

October 2024 ERCOT Monthly Operations Report

Reliability and Operations Subcommittee Meeting

December 05, 2024

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# Report Highlights

* The unofficial ERCOT peak demand was 72,540 MW for the month of October on 10/3/2024 HE 17:00; this is 1,306 MW higher than the October 2023 peak demand of 71,234 MW on 10/4/2023 HE 17:00.
* There were 3 frequency events.
* There were no ERCOT Contingency Reserve Service (ECRS) events.
* There were no Responsive Reserve Service (RRS) releases.
* There were no DC Tie Curtailments.
* There were 49 HRUC commitments.
* There were 7 OCNs issued.
  + 3 OCNs were issued for topology change in PNHNDL region.
  + 1 OCN was issued for AAN due to possible future Emergency Conditions of reserve capacity deficiency.
  + 1 OCN was issued for taking manual action on the PNHNDL IROL for a planned outage.
  + 1 OCN was issued due to predicted Extreme Hot Weather event for the ERCOT Region.
  + 1 OCN was issued due to developing a modified Generic Transmission Constraint due to new updated limit.
* There were 4 Advisories issued for Geomagnetic disturbance of [K-7] or Higher.
* The following GTCs saw congestion in October:

|  |  |
| --- | --- |
| GTC | Days Congestion |
| Panhandle GTC | 20 |
| West Texas Export | 14 |
| Wharton County | 7 |
| South Texas Export (E\_PASP) | 8 |
| Nelson Sharpe to Rio Hondo | 10 |
| Valley Export | 8 |
| Zapata Starr | 11 |
| North Edinburg to Lobo | 9 |
| South Texas Export (E\_PATA) | 12 |
| South Texas Import (I\_KALO) | 4 |
| North to Houston | 2 |

