



# Performance Assessment Interval (PAI) Settlements

Risk Management Committee  
April 25, 2023

The Balancing Ratio is calculated during each Performance Assessment Interval (PAI) to determine each generation capacity resource’s obligation to deliver energy.

**Balancing Ratio (BR) =**

$$\frac{\text{Total Actual Generation and Storage Performance} + \text{Net Energy Imports} + \text{DR and PRD Bonus Performance}}{\text{All Generation and Storage Committed Capacity Commitments (UCAP)}}$$

Final Balancing Ratios					Preliminary Balancing Ratio	Difference
Date/Time	Area(s)	Min BR	Max BR	Average BR	Average BR	
Dec. 23 17:30–23:00	RTO	82.41%	86.23%	85.20%	85.48%	-0.28%
Dec. 24 04:25–22:00	RTO	77.85%	83.96%	81.19%	80.62%	0.57%

<b>Total Gross Penalties / Potential Bonus</b>	<b>Total Net Penalties</b>
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\$1,817,694,727

\$1,296,628,015

Members with:			
Gross Penalties	Gross Bonus	Net Penalties	Net Bonus
187	260	116	182

*Bonus performance payments ultimately depend on total collected Non-Performance Charges so those credits are subject to change based on actual collections. Collection of these charges cannot be guaranteed on account of factors such as litigation outcomes, bankruptcy discharge or other financial constraints affecting collectability. As such, the bonus credits and rates included in this presentation are subject to change.*



# PAI Billing Elections & Monthly Billing

Election	% of Sub-Accounts with Charges	Penalty Charges		Total Interest Charges
		Total Gross	% of Gross	
3 Months	71%	\$539 million	30%	N/A
9 Months	29%	\$1,279 million	70%	\$15 million

<b>Penalty charges* billed in March–May:</b> \$322 million per month	<b>Penalty charges* billed in June – November:</b> \$142 million per month
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*\*Excludes interest charges*

The total penalties and interest charges to be billed on a monthly basis have been [posted](#) on the Winter Storm Elliott web page.



# Final Bonus Rates (before holdback)

	Average Bonus Rate (\$/MW-interval)	% of RTO Penalty Rate (\$250.69/MW-interval)	Min Bonus Rate (\$/MW-interval)	Max Bonus Rate (\$/MW-interval)
Entire Event	\$ 193.15	77%	\$ 161.41	\$ 225.06
12/23/2022	\$ 200.22	80%	\$ 190.61	\$ 207.04
12/24/2022	\$ 190.94	76%	\$ 161.41	\$ 225.06

The final bonus rates are roughly 25% lower than the preliminary bonus rates. This is primarily driven by the addition of demand response, price responsive demand, energy efficiency and net import bonus MW.

- Resources that over-performed beyond expectations receive a share of the penalty charges **collected** for each interval as bonus credits
- A bonus holdback is used to adjust for the difference between total penalties billed and total penalties collected
  - An **expected holdback** is an estimate of non-collection of penalty charges before financial settlement occurs
    - The expected holdback for the March 2023 bill was 25%. Total bonus credits paid equaled 75% of total monthly charges billed (\$241 million)
  - An **actual holdback** amount is used in subsequent bills to true up the initial bonus credits paid for a month with the total penalties actually collected for that month

PJM collected 97.4% of all non-performance charges in March (principal plus interest)

	Principal	Interest
Total Monthly Non-Performance Charges Invoiced	\$321,691,327.32	\$1,708,728.11
Total Monthly Non-Performance Charges Collected	\$313,268,533.79	\$1,708,728.11
<b>Non-payment</b>	<b>\$ 8,422,793.53</b>	<b>\$0*</b>

\*For simplicity, when allocating payments received towards PAI charges, PJM first applies payments to interest charges, then to non-performance charges



# Actual Holdback for March 2023 & Adjustment to Bonus Credits

An additional \$72 million in bonus credits for March will be distributed in the April bill

