>
APSS	LINE	PINEY FK	138 KV	PIN-WOO	ENDA MW	PJM_AN90179	<input type="checkbox"/>
BC	XFMR	BETHSTL	115 KV	110-1	LO MW	PJM00029	<input type="checkbox"/>

Telemetry Coordination Main Menu

Pending: 7 Approved: 1 Future: 1579 Awaiting Availability: 1675

Notif. Requested: 0 Notif. Granted: 1

NA Build Data Collection

- A member company may request access to an Object ID by checking the “Request Notification” checkbox and clicking the “Submit Form” button.
- If no checkbox is displayed, the company either already has access to this element or they have a request pending.

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Notif. Requested: 0 Notif. Granted: 1

NA Build Data Collection

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Telemetry Notification Request Review

Company: [Company 1](#) Zone: Station: [Apply Filter](#) [Help](#)

From Date: To Date: Last 30 days:

(mm/dd/yy) (mm/dd/yy)

Status: Pending Denied Canceled Granted Implemented

Request ID	Company	Zone	Type	Station	Voltage	Equipment Name	Element ID	Object ID	Status	Last Updated	Cancel
62	Company 1	APSS	LINE	DOUBS	500 KV	DOU-MTS	ENDA MW	PJM_AN90209	Implemented	02/14/2008 14:44	
61	Company 1	APSS	LINE	CORNER	138 KV	COR-WAS	ENDA MW	PJM_AN90122	Granted	02/14/2008 14:40	

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- This form can be used to see the status of any requests.

- Pending – Request is waiting for PJM Approval.
- Denied – Request has been denied by PJM.
- Cancelled – Request has been cancelled by company submitting request.
- Granted – Request has been approved by PJM but object ID is not yet accessible.
- Implemented – Request has been approved by PJM and is accessible for use.

Telemetry Notification Report

Company: **Company A** Zone: **APS** Station: **MOSHANON** [Apply Filter](#)

Zone	Type	Station	Voltage	Equipment Name	Element ID	Object ID
APS	LINE	MOSHANON	230 KV	MOS-SHA	ELEM1	PJM20529
APS	LINE	MOSHANON	230 KV	MOS-SHA	ELEM2	PJM15425
APS	LINE	MOSHANON	230 KV	MOS-SHA	ELEM3	PJM01413

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Notif. Requested: 0 Notif. Granted: 1

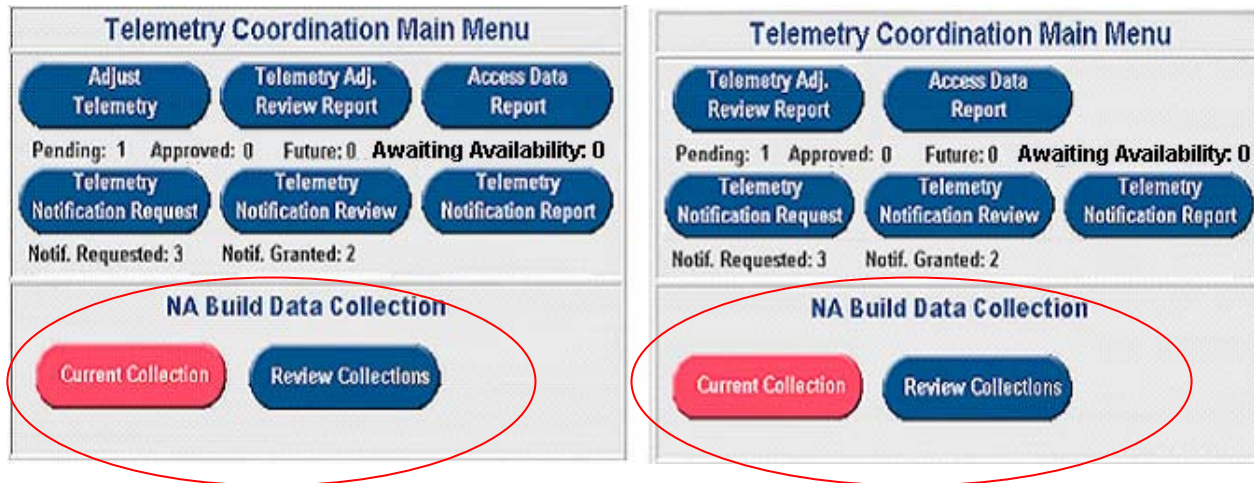
NA Build Data Collection

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- Displays Object IDs currently granted or implemented for your company.
- Filtering available by Zone and Station.

