

## Proposed FTR Report Changes

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February 19, 2021



- Proposed Changes
  - Update two existing reports to allow for easier readability and ease of use
    - Hourly Transmission Congestion Credits
    - Cross-monthly Congestion Credit Summary
  - Create one new report
    - Planning Period Congestion Allocation
      - Will show how excess congestion is derived
      - Replace annual email sent out at the end of the planning period
- Desired implementation in May 2021



### Hourly Transmission Congestion Credits - Updated

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)
EPT Hour Ending	EPT_HOUR_ENDING	4000.05	VARCHAR2(40)
			mm/dd/yyyy HH24 format
			(Displays first hour of the day as hour 1 and last hour of the day as hour 24)
GMT Hour Ending	GMT_HOUR_ENDING	4000.06	VARCHAR2(40)
			mm/dd/yyyy HH24 format
			(Displays first hour of the day as hour 1 and last hour of the day as hour 00 of the following day)
Total PJM FTR Target Credits (\$)	TOTAL_PJM_FTR_TARGET_CRE DITS	2211.11	NUMBER(22,2)
Total PJM FTR Revenues (\$)	TOTAL_PJM_FTR_REVENUES	2211.12	NUMBER(22,2)
Hourly FTR Target Credit (\$)	HOURLY_FTR_TARGET_CREDIT	2211.13	NUMBER(22,9)
Hourly FTR Credit (\$)	HOURLY_FTR_CREDIT	2211.01	NUMBER(22,2)
End-of-Month FTR Credit	END_OF_MONTH_FTR_CREDIT	<del>2211.02</del>	NUMBER(22,4)
Version	VERSION	4000.07	VARCHAR2(12)

- All supporting calculations will remain the same
- End-of-Month FTR Credit (2211.02)
  - Being removed
  - Use Monthly FTR Excess Credit (2211.03) on Cross-Monthly Congestion Credit Summary



### Cross-monthly Congestion Credit Summary - Updated

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)
Processing Month	PROCESSING_MONTH	4000.43	DATE (Month, YYYY (ex. January, 2007) in online and CSV formats, YYYY-MM in XML format)
Month	MONTH	4000.03	DATE (Month, YYYY (ex. January, 2007) in online and CSV formats, YYYY-MM in XML format)
Monthly FTR Target Credit (\$)	MONTHLY_FTR_TARGET_CR	2217.11	NUMBER
Monthly FTR Credit (\$)	MONTHLY_FTR_CR	2217.12	NUMBER
FTR Deficiency (\$)	FTR_DEFICIENCY	2217.13	NUMBER
FTR Holder Excess Congestion Credit (\$)	FTR_HOLDER_EXCESS_CONGESTION	2217.01	NUMBER(22,2)
FTR Uplift Credit (\$)	FTR_UPLIFT_CR	<del>2218.01</del>	NUMBER(22,2)
Monthly ARR Target Credit (\$)	MONTHLY ARR TARGET CR	2217.14	NUMBER
Monthly ARR Credit (\$)	MONTHLY_ARR_CR	2217.15	NUMBER
ARR Deficiency (\$)	ARR_DEFICIENCY	2217.16	NUMBER
ARR Holder Excess Congestion Credit (\$)	ARR_HOLDER_EXCESS_CONGESTION_CR	2217.02	NUMBER(22,2)
ARR Uplift Credit (\$)	ARR_UPLIFT_CR	2218.02	NUMBER(22,2)
End of Year Excess Congestion Credit (\$)	YEAR_END_EXCESS_CONGESTION _CR	2217.03	NUMBER(22,2)
Version	VERSION	4000.07	VARCHAR2(12)

- Original format shown
- Additional data added for more transparency
- Rows with red wording
  - See slide 5 for details
- Rows orange highlighted and red strikethrough
  - Processing Month (4000.43)
    - removed
  - FTR Uplift Credit (2218.01)
    - Moved to Planning Period Congestion Allocation report
  - ARR Holder Excess Congestion Credit (2217.02)
    - Moved to Planning Period Congestion Allocation report
    - Assigned a new number 2217.36
  - ARR Uplift Credit (2218.02)
    - Moved to Planning Period Congestion Allocation report
  - End of Year Excess Congestion Credit (2217.03)
    - Moved to Planning Period Congestion Allocation report
    - Renamed to Planning Period Excess Congestion Credit (2217.01)



