



Dynamic Line Ratings Task Force (DLRTF) Final Report

ISSUE CREATION

[Additional Issues Relating to the Implementation of Dynamic Line Ratings](#) was created as a next phase to [Interim Measures to Facilitate the Integration of Dynamic Ratings into PJM Operations](#). The [Problem Statement](#) and education-focused [Issue Charge](#) was brought forward by PJM at the request of stakeholders and approved at the April 14, 2021 Operating Committee (OC). This issue was assigned to the new Dynamic Line Ratings Task Force (DLRTF) reporting to OC. All posted materials are on the [DLRTF](#) page.

ISSUE SUMMARY

The purpose of this issue and work effort was to explore additional considerations related to DLR implementation, including notice of intent to implement DLR, impacts to ARR/FTR markets, and impacts to the Seasonal Ratings utilized within PJM Planning processes.

The expected deliverable was education.

Out of scope were any modifications to the Operating Agreement, Tariff or Manuals that would infringe upon the terms of the Consolidated Transmission Owners Agreement, including requiring Transmission Owners to install and/or implement DLR, modifying the Transmission Owners' authority to determine transmission line rating methodologies, and calculate transmission line ratings. A furtherance of compliance efforts with Order No. 881 was also out of scope.

TASK FORCE KEY WORK ACTIVITIES

	9/8/2022 OC	9/30/2022	11/11/2022	12/12/2022	1/12/2023 OC	2/9/2023 OC
Review Work Plan		X	X	X		
Education		X	X	X		
a) Additional considerations regarding notice of an intent to implement DLR.		X	X			
b) Impact of DLR implementation to ARR/FTR markets.		X	X			
c) DLR impacts to the Seasonal Ratings utilized within PJM Planning processes.		X	X			
d) DLR implementation perspectives from stakeholders and DLR vendors.				X		
Education Survey Open	X					
Review Education Tracker			X	X		
Updates to Parent Committee	X				Sunset First Read	Sunset Endorsement

Meeting Summaries:

- September 30, 2022: PJM presented education on dynamic line ratings in PJM to date and education on the three key topics noted in the Issue Charge: (1) Considerations regarding notice of an intent to implement DLR, (2) Impacts of DLR implementation to ARR/FTR markets, and (3) impact on Seasonal Ratings utilized within PJM Planning processes. Stakeholders also reviewed draft questions for an education survey, opened to the DLRTF and OC email distribution lists after the September meeting.
- November 11, 2022: The education survey results were discussed while reviewing the [Education Tracker](#), which includes 24 consolidated requests, FAQs, responses, and related links. PJM SMEs discussed the detailed responses to the survey feedback and provided additional clarifications. The Education Tracker was posted on the DLRTF main page after the November meeting.
- December 12, 2022: Transmission Owners and DLR technology vendors shared experiences and best practices for implementing dynamic line ratings. Next steps for the task force was also discussed, including options for sunset and hiatus given the Task Force had covered education on all topics in the Issue Charge, and no new education requests were received.

RECOMMENDED PROPOSAL / ALTERNATE 1 / ALTERNATE 2

Not Applicable

STANDING COMMITTEE RESULTS

The DLRTF completed all education items in the issue charge, plus education on additional topics brought forward through stakeholder feedback and the education survey (see [Education Tracker](#)). PJM remains open to feedback from stakeholders on activities for the task force, but no new requests have been brought forward. An update on DLRTF activities was provided at the January 12, 2023 Operating Committee. During that time, stakeholders provided feedback on options for a path forward, including:

1. **Hiatus:** Pause task force and resume meetings when needed. For example, when more data on existing projects becomes available, needs for additional changes (if any) are identified, FERC issues additional rulemaking on DLR. Addressing needs for additional changes via CBIR would require updates to Issue Charge.
2. **Sunset:** Close task force, and bring new PS/IC as need arises.

Under all options, information on any new DLR installation must be communicated to Operating Committee per the notice requirement in M03 - Section 2.1.1.2.

Stakeholders voiced support for sunset of the DLRTF, and this option was designated as a First Read at the January 12, 2023 Operating Committee.

On February 9, 2023 the Operating Committee endorsed the sunset of the DLRTF with 0 objections and 0 abstentions.



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APPENDIX I: SUPPLEMENTAL DOCUMENTS

[Committee Page](#)

[Issue Tracking](#)

[Education Tracker](#)

APPENDIX II: PJM PARTICIPATION

Facilitator : Natalie Tacka Furtaw

Secretary : Ashwini Bhat

Advocates : David Hislop, Sami Abdulsalam, Eric Hsia, PJM Stakeholder Affairs Representative

Subject Matter Experts : Raymond J. III Fernandez, Nicolae Dumitriu, Christopher R. Callaghan, Michael Herman, Vy Le, Bilge Derin, Ryan A. Nice, James Waweru, Darlene Phillips, J. Rami G Dirani, Janell L. Fabiano, Kevin Bazar.