	<b>Principal</b>	<b>Interest</b>
Total Monthly Non-Performance Charges Collected (Final bonus pool)	\$313,268,533.79	\$1,708,728.11
Total Monthly Bonus Credits Invoiced in March (inclusive of holdback)	\$241,268,495.49	\$1,708,728.11
<b>Adjustment to March Bonus Credits (additional credits to be paid in April)</b>	<b>\$ 72,000,038.30</b>	<b>\$ 0</b>



## Entities in Default^

EFS Parlin Holdings, LLC

## Entities in Bankruptcy\*

Elgin Energy Center, LLC

Rocky Road Power, LLC

Heritage Power Marketing, LLC

^Market notice of collateral and non-payment defaults sent on 4/19/2023

\*Market notice sent on 4/14/2023

\*\* As of 1/1/2023

	<b>Principal</b>	<b>Interest</b>
Total Monthly Non-Performance Charges Invoiced in April	\$321,691,327.32	\$1,708,728.11
Initial Holdback	\$ 48,253,699.10 (15% - covers principal charges from accounts with non-payment in March plus additional risk)	\$ 56,871.22 (covers non-payment from accounts with non-payment in March)
<b>Total Bonus Credit</b>	<b>\$273,437,628.22</b>	<b>\$1,651,220.89</b>

# Appendix



# Winter Storm Elliott FERC-Filed Complaints

Docket	Complainants
EL23-53	Essential Power OPP, LLC; Essential Power Rock Springs, LLC; Lakewood Cogeneration, L.P.
EL23-54	ComEd Zone Generators: Aurora Generation, LLC; Elwood Energy, LLC; Jackson Generation, LLC; Lee County Generating Station, LLC; Lincoln Generating Facility, LLC; LSP University Park, LLC; Rockford Power, LLC; Rockford Power II, LLC; and University Park Energy, LLC
EL23-55	Coalition of PJM Capacity Resources: Ad Hoc Committee of Certain Noteholders of Talen Energy Corp.; Clean Energy Future – Lordstown, LLC Competitive Power Ventures Holdings, LP; Hickory Run Energy, LLC; Lanyard Power Holdings, LLC; Lightstone Marketing LLC; Orion Power Holdings, LLC; Parkway Generation Operating LLC; Brunner Island, LLC; H.A. Wagner LLC; Montour, LLC; Camden Plant Holding, L.L.C.; MC Project Company LLC; Talen Energy Marketing, LLC; Red Oak Power, LLC; and South Field Energy LLC
EL23-56	Talen Energy Marketing, LLC
EL23-57	Lee County Generating Station, LLC
EL23-58	SunEnergy1, LLC
EL23-59	Lincoln Generating Facility, LLC
EL23-60	Parkway Generation Keys Energy Center LLC
TBD	Old Dominion Electric Cooperative

- PJM member Heritage Power Marketing, LLC and 18 affiliates (Blossburg Power, LLC; Brunot Island Power, LLC; Gilbert Power, LLC; Hamilton Power, LLC; Heritage Power, LLC; Heritage Power Marketing, LLC; Hunterstown Power, LLC; Mountain Power, LLC; New Castle Power, LLC; Niles Power, LLC; Orrtanna Power, LLC; Portland Power, LLC; Sayreville Power, LLC; Shawnee Power, LLC; Shawville Power, LLC; Titus Power, LLC; Tolna Power, LLC; and Warren Generation, LLC) filed Chapter 11 bankruptcy petitions on January 24, 2023 in the U.S. Bankruptcy Court for the Southern District of Texas (Case No. 23-90032)
- Lincoln Power, L.L.C. and 7 affiliates (including PJM members Elgin Energy Center, LLC and Rocky Road Power, LLC) filed Chapter 11 bankruptcy petitions on March 31, 2023 in the U.S. Bankruptcy Court for the District of Delaware (Case No. 23-10382)



