



eDART March 2015 Release Enhancements

eDART Users Group Meeting
02/27/2015

- **Production**
 - Release of enhancements scheduled for Wednesday, March 25th.
- **Sandbox**
 - Enhancements released by Wednesday, March 11th.

- Password Security Enhancements
 - ❖ March 2015 Enhancements
 - ❖ Enhancements to RxB Adjustment Functionality
 - ❖ Unit D-Curve Acknowledgement
 - ❖ Changes to BlackStart Restoration Plans
 - ❖ Other March 2015 Enhancements
 - ❖ Future Enhancements
 - ❖ Question & Answer Resolution Session

- New password security algorithm has been implemented.
 - Changes transparent to users.
- Users are being asked to log in/connect to **eDART as soon as possible**.
 - Production and Sandbox environments.
- Users still on old algorithm to be revoked on March 30, 2015.



❖ Password Security Enhancements

➤ March 2015 Enhancements

➤ Enhancements to RxB Adjustment Functionality

❖ Unit D-Curve Acknowledgement

❖ Changes to BlackStart Restoration Plans

❖ Other March 2015 Enhancements

❖ Future Enhancements

❖ Question & Answer Resolution Session

- New Base Data section for impedance and Tariff related reports.
- Improved data precision by removing conversion from admittances.
 - Tickets will be moved to implemented more frequently.

Old

TERM Main Menu

Create New Ticket

View/Revise Tickets

Bulk Upload

Adjust R, X, B

Adj. Tariff Data

Effective Ratings

TERM Reports

Status Reports

Recently Restored

History Report

R, X, B Adjust Report

Adj. Tariff Data Report

Historical Bulk Report

Submitted Tickets
Submitted: 0/0 Revised: 0/0 Received: 0/0

Approved Tickets
(Temporary) Approved: 0/0 Implemented: 177/0
(Permanent) Approved: 0/0 Implemented: 759/0

R, X, B Adjustment
Submitted: 0/1

Monitored Status
Submitted: 0

Notification Reports

Ack. Required

Notifications Report

Notifications Request Form

Current Notifications: 0

New

TERM Main Menu

Create New Ticket

View/Revise Tickets

Effective Ratings

Bulk Upload

Historical Bulk Report

TERM Reports

Status Reports

Recently Restored

History Report

Submitted Tickets
Submitted: 1/0 Revised: 0/0 Received: 0/0

Approved Tickets
(Temporary) Approved: 1/9 Implemented: 0/0
(Permanent) Approved: 2/5 Implemented: 470/421

Base Data

Adjust R, X, B

Adj. Tariff Data

R, X, B Adjust Report

Congestion Mngt. Audit

R, X, B, Audit

Monitored Status Diff. Issues

Adj. Tariff Data Report

R, X, B Adjustment
Submitted: 10/2

Monitored Status
Submitted: 3

Notification Reports

Ack. Required

Notifications Report

Notifications Request Form

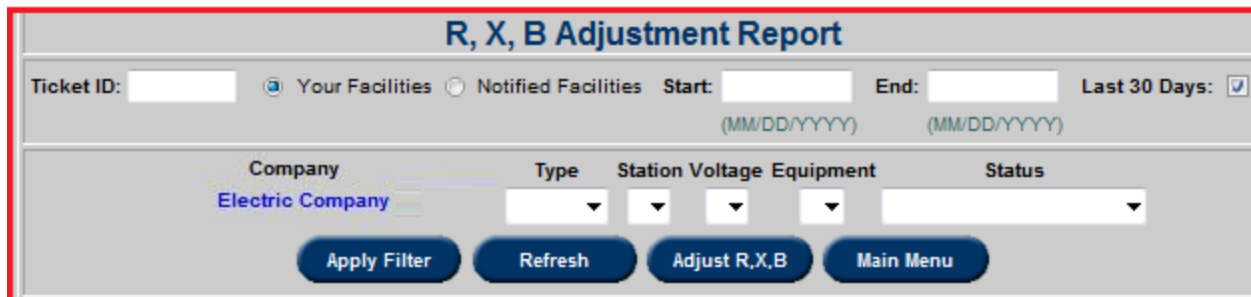
Current Notifications: 435

- Users can now filter by unit type, station, voltage, etc.
- Users can enter a date range and search by ticket ID.