### Cross-monthly Congestion Credit Summary - Updated

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)
Month	MONTH	4000.03	DATE (Month, YYYY (ex. January, 2007) in online and CSV formats, YYYY-MM in XML format)
Monthly ARR Target Credit (\$)	MONTHLY_ARR_TARGET_CR	2217.14	NUMBER(22,2)
Monthly ARR Credit (\$)	MONTHLY_ARR_CR	2217.15	NUMBER(22,2)
Monthly ARR Deficiency (\$)	MONTHLY_ARR_DEFICIENCY	2217.28	NUMBER(22,2)
Total Monthly ARR Deficiency(\$)	TOT_MTH_ARR_DEF	2217.17	NUMBER(22,2)
Total Monthly ARR Excess Revenue (\$)	TOT_MTH_ARR_EXS_REV	2217.18	NUMBER(22,2)
Monthly ARR Excess Credit (\$)	MONTHLY_ARR_EXS_CR	2217.19	NUMBER(22,2)
Monthly FTR Target Credit (\$)	MONTHLY_FTR_TARGET_CR	2217.11	NUMBER(22,2)
Monthly FTR Credit (\$)	MONTHLY_FTR_CR	2217.12	NUMBER(22,2)
Monthly FTR Deficiency (\$)	MONTHLY_FTR_DEF	2217.20	NUMBER(22,2)
Total Monthly FTR Deficiency (\$)	TOT_MTH_FTR_DEF	2217.21	NUMBER(22,2)
Total Monthly PJM FTR Excess Cong Revenue (\$)	TOT_MTH_PJM_FTR_EXS_CONG_RE V	2217.22	NUMBER(22,2)
Total Net ARR Excess Revenue (\$)	TOT_NET_ARR_EXS_REV	2217.23	NUMBER(22,2)
Monthly FTR Excess Credit (\$)	MTH_FTR_EXS_CR	2211.03	NUMBER(22,2)
FTR Planning Year to Date Deficiency(\$)	FTR_PLANNING_YTD_DEF	2217.25	NUMBER(22,2)
Total FTR Planning Year to Date Deficiency (\$)	TOT_FTR_PLANNING_YTD_DEF	2217.26	NUMBER(22,2)
Total FTR Planning Year to Date Excess Cong Revenue (\$)	TOT_FTR_PLANNING_YTD_EXS_CO NG_REV	2217.27	NUMBER(22,2)
FTR Holder Excess Congestion Credit (\$)	FTR_HOLDER_EXCESS_CONGESTIO N_CR	2211.04	NUMBER(22,2)
Version	VERSION	4000.07	VARCHAR2(12)

- Proposed format shown
- Rows blue highlighted and red wording
  - FTR Deficiency (2217.13) → Monthly FTR Deficiency (2217.20)
  - FTR Holder Excess Congestion Credit (2217.01) → FTR Holder Excess Congestion Credit (2211.04)
  - ARR Deficiency (2217.16) → Monthly ARR Deficiency (2217.28)
- Rows blue highlighted only
  - Additional data added



# Cross-monthly Congestion Credit Summary Updated Supporting Calculations

- Monthly ARR Deficiency (\$) (2217.28)
  - = Monthly ARR Target Credit (\$) Monthly ARR Credit (\$)
  - = 2217.14 2217.15
- Monthly ARR Excess Credit (\$) (2217.19)
  - If Total Monthly ARR Excess Revenue (\$) < Total Monthly ARR Deficiency (\$) then:</li>
  - = (Monthly ARR Deficiency (\$) / Total Monthly ARR Deficiency (\$))\* Total Monthly ARR Excess Revenue(\$)
  - = (2217.28 / 2217.17) \* 2217.18
  - If Total Monthly ARR Excess Revenue (\$) >= Total Monthly ARR Deficiency (\$) then:
  - = Monthly ARR Deficiency (\$)
  - = 2217.28



## Cross-monthly Congestion Credit Summary Updated Supporting Calculations

- Monthly FTR Deficiency (\$) (2217.2)
  - = Monthly FTR Target Credit (\$) Monthly FTR Credit (\$)
  - = 2217.11 2217.12
- Monthly FTR Excess Credit (\$) (2211.03)
  - If (Total Monthly PJM FTR Excess Cong Rev (\$) + Total Net ARR Excess Rev) < Total Monthly FTR Deficiency (\$) then:
  - = (Monthly FTR Deficiency (\$) / Total Monthly FTR Deficiency (\$)) \* (Total Monthly PJM FTR Excess Cong Rev (\$) + Total Net ARR Excess Rev)
  - = (2217.2 / 2217.21) \* (2217.22 + 2217.23)
  - If (Total Monthly PJM FTR Excess Cong Rev (\$) + Total Net ARR Excess Rev) >= Total Monthly FTR Deficiency (\$) then:
  - = Monthly FTR Deficiency (\$)
  - = 2217.2