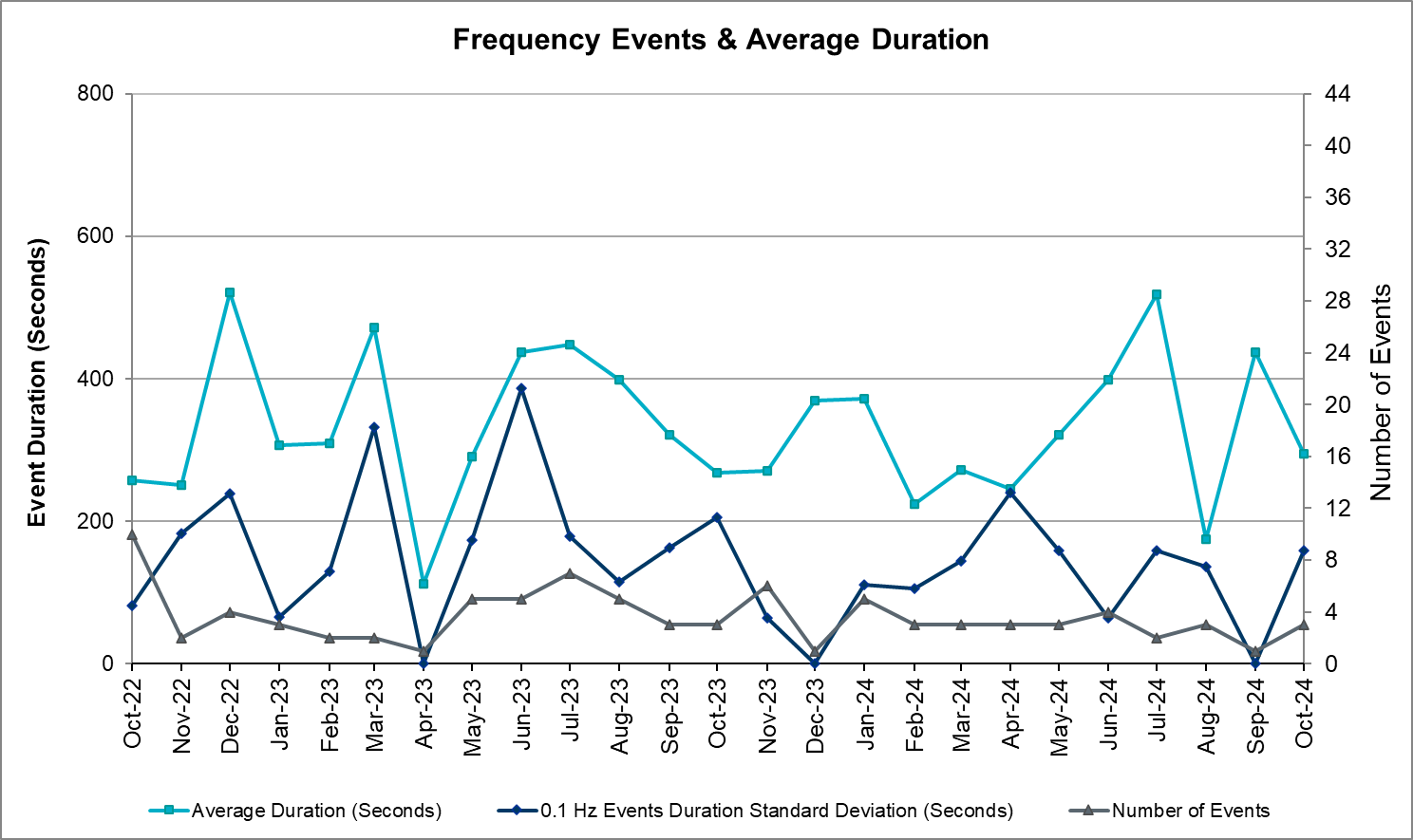
# Frequency Control

## Frequency Events

The ERCOT Interconnection experienced 3 frequency events, which resulted from unit tripping. The average duration of these events was 4 minutes and 54 seconds.

A summary of the frequency event is provided below. The reported frequency event meets one of the following criteria: Delta Frequency is 60 mHz or greater; the MW loss is 350 MW or greater; resource trip event triggered ECRS deployment. Frequency events that have been identified as Frequency Measurable Events (FME) for purposes of BAL-001-TRE-2 analysis are highlighted in blue. When analyzing frequency events, ERCOT evaluates PMU data according to industry standards. Events with an oscillating frequency of less than 1 Hz are inter-area, while higher frequencies indicate local events. Industry standards specify that damping ratio for inter-area oscillations should be 3.0% or greater. For the frequency event listed below, the ERCOT system met these standards and transitioned well after the disturbance. In the case of negative delta frequency, the MW Loss column could refer to load loss.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Date and Time** | **Delta Frequency** | **Max/Min Frequency** | **Duration of Event** | **PMU Data** | | **MW Loss** | **Load** | **IRR** | **Inertia** |
| **(Hz)** | **(Hz)** | **Oscillation Mode (Hz)** | **Damping Ratio** | **(MW)** | **%** | **(MW-s)** |
| 10/23/2024 13:17:24 | 0.067 | 59.913 | 00:07:45 | 0.7 | 16% | 778 | 61,105 | 32% | 280,752 |
| 10/14/2024 12:10:11 | 0.025 | 59.963 | 00:02:31 | 0.61 | 8% | 449 | 57,599 | 39% | 281,109 |
| 10/15/2024 17:06:17 | 0.048 | 59.965 | 00:04:28 | 0.58 | 9% | 606 | 71,194 | 35% | 288,891 |
|  |  | Avg | 00:04:54 |  |  |  |  |  |  |



(Note: All data on this graph encompasses frequency event analysis based on BAL-001-TRE-2.)

## ERCOT Contingency Reserve Events

There were no events where ERCOT Contingency Reserve MWs were released to SCED. The events highlighted in blue were related to frequency events reported in Section 2.1 above.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Date and Time Released to SCED** | **Date and Time Recalled** | **Duration of Event** | **Maximum MWs Released** | **Comments** |
| N/A | N/A | N/A | N/A | N/A |

## Responsive Reserve Events

There were no events where Responsive Reserve MWs were released to SCED.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Date and Time Released to SCED** | **Date and Time Recalled** | **Duration of Event** | **Maximum MWs Released** | **Comments** |
| N/A | N/A | N/A | N/A | N/A |

## Load Resource Events

There were no events where Load Resources that are controlled by Under-Frequency Relays were deployed for an Emergency Condition.

# Reliability Unit Commitment

ERCOT reports on Reliability Unit Commitments (RUC) monthly. Commitments are reported grouped by operating day and weather zone. The total number of hours committed is the sum of the hours for all the units in the specified region. Additional information on RUC commitments can be found on the MIS secure site at Grid 🡪 Generation 🡪 Reliability Unit Commitment.