Old



New



R, X, B Adjustment Report

Ticket ID: Your Facilities Notified Facilities Start: End: Last 30 Days:

Company: Type: Station Voltage: Equipment: Status:

[Apply Filter](#) [Refresh](#)

Ticket ID	Company	Facility		R (p/u, 100MVA Base)	X (p/u, 100MVA Base)	B (p/u Totals)	Comments	Status	Last Updated
338	Energy	Type: LINE	Initial	0.00099	0.04321	0.006	Testing TERM Upload -	Submitted	08/06/2012 13:47
		Station: 115 KV	Adjusted	3.14159	3.14159	3.14159			
		Short Name:	% Diff.	44844.06%	7170.52%	62269.83%			
		Long Name:	Curr. Production	0.00099	0.04321	0.006			
359	Energy	Type: LINE	Initial	0.0028	0.02356	0.0466		Implemented	01/22/2015 16:11
		Station: 230 KV	Adjusted	0.0029	0.02356	0.0466			
		Short Name:	% Diff.	3.57%	0%	0%			
		Long Name:	Curr. Production	0.0028	0.02356	0.04656			
360	Energy	Type: LINE	Initial	0.003	0.0251	0.0487		Implemented	01/22/2015 16:11
		Station: 230 KV	Adjusted	0.0031	0.0251	0.0487			
		Short Name:	% Diff.	3.33%	0%	0%			
		Long Name:	Curr. Production	0.003	0.0251	0.04874			

[Submit Form](#) [Adjust R,X,B](#) [Main Menu](#)

- Addition of current production values.
- New “Awaiting Build” status for changes that will take effect in the next model build.



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- ❖ Future Enhancements
- ❖ Question & Answer Resolution Session

- D-Curves will now be acknowledged on a per-unit basis.
 - Option available to Acknowledge All.
 - Log of acknowledgements in the current review added.
 - Latest Completed New Default MVAR Ticket displayed per unit.
 - D-Curve Match/Mismatch status also displayed.
 - Will remain available outside review period.
 - D-Curve Report button will remain red if there are any unacknowledged D-Curves.

- New columns added: User ID, Last Update Timestamp, Acknowledge, Overwrite, Latest MVAR Ticket.

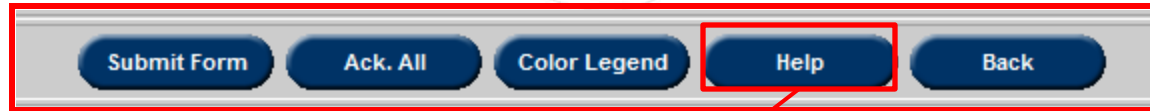


D-Curve Unit Acknowledgement Form

Company: [Electric Company](#)

Initiate Timestamp: 02/26/2015 13:15 Completed Timestamp: Ongoing Review Type: Transmission

Unit Name	Unit Type	Installed Capacity	Voltage Control Philosophy	D-Curve Metered MVAR Location	Power System Stabilizer	EMS Equipment Name	MW Point	MVAR Min	MVAR Max	User ID	Last Update Timestamp	Acknowledge	Overwrite	Latest MVAR Ticket
SPECIALTON	Combustion Turbine	141	TBD	TBD	No	SPECIALTON CT 1-4	4	0	0			<input type="checkbox"/>		
							72	0	0					
							73	0	0					
							74	0	0					
							75	0	0					
							76	0	0					
							77	0	0					
78	0	0												
ORANGE	Combustion Turbine	200	TBD	TBD	No	ORANGE P1 GEN UNIT	469	-244	433			<input type="checkbox"/>		Ticket #303513 Act. Start: 02/03/2015 00:00 D-Curve Mismatch
							830	-112	283					
							831	-112	283					
							832	-112	283					
							833	-112	283					
							834	-112	283					
							835	-112	283					
836	-112	283												
							370	-206	588					
							830	-231	288					



D-Curve Unit Acknowledgement Help

How to Acknowledge, Un-Acknowledge and Overwrite Timestamps for D-Curve Review

To Acknowledge a Unit, check "Acknowledge" box

Acknowledge

To update the "Acknowledge Timestamp" to the current time, check "Acknowledge" and "Overwrite" boxes