# Cross-monthly Congestion Credit Summary Updated Supporting Calculations

- FTR Holder Excess Congestion Credit (\$) (2211.04)
  - If Total FTR Planning Year to Date Excess Cong Revenue (\$) < Total FTR Planning Year to Date Deficiency (\$)
  - = (FTR Planning Year to Date Deficiency(\$) / Total FTR Planning Year to Date Deficiency (\$)) \* Total FTR Planning Year to Date Excess Cong Revenue (\$)
  - = (2217.25 / 2217.26) \* 2217.27
  - If Total FTR Planning Year to Date Excess Cong Revenue (\$) >= Total FTR Planning Year to Date Deficiency (\$)
  - = FTR Holder Excess Congestion Credit (\$) = FTR Planning Year to Date Deficiency(\$)
  - = 2217.25



## Planning Period Congestion Allocation – New

 This will replace the email sent out with the subject: "FAQ regarding verification of Planning Period Excess Congestion Credit line item in May 20XX bill"

Subject: FAQ regarding verification of Planning Period Excess Congestion Credit line item in May 2020 bill

The May 2020 PJM monthly bill included some significant distributions to ARR holders under BLI #2217: "Planning Period Excess Congestion Credits". This is an annual distribution that occurs at the end of Planning Periods in which PJM collected more congestion revenues than were needed to fulfill FTR Targets. When this happens, any remaining excess congestion funds are distributed to ARR holders who had net-positive ARR Target Credits for the planning year. For members who wish to recalculate/verify the Planning Period Excess Congestion Credit value appearing on their May 2020 billing statement, here are the two additional pieces of data that they will need:

Total PJM end-of-planning-year excess congestion revenues to be distributed: \$ 138,943,242.43

Total PJM net-positive ARR Target Credits for the planning year: \$ 762,041,252.65

#### So the formula is:

(Total PJM end-of-planning-year excess congestion revenues to be distributed) \* (Participant's net-positive ARR Target Credits for the planning year / Total PJM net-positive ARR Target Credits for the planning year) = Participant's Planning Period Excess Congestion Credit

Please note that these values are likely to change slightly in future billing statements due to retroactive data corrections affecting the 2019-2020 planning year. Any changes of this type will appear as adjustments to May 2020 Planning Period Excess Congestion Credits in future billing statements.

Available 5<sup>th</sup> business day in June for the end of the planning year



## Planning Period Congestion Allocation

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)
Month	MONTH	4000.02	DATE (Month, YYYY (ex. January, 2007) in online and CSV formats, YYYY-MM in XML format)
Start Planning year	START_PLANNING_YEAR	4001.17	DATE (MM/DD/YYYY)
End Planning Year	END_PLANNING_YEAR	4001.18	DATE (MM/DD/YYYY)
Net Positive ARR Target Credit (\$)	NET_POS_ARR_TARGET_CR	2217.30	NUMBER
PJM Planning Period Net Positive ARR Credits (\$)	PJM_PLAN_PRD_ NET_POSTIVE ARR_TARGET_CR	2217.31	NUMBER
PJM Planning Period Excess Congestion Revenue (\$)	PJM_PLAN_PRD_CONGESTION_ REVENUE	2217.32	NUMBER
Planning Period FTR Deficiency (\$)	PLAN_PRD_FTR_DEFICIENCY	2217.33	NUMBER
FTR Uplift Credit (\$)	FTR_UPLIFT_CR	2218.01	NUMBER(22,2)
ARR Deficiency (\$)	ARR_DEFICIENCY	2217.34	NUMBER
PJM ARR Deficiency (\$)	PJM_ARR_DEFICIENCY	2217.35	NUMBER
ARR Holder Excess Congestion Credit (\$)	ARR_HOLDER_EXCESS_CONGESTI ON_CR	2217.36	NUMBER
PJM Planning Period Excess Congestion Revenue to be distributed (\$)	PJM_PLAN_PRD_EXS_CONG_REV_ DIST	2217.37	NUMBER
Planning Period Excess Congestion Credit (\$)	PLAN_PRD_EXCESS_CONG_CR	2217.01	NUMBER
ARR Uplift Credit (\$)	ARR_UPLIFT_CR	2218.02	NUMBER(22,2)
Positive FTR Target Credits (\$)	NET_POSITIVE_FTR_TARGET_CR	2217.38	NUMBER
PJM Planning Period Net Positive FTR Target Credits (\$)	PJM_PLAN_PRD_NET_POS_FTR_TA RGET_CR	2217.39	NUMBER
PJM Planning Period FTR Deficiency (\$)	PJM_PLAN_PRD_FTR_DEFICIENCY	2217.40	NUMBER
Congestion Uplift Charge(\$)	CONG_UPLIFT_CH	1218.01	NUMBER(22,2)
Version	VERSION	4000.07	VARCHAR2(12)

- End of the year allocation process is complex and happens in stages
  - Manual 28, 8.4.4
- New report consolidates the information and eliminates calculating these values manually
- Provides transparency associated with excess and deficiencies scenarios
- Column names are not final and may alter slightly



## Planning Period Congestion Allocation Scenarios

### Excess

 Annual distribution that occurs at the end of Planning Periods in which PJM collected more congestion revenues than were needed to fulfill FTR Targets. Any remaining excess congestion funds are distributed to ARR holders who had net-positive ARR Target Credits for the planning year

### Deficiency

Any revenue deficient transmission rights (ARRs or FTRs) remaining at the end of the Planning
Period are satisfied through a transmission rights uplift charge which is allocated to FTR holders
on a pro-rata basis according to their net FTR target allocation position, relative to the total net
FTR target allocation positions of all FTR holders in the PJM Interchange Energy Market. An entity
with a net negative FTR target allocation position is not subject to transmission rights uplift
allocation charges



### Planning Period Congestion Allocation Supporting Calculations - Excess

- Planning Period Excess Congestion Credit (\$) (2217.01)
  - = (PJM End of Planning Year Excess Congestion Revenue to be distributed (\$)) \* (Participant Net Positive ARR Target Credit (\$) / PJM End of Year Net Positive ARR Credits (\$))
  - = (2217.37) \* (2217.30 / 2217.31)



### Planning Period Congestion Allocation Supporting Calculations – Excess/Deficiency

- PJM End of Planning Year Excess Congestion Revenue to be distributed (\$) (2217.37)
  - If PJM End of Year Excess Congestion Revenue (\$) >= PJM ARR Deficiency (\$)
    - Then all participant ARR Deficiency is fully funded, therefore;
      - ARR Holder Excess Congestion Credit (\$) (2217.36) = Participant ARR Deficiency (\$) (2217.34)
  - = PJM End of Year Excess Congestion Revenue (\$) PJM ARR Deficiency (\$)
  - = 2217.32 2217.35
  - If PJM End of Year Excess Congestion Revenue (\$) < PJM ARR Deficiency (\$)</li>
  - = No distribution.
    - Then all participant ARR Deficiency is NOT fully funded, therefore;
      - ARR Holder Excess Congestion Credit (\$) (2217.36)
      - = (Participant ARR Deficiency (\$) / PJM ARR Deficiency) \* PJM End of Year Excess Congestion Revenue (\$)
      - = (2217.34 / 2217.35) \* 2217.32



### Planning Period Congestion Allocation Supporting Calculations - Deficiency

- FTR Uplift Credit (\$) (2218.01)
  - Populated only when Participant End Of Year FTR Deficiency (\$) > 0
  - = Participant End Of Year FTR Deficiency (\$)
  - =(2217.33)
- ARR Uplift Credit (\$) (2218.02)
  - Populated only when Participant ARR Deficiency (\$) > 0
  - = ARR Deficiency (\$) ARR Holder Excess Congestion Credit (\$)
  - = (2217.34) (2217.36)
- Congestion Uplift Charge (\$) (1218.01)
  - = (Participant positive FTR Target Credits (\$) / Total PJM End of Year Net Positive FTR Target Credits (\$)) \* (PJM End of Year FTR Deficiency (\$) + PJM ARR Deficiency (\$) PJM End of Year Excess Congestion Revenue (\$))
  - = (2217.38 / 2217.39) \* (2217.40 + 2217.35 2217.32)



- Next Steps
  - Review slides with internal personnel
  - Respond to survey forthcoming in next two weeks



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