## Changes to how PAI Interest Will Be Billed

- With March 2023 Billing Cycle, the interest charges associated with billing for Winter Storm Elliott PAIs were processed as an adjustment.
- Interest charges and credits can be seen on the billing statement.
  - Under Billing Line Item 1667: Non-Performance Charge
    - Applied as a same month adjustment to this line item. For example, March interest was assessed as an adjustment to March non-performance charges in the March billing statement. (Line Item 1667 A)
  - Under Billing Line Item 2667: Bonus Performance Credit
    - Applied as a same month adjustment to this line item. For example, March interest was paid as an adjustment to March bonus performance credits in the March billing statement. (Line Item 2667 A)

- Interest charges and credits will be encapsulated in Non-Performance Charge and Bonus Performance Credit line items
  - Under Billing Line Item 1667: Non-Performance Charge including interest charges
  - Under Billing Line Item 2667: Bonus Performance Credit including interest credits
  - No longer broken out as adjustments on the billing statement
- A new MSRS report titled 'Non-Performance Assessment Monthly Billing Totals' will be created to detail an organization's monthly PAI billing data.
  - This report will show which portion of the amounts billed in the 1667 and 2667 line items are attributable to principal vs. interest.





# Non-Performance Assessment Monthly Billing Totals

- Details an organization’s PAI billing at the billing month level
- Shows allocation of Monthly Interest Charges to Bonus Performance Monthly Interest Credits

The following columns will appear in the body of the report:

Online and CSV Column Name	XML Column Name	Column Number	Data Type
Customer ID	CUSTOMER_ID	4000.01	INTEGER
Customer Code	CUSTOMER_CODE	4000.02	VARCHAR2(6)
Billing Month	BILLING_MONTH	4000.03	Date (Mon, YYYY)
Performance Assessment Area	PERFORMANCE_ASSESSMENT_AREA	1667.12	VARCHAR2(4000)
Total PJM Non-Performance Charges (\$)	TOT_PJM_NPA_CHARGES	1667.85	NUMBER(22,2)
Total PJM Non-Performance Monthly Charge (\$)	TOT_PJM_NON_PERF_MONTHLY_CH	2667.13	NUMBER(22,2)
Total PJM Monthly Bonus Holdback (\$)	TOT_PJM_MONTHLY_BONUS_HOLD	2667.19	NUMBER(22,2)
Non-Performance Monthly Charge (\$)	NON_PERF_MONTHLY_CH	1667.01	NUMBER(22,2)
Non-Performance Monthly Interest Charge (\$)	NON_PERF_MTHLY_INT_CH	1667.02	NUMBER(22,2)
Total PJM Monthly Interest Charge (\$)	TOT_PJM_MONTHLY_INT_CH	2667.20	NUMBER(22,2)
Total PJM Monthly Interest Holdback (\$)	TOT_PJM_MONTHLY_INT_HOLD	2667.21	NUMBER(22,2)
Total Potential Bonus Performance Credits (\$)	TOT_POT_BONUS_PERF_CR	2267.14	NUMBER(22,2)
Bonus Performance Monthly Credit (\$)	BONUS_PERFORMANCE_MONTHLY_CR	2667.01	NUMBER(22,2)
Bonus Performance Monthly Interest Credit (\$)	BONUS_PERF_MONTHLY_INT_CR	2667.02	NUMBER(22,2)
Version	VERSION	4000.07	VARCHAR2(12)

Bonus Performance Monthly Interest Credit = (Total PJM Monthly Interest Charge – Total PJM Monthly Interest Holdback) \* Total Potential Bonus Performance Credits / Total PJM Non-Performance Charges

- Non-Performance Assessment Monthly Billing Totals report will be available with April 2023 Billing.
- MSRS report documentation will be posted to the MSRS Reports Web Page (<https://www.pjm.com/markets-and-operations/billing-settlements-and-credit/msrs-reports-documentation>) under the RPM category
  - Pardot communication will be distributed detailing availability of updated documentation
- Please direct any questions related to report updates to [mss@pjm.com](mailto:mss@pjm.com)

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## PAI Settlements



## Member Hotline

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