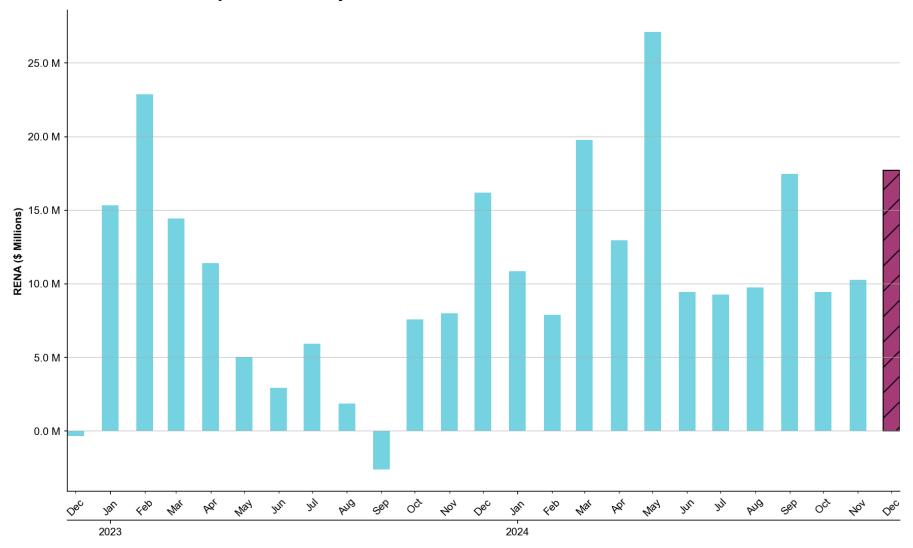
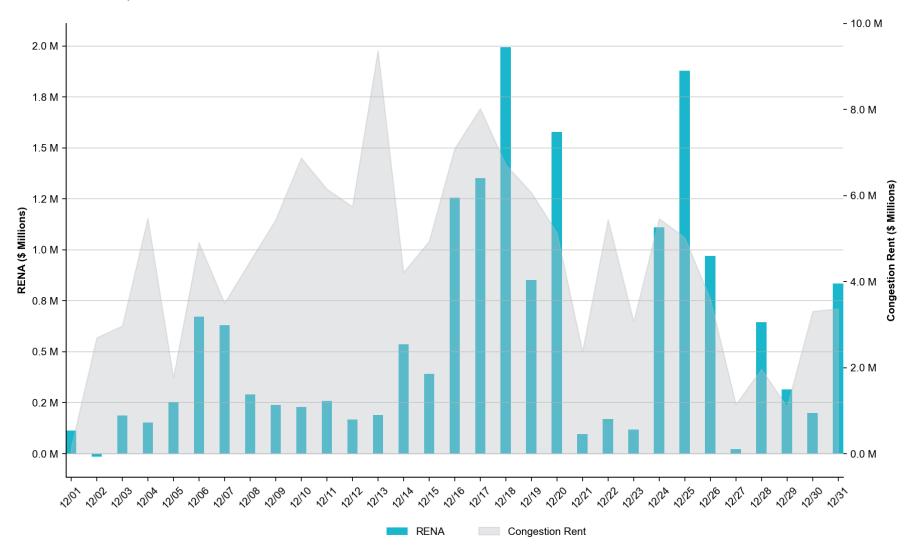
Historical Monthly RENA Totals

The total RENA in December of \$17.70M represents the 88th percentile compared to the monthly RENA totals across the previous two years.



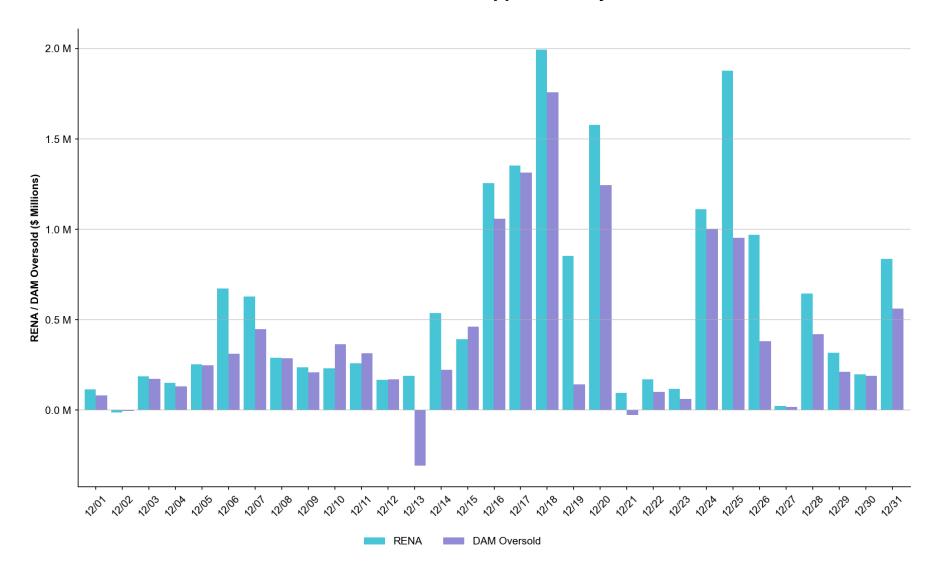
Daily RENA vs. Real-Time Congestion Rent

The total RENA in December was approximately \$17.70M, while the total Real-Time congestion rent accrued amounted to \$137.56M.