Acknowledge Timestamp	Acknowledge	Overwrite
01/01/2015 00:00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

To Un-Acknowledge, uncheck "Acknowledge" box. Please note that un-acknowledging a unit's D-Curve will cause that unit's row to turn yellow

Acknowledge

Close Window

D-Curve Report



Unit Name	Unit Type	Installed Capacity	Voltage Control Philosophy	D-Curve Metered MVAR Location	Power System Stabilizer	EMS Equipment Name	MW Point	MVAR Min	MVAR Max	User ID	Last Update Timestamp	Acknowledge	Overwrite	Latest MVAR Ticket
ABCDEFGH	Combustion Turbine	0	Reactive Power Schedule	Low-side Gross	Yes	ABCDEFGH 13U EE-13	45 50 55 60 65 70 75 80	-42 -41 -40 -40 -40 -40 -39 -39	76 74 71 66 61 57 50 42	human	02/26/2015 17:59 View	<input type="checkbox"/>	<input type="checkbox"/>	
SPECIALTON	Combustion Turbine	150	Reactive Power Schedule	Low-side Gross	No	SPECIALTON CT 1-4	4 72 73 74 75 76 77 78	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0			<input type="checkbox"/>		Ticket #303509 Act. Start: 02/03/2015 00:00 Match

Acknowledgement Log

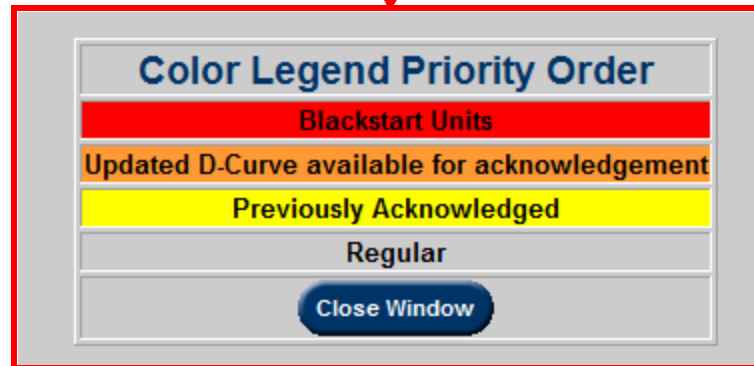
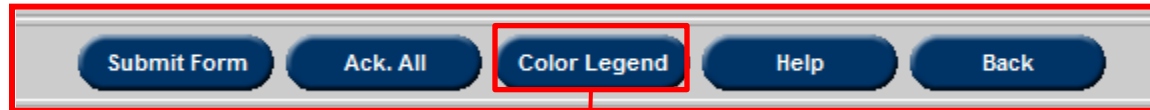
Company: **Electric Company**

Unit Name: **ABCDEFGH**

User ID	Action	Timestamp
human	Acknowledge	02/26/2015 17:59
human	Unacknowledge	02/26/2015 17:59

[Close Window](#)

Click to open last completed New Default MVAR Ticket.

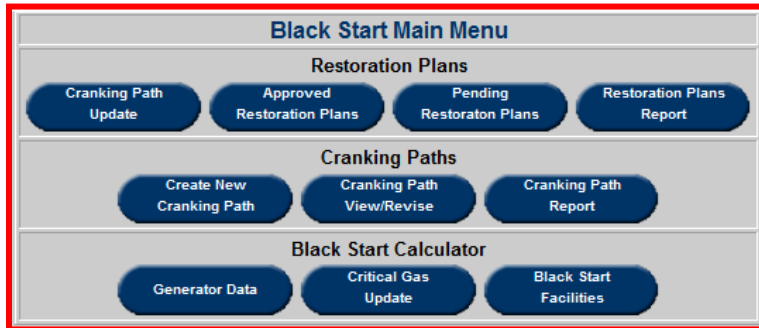




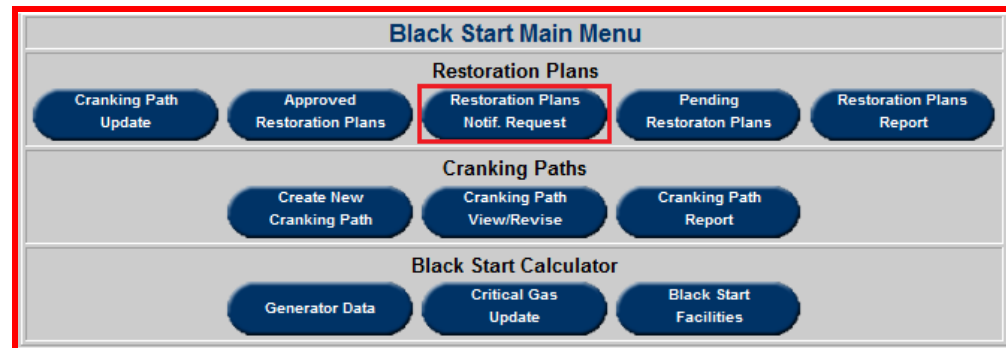
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 - ❖ Other March 2015 Enhancements
- ❖ Miscellaneous
- ❖ Future Enhancements
- ❖ Question & Answer Resolution Session

- Transmission Owners will now be able to view the approved restoration plans of other TOs.
 - Users can select which TOs plan they would like to view.
 - New button, Restoration Plans Notif. Request, added to the Black Start Main Menu for transmission users.

Old



New



- Select 'View' on Restoration Plan Notification Request form to indicate which TO's plan should be displayed.
- Plans for selected TOs available on the Approved Restoration Plans report.

Restoration Plan Notification Request

Company: [Company1](#)

Transmission Owners	View
Company 2	<input type="checkbox"/>
Company 3	<input type="checkbox"/>
Company 4	<input checked="" type="checkbox"/>
Company 5	<input checked="" type="checkbox"/>
Company 6	<input checked="" type="checkbox"/>
Company 7	<input checked="" type="checkbox"/>
Aperture Science	<input checked="" type="checkbox"/>
Company 9	<input checked="" type="checkbox"/>

[Submit](#) [Main Menu](#)

Black Start Main Menu

Restoration Plans

[Cranking Path Update](#) [Approved Restoration Plans](#) [Restoration Plans Notif. Request](#) [Pending Restoration Plans](#) [Restoration Plans Report](#)

Cranking Paths

[Create New Cranking Path](#) [Cranking Path View/Revise](#) [Cranking Path Report](#)

Black Start Calculator

[Generator Data](#) [Critical Gas Update](#) [Black Start Facilities](#)

- ‘Other’ and ‘My Company’ radio buttons added to toggle between viewing user’s plan and plans for other TOs.
 - ‘My Company’ selected by default.
- SOS-T notified of approved restoration plans daily.

Approved Restoration Plans

Other
 My Company
 Company: [Company 1](#)

Plan ID	Plan Name	Restoration Plan Updated	History	Restoration Plan/ Attachment G	Retire
14	Plan 1	07/11/2013 08:59	View	<input type="button" value="Submit Update"/>	<input type="button" value="Retire"/>

Approved Restoration Plans

Other
 My Company
 Company: [Company 1](#)

Plan ID	Company	Plan Name	Restoration Plan Updated
155	Company 2	Plan 2	02/18/2014 11:26
114	Company 3	Plan 3	10/15/2013 14:36

- Changes to Restoration Plan Review Logic:
 - Removed requirement to select a restoration plan and impacted companies.
 - Removed dependence on cranking path for restoration plan review needed.
 - For cut-in tickets, Restoration Plan Review Needed is set to “Yes” regardless of ticket duration and user entered value.
 - If cut-in flag is unchecked, Restoration Plan Review Needed changed to “No”.
 - If Restoration Plan Review Needed = “Yes”, notification emails to be sent every day beginning 30 days before the estimated start until plan is uploaded.



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- ❖ Future Enhancements
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- Fixed ratings.CSV download errors due to file size.
- Identified issues during Flow CB rollout.
 - On-hold while we work with our EMS vendor.
- Warning indicator for overlapping dates on equipment when submitting transmission tickets.

Tier 1
 Tier 2
 Tier 3

Primary	Status	Include	Type	Station Name	Voltage	Equipment Name	Start Date	Start Hour	End Date	End Hour
<input checked="" type="radio"/>	O ▾	Yes ▾	LINE	START1	138 KV	START1-FINISH2 02	03/02/2015	00:50	03/04/2015	01:50
<input type="radio"/>	O ▾	Yes ▾	LINE	START1	138 KV	START1-FINISH2 02	03/02/2015	00:50	03/05/2015	01:50

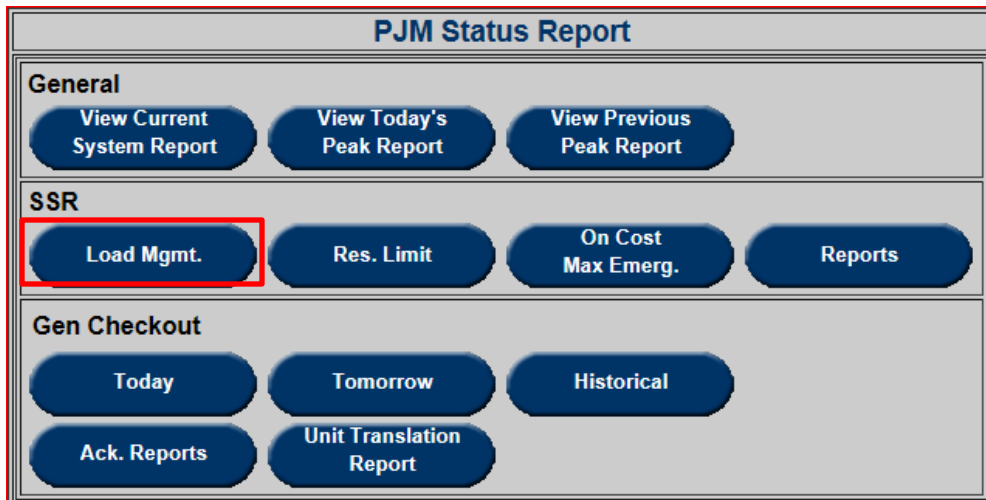
Ticket 66186 was created.
There are overlapping outage dates for LINE -START1-FINISH2 02

- Updates to Unit Types and Generator Outage Cause Types.
 - Email notifications will be sent.
 - Updates currently available in Sandbox: Generation Cause List download.
- Transmission NERC-TADS Report Changes
 - Reporting now required for Automatic Outages (Form 4.X) to 0-99 kV BES and 100-199 kV BES equipment.
 - New Outage Initiation Code: “Protection System-Initiated”
 - New Operational Cause Code: “Human Error”

- “Blackstart Units Only” checkbox added to D-Curve Report filter.
- Added user ability to search by Ticket ID only, regardless of other filters in the Owners Report.
- Emergency Procedures Messages removed from SSR Reports
 - Active EP messages are currently displayed in completed reports.
 - Button to log into EP as guest also removed.
 - Part of Emergency Procedures tool refresh.

- PJM removed the requirement to submit Load Management data in eDART and to support this the Load Mgmt. form will be removed from the PJM Status Report main menu.

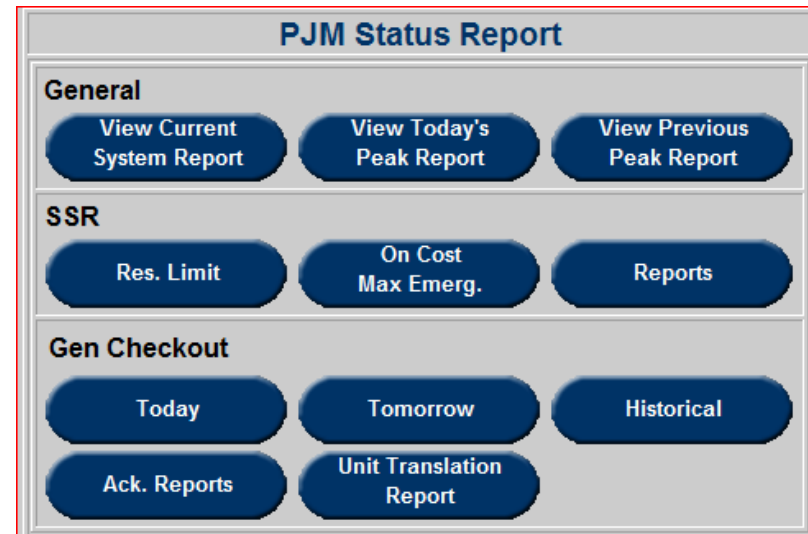
Old



The screenshot shows the 'PJM Status Report' menu with three sections: General, SSR, and Gen Checkout. The 'Load Mgmt.' button in the SSR section is highlighted with a red box.

PJM Status Report			
General			
View Current System Report	View Today's Peak Report	View Previous Peak Report	
SSR			
Load Mgmt.	Res. Limit	On Cost Max Emerg.	Reports
Gen Checkout			
Today	Tomorrow	Historical	
Ack. Reports	Unit Translation Report		

New



The screenshot shows the updated 'PJM Status Report' menu. The 'Load Mgmt.' button has been removed from the SSR section.

PJM Status Report		
General		
View Current System Report	View Today's Peak Report	View Previous Peak Report
SSR		
Res. Limit	On Cost Max Emerg.	Reports
Gen Checkout		
Today	Tomorrow	Historical
Ack. Reports	Unit Translation Report	



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- Reorder One Line Diagrams list in alphabetical order.
- Legal sign-off for one-line diagrams.
- Additional BlackStart information to Transmission Owners Report.
- Network Model submit on-time functionality.
- Rejection of company submitted tickets based on new TERM Ratings criteria.

- Instantaneous Reserve Check (IRC) Enhancements:
 - Reserve data pre-populated from PJM Markets and EMS systems.
 - User option to acknowledge reserve values: all units or per unit.
 - User entry fields to submit changes to reserve values.
 - Display of current reserve data when IRC is not in progress.
 - Design still in progress.

IRC Company Data

Company: Company 1 **Request Timestamp:** 01/15/2015 09:08 **Date updated:** 1/15/2015 9:05
Request ID: 50093 **Posted Timestamp:**
User Name: whongv

	Mid Atl	CE	AP	DUQ	AEP	DAY	DOM	FE	DEOK	EKPC	RTO Total
Total Synchronized Reserve*	390	0	0	0	0	0	0	0	0	0	0
NSR Hydro	0	0	0	0	0	0	0	0	0	0	0
NSR Other	0	0	0	0	0	0	0	0	0	0	0
Total Quick Start - Non synchronized Reserve	0	0	0	0	0	0	0	0	0	0	0
Primary Reserve	390	0	0	0	0	0	0	0	0	0	0
Secondary Reserve	0	0	0	0	0	0	0	0	0	0	0
Operating Reserve	390	0	0	0	0	0	0	0	0	0	0
Beyond Secondary	0	0	0	0	0	0	0	0	0	0	0

Notes to PJM Operator (500 char. Max)

Recalc/Submit

Main Menu

*Regulation assignments should not be included in the Synchronized Reserves unless the reserve is beyond the regulation bandwidth.

Submitted By:

Timestamp:

Unit Data

If you do not wish to acknowledge any unit, please uncheck the acknowledge check box prior to clicking Recalc/Submit

2		1									Check All
Unit Name	Equipment Name	Unit Type	Zone	Ecomax	Real-Time MW	Regulating	Synchronized Reserves*/ New Value	Quick Start NSR/ New Value	Secondary/ New Value	Beyond Secondary/ New Value	Acknowledge
Unit 1	102 PAL-11703	CT	PE	444	364	0	50	40	0	0	<input checked="" type="checkbox"/>
							55	35			<input checked="" type="checkbox"/>
Unit 2							200	100			<input checked="" type="checkbox"/>
							250	103			

- Tools Refresh of Emergency Procedures:
 - Users can request EP accounts or use the Guest login.
 - Command Line Interface replacing browserless client.
 - XML file format will change from the current version.
 - Sandbox version of the new tool now available.
(<https://esuitetrain.pjm.com/mui/>)
 - Parallel Production environment to be available soon.
 - For more information: <http://www.pjm.com/markets-and-operations/etools/emerg-procedure.aspx>



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