Company With Update Rights View

Company Without Update Rights View



- The NA Build Data Collection Section will be used to collect Telemetry info after PJM NA Build.
- When collection initiated by PJM Current Collection button will go red and message posted on log-in screen. Button visible only during open collection.
- on “Current Collection” button will be red during open collection until all equipment types have been closed out.

NA Build Collection Form

Company: **Company 1** Initiate Date: 02/14/2008 Collection ID: **285**

Type: **GEN** Zone: Station: EMS Build Date: 02/07/2008 Closeout:

Zone	Station	Voltage	Equip. Short Name	Elemnt ID	Telemetered	Object ID	Available	Ticket ID
PS-N	TSTSTN	13 KV	SK NUG	ELEMENT1	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Postponed	xxxxx	<input type="checkbox"/>	172885
PS-N	TSTSTN	13 KV	SK NUG	ELEMENT2	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Postponed		<input type="checkbox"/>	172886

- Data is generated per company, per type, per applicable element type of all facilities owned by that company with effective date = NA Build.
- User must select Equip. Type.
- A radio button will be available to allow users to select elements will be telemetered.
- One of the Telemetered radio buttons must be selected for each row.
- To closeout a type all rows must have a Telemetered radio button selected. If none in build for type auto closed by PJM.
- Each element type must be closed out by company.

NA Build Collection Form

Company: **Company 1** Initiate Date: 02/14/2008 Collection ID: **285**
 Type: **GEN** Zone: Station: EMS Build Date: 02/07/2008 Closeout:

Zone	Station	Voltage	Equip. Short Name	Elemnt ID	Telemetered	Object ID	Available	Ticket ID
PS-N	TSTSTN	13 KV	SK NUG	ELEMENT1	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Postponed	xxxxx	<input type="checkbox"/>	172885
PS-N	TSTSTN	13 KV	SK NUG	ELEMENT2	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Postponed		<input type="checkbox"/>	172886

- If a user selects “Yes” and supplies the Object ID in the telemetered column, an adjustment ticket will be created with the initial Object ID of “NA” and the value entered in Object ID by the user as “Adjusted Object ID” with the status of “Pending” in the ticket
- If the user selects “Yes” in the telemetered column, an adjustment ticket will be created with the initial Object ID of “NA” and the “NULL” for the Adjusted Object ID with the status of “Future”
- If user selects “Postponed”, a future ticket will be created and Element is put in an offline postponed table to be included next time a collection process initiated.
- After tickets are generated the ticket number will be displayed.

- If the Object ID is changed in the collection form, the old ticket is replaced with a new ticket in the status of “Pending” with the new ticket number displayed.
- If the ticket is created and the user changes the Telemetered to “No”, the ticket will be cancelled.
- If the ticket has the status of “Future” and the user enters the Object ID in the Collection Form or the Adjustment Review Form, the ticket is updated to the status of “Pending”. Also removed from offline table.

Collection Review Report

Company: **Company 1** NA Build Date: Collection ID:

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Collection ID	NA Build Date	Initiate Timestamp	Closeout Date	Equip Type	Ack. User	Ack. Timestamp
295	02/07/2008	02/14/2008		GEN		
284	02/07/2008	02/14/2008	02/14/2008	GEN	SUPER6	02/14/2008 10:50
283	02/07/2008	02/14/2008	02/14/2008	GEN		
281	02/07/2008	02/14/2008	02/14/2008	SD	SUPER3	02/14/2008 07:56
				LINE	SUPER3	02/14/2008 07:56
				GEN	SUPER3	02/14/2008 07:56
248	02/07/2008	02/13/2008	02/13/2008	SD		
				LINE		
				GEN		
247	02/07/2008	02/13/2008	02/13/2008	SD		
				LINE		
				GEN		
246	02/05/2008	02/13/2008	02/13/2008	SD		
				LINE		
				XFMR		
				GEN		
245	05/04/2007	02/13/2008	02/13/2008	LINE		
				XFMR		

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Notif. Requested: 0 Notif. Granted: 1

NA Build Data Collection

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- If the user clicks Collection ID, they will get read only version of NA Collection Report.

A decorative graphic consisting of several overlapping, wavy blue lines that flow across the top of the slide, creating a sense of movement and depth.

Telemetry Coordination Application

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