PJM Legal : Mark Stanisz

APPENDIX III: STAKEHOLDER PARTICIPATION

Name	Company	Sector
Tina Mohler	PJM Interconnection LLC	Not Applicable
Hong Chen	PJM Interconnection LLC	Not Applicable
Jim Benchek	First energy Corporation	Transmission Owner
Mark Stanisz	PJM Interconnection LLC	Not Applicable
Michael Herman	PJM Interconnection LLC	Not Applicable
Adrien Ford	Old Dominion Electric Cooperative	Electric Distributor
Raymond Fernandez	PJM Interconnection LLC	Not Applicable
john dadourian	Monitoring Analytics, LLC	Not Applicable
Mike Bryson	PJM Interconnection LLC	Not Applicable
Takis Laios	Appalachian Power Company	Transmission Owner
Bill Crossland	Reliability First Corporation	Not Applicable
Connie Schroeder	Dominion Energy	Transmission Owner
Elizabeth Barnes	Not applicable	Not Applicable
Jill Gates	PJM Interconnection LLC	Not Applicable
Rafael Wilches	Public Service Electric & Gas Company	Transmission Owner
Hilary Pearson	Linevision Inc	Not Applicable
Christian McDewell	Not applicable	Not Applicable
Steven Nadel	PPL Electric	Transmission Owner
Becky Webb	Exelon Corporation	Transmission Owner
Christopher Pilonig	PJM Interconnection LLC	Not Applicable



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Zachary Callen	Illinois Commerce Commission	Not Applicable
Ben Sloan	Organization of PJM States, Inc. (OPSI)	Not Applicable
Anu Janapareddy	National Grid Renewables	Not Applicable
Natalie Tacka Furtaw	PJM Interconnection LLC	Not Applicable
Jonathan Sasser	Customized Energy Solutions, Ltd	Not Applicable
Dmitriy Misyura	Public Service Electric & Gas Company	Transmission Owner
John Brodbeck	EDP Renewables North America LLC	Generation Owner
Jay Rasmussen	Duke Energy Business Services LLC	Transmission Owner
jonas thaliath	Public Service Electric & Gas Company	Transmission Owner
Mark Price	DC Energy Mid-Atlantic, LLC	Other Supplier
Joey Alexander	Ampacimon	Not Applicable
Horst Lehmann	PPL Electric	Transmission Owner
Solon James	DC Energy, LLC	Other Supplier
Eric Rosenberger	PPL Electric	Transmission Owner
Maura McClelland	Public Utilities Commission of Ohio	Not Applicable
Rory Sweeney	Not applicable	Not Applicable
Mahila Christopher	Public Utilities Commission of Ohio	Not Applicable
Bill Elko	PPL Electric	Transmission Owner
Cynthia Bothwell	Department of Energy, DOE	Not Applicable
Kerry Neubrandner	DC Energy Mid-Atlantic, LLC	Other Supplier
Solomon, Greg	NextEra Energy Marketing, LLC	Other Supplier
Michael Coccco	Old Dominion Electric Cooperative	Electric Distributor
Janessa Kent	Duquesne Light Company	Transmission Owner
Thomas Hoatson	LS Power	Transmission Owner
Gerit Hull	American Municipal Power, Inc.	Electric Distributor
Christin Domian	Duquesne Light Company	Transmission Owner
Roseanne Circelli	Public Service Electric & Gas Company	Transmission Owner
Jason Hitt	Duquesne Light Company	Transmission Owner
Ben Rhyne	Dominion Energy	Transmission Owner
Phil D'Antonio	PJM Interconnection LLC	Not Applicable
Tom Hyzinski	GT Power Group, LLC	Not Applicable
Eric Hsia	PJM Interconnection LLC	Not Applicable
Michelle Antantis	Duquesne Light Company	Transmission Owner
Janell Fabiano	PJM Interconnection LLC	Not Applicable
Brian Hallett	ReliabilityFirst Corporation	Not Applicable
Elizabeth Cook	Duquesne Light Company	Transmission Owner
Laura Yovanovich	PPL Electric	Transmission Owner



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Dave Hicks	Perast Fund LP	Other Supplier
Richard Steinbacher	Dominion Energy	Transmission Owner
Jeff Whitehead	GT Power Group, LLC	Not Applicable
Sharon Midgley	Exelon Corporation	Transmission Owner
Jeremy Abramowitz	Monitoring Analytics, LLC	Not Applicable
Joe Pilch	Duquesne Light Company	Transmission Owner
John Eason	Not applicable	Not Applicable
Clay	Linevision Inc	Not Applicable
Bruce Bleiweis	DC Energy, LLC	Other Supplier
Diane Janicki	Boston Energy Trading and Marketing LLC	Other Supplier
Shaun Murphy	Urban Grid	Not Applicable
Jonathan Marmillo	Linevision Inc	Not Applicable
Kevin Bazar	PJM Interconnection LLC	Not Applicable
Peter Hepplewhite	Wrigley Capital LLC	Other Supplier
Jennifer Hohenshielt	Talen Energy Marketing, LLC	Generation Owner
David Hislop	PJM Interconnection LLC	Not Applicable
Kenneth Foladare	Tangibl Inc	Not Applicable
Ray Fernandez	PJM Interconnection LLC	Not Applicable
Claire Wang	Wrigley Capital LLC	Other Supplier
Mark Hurwich	Elliott Bay Energy Trading, LLC	Other Supplier
David Mabry	McNees, Wallace & Nurick, LLC	Not Applicable
Meagan Kuchan	AES Corporation	Transmission Owner
Forcum, David J	Duke Energy Ohio, Inc.	Transmission Owner
Paul McGlynn	PJM Interconnection LLC	Not Applicable
Baker, Jeff	Duke Energy Ohio, Inc.	Transmission Owner
Steinkuhl, Steve	Duke Energy Business Services LLC	Transmission Owner
Danielle Daugherty	ReliabilityFirst Corporation	Not Applicable
Christopher Callaghan	PJM Interconnection LLC	Not Applicable
Art Iler	Indiana Office of Utility Consumer Counsel	End User Customer
Gary Mason	First energy Corporation	Transmission Owner
Robert Cope	Dominion Energy	Transmission Owner
Jason Cox	EDF Energy Services, LLC	Other Supplier
Ashwini Bhat	PJM Interconnection LLC	Not Applicable