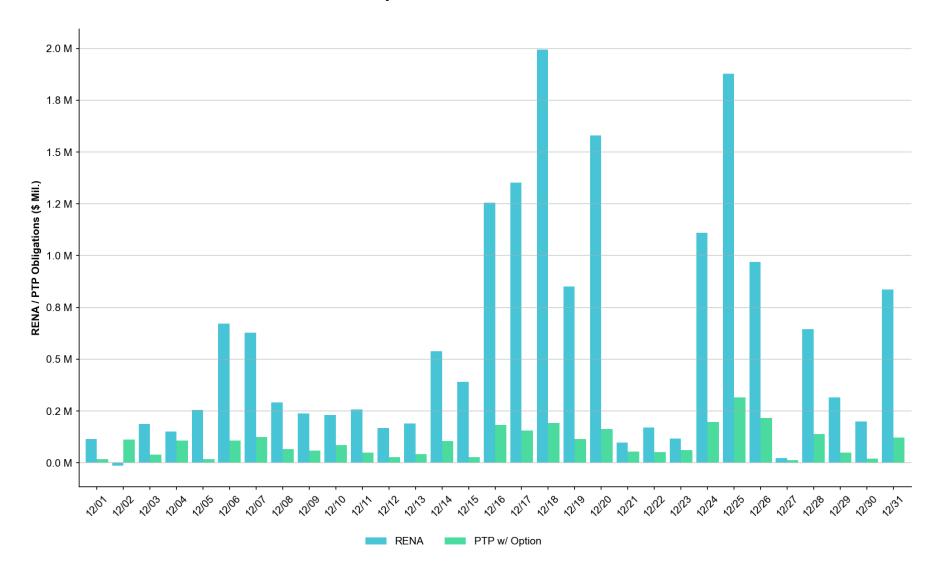
Daily RENA vs. estimated DAM Oversold

The total estimated DAM oversold in December was approximately \$12.50M.



Daily RENA vs. PTP w/ Links to Options

The estimated sum of PTPs w/ Links to Options in December totaled \$3.03M.



Analysis

Operating Days with RENA exceeding \$1 million

| OPERATING DAY | RENA | RT CONGESTION RENT | DAM OVERSOLD | PTP W/ OPTION |
|---------------|---------|--------------------|--------------|---------------|
| December-16 | \$1.26M | \$7.09M | \$1.06M | \$0.18M |

NOTES:

 DAM Oversold on an RTM constraint: The constraint DBAKCED5: HARGRO_TWINBU1_1 (LZ_WEST) contributed ca. \$1M toward RENA, attributable to a combination of a PST tap discrepancy between DAM and RTM and discrepancies between PUN LDFs modelled in DAM and actual net consumption in RTM.

| OPERATING DAY | RENA | RT CONGESTION RENT | DAM OVERSOLD | PTP W/ OPTION |
|---------------|---------|--------------------|--------------|---------------|
| December-17 | \$1.35M | \$8.02M | \$1.32M | \$0.16M |

NOTES:

- DAM Oversold on an RTM constraint: The constraint DCONLNG5: 14040__I (LZ_WEST) contributed ca. \$0.6M toward RENA, attributable to a combination of a PST tap discrepancy between DAM and RTM and discrepancies between PUN LDFs modelled in DAM and actual net consumption in RTM.
- DAM Oversold on an RTM constraint: The constraint DBAKCED5: HARGRO_TWINBU1_1 (LZ_WEST) contributed ca. \$0.5M toward RENA, attributable to a combination of a PST tap discrepancy between DAM and RTM and discrepancies between PUN LDFs modelled in DAM and actual net consumption in RTM.

| OPERATING DAY | RENA | RT CONGESTION RENT | DAM OVERSOLD | PTP W/ OPTION |
|---------------|---------|--------------------|--------------|---------------|
| December-18 | \$1.99M | \$6.72M | \$1.76M | \$0.19M |

NOTES:

- DAM Oversold on an RTM constraint: The constraint DCONLNG5: 14040__I (LZ_WEST) contributed ca. \$0.95M toward RENA, attributable to a combination of a PST tap discrepancy between DAM and RTM and discrepancies between PUN LDFs modelled in DAM and actual net consumption in RTM.
- DAM Oversold on an RTM constraint: The constraint DBIGKEN5: FORTMA_YELWJC1_1 (CROSS) contributed ca. \$0.55M toward RENA, primarily attributable to PST tap differences between DAM and RTM.

| OPERATING DAY | RENA | RT CONGESTION RENT | DAM OVERSOLD | PTP W/ OPTION |
|---------------|---------|--------------------|--------------|---------------|
| December-20 | \$1.58M | \$5.14M | \$1.24M | \$0.16M |

NOTES:

- DAM Oversold on an RTM constraint: The constraint DBAKCED5: HARGRO_TWINBU1_1 (LZ_WEST) contributed ca. \$0.4M toward RENA, attributable to a combination of a PST tap discrepancy between DAM and RTM and discrepancies between PUN LDFs modelled in DAM and actual net consumption in RTM.
- DAM Oversold on an RTM constraint: The constraint BASE CASE: PNHNDL (LZ_WEST) contributed ca. \$0.3M toward RENA, attributable to a discrepancy between the GTC limit applied in RTM and DAM.

| OPERATING DAY | RENA | RT CONGESTION RENT | DAM OVERSOLD | PTP W/ OPTION |
|---------------|---------|--------------------|--------------|---------------|
| December-25 | \$1.99M | \$5.02M | \$0.95M | \$0.31M |

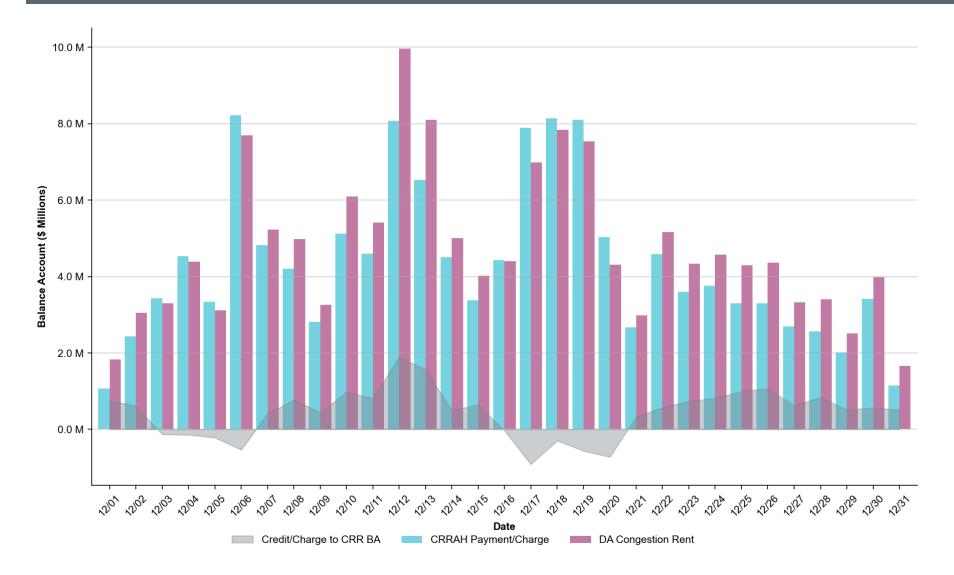
NOTES:

• DAM Oversold on an RTM constraint: The constraint DBIGKEN5: FORTMA_YELWJC1_1 (CROSS) contributed ca. \$1.2M toward RENA, primarily attributable to PST tap differences between DAM and RTM.

Summary

- The monthly RENA observed in December totaled \$17.70M, which is high based on the monthly RENA totals
 across the past two years.
 - The overwhelming share of the RENA accrued was related to constraints "oversold" in DAM, which can
 generally be attributed to model topology differences between DAM and RTM, forced/planned outages in
 RTM not captured in DAM, LDF, PST and/or RAS modeling.
 - The largest share of the highest totals accrued on RTM constraints in the West Load Zone (LZ West).
- The highest RENA observed in December was on OD 12/18 with \$1.99M, attributable to a combination of a PST tap discrepancies between DAM and RTM and differences between PUN LDFs modelled in DAM and actual net consumption in RTM.
- PTP w/ links to options in December totaled \$3.03M, which is slightly higher than observed in recent months. The highest daily contribution of \$0.31M was observed on OD 12/25.
- The remainder of RENA was related to disparities in the amount of Congestion Rent that accrued in SCED and that which was collected in Settlement.

Monthly CRR Balance Account



Abbreviations

CRR Congestion Revenue Rights

CRRAH Congestion Revenue Rights' Account Holders

CRRBA Congestion Revenue Rights' Balance Account

OD Operating Day

PTP Point-to-Point

RENA Revenue Neutrality Allocation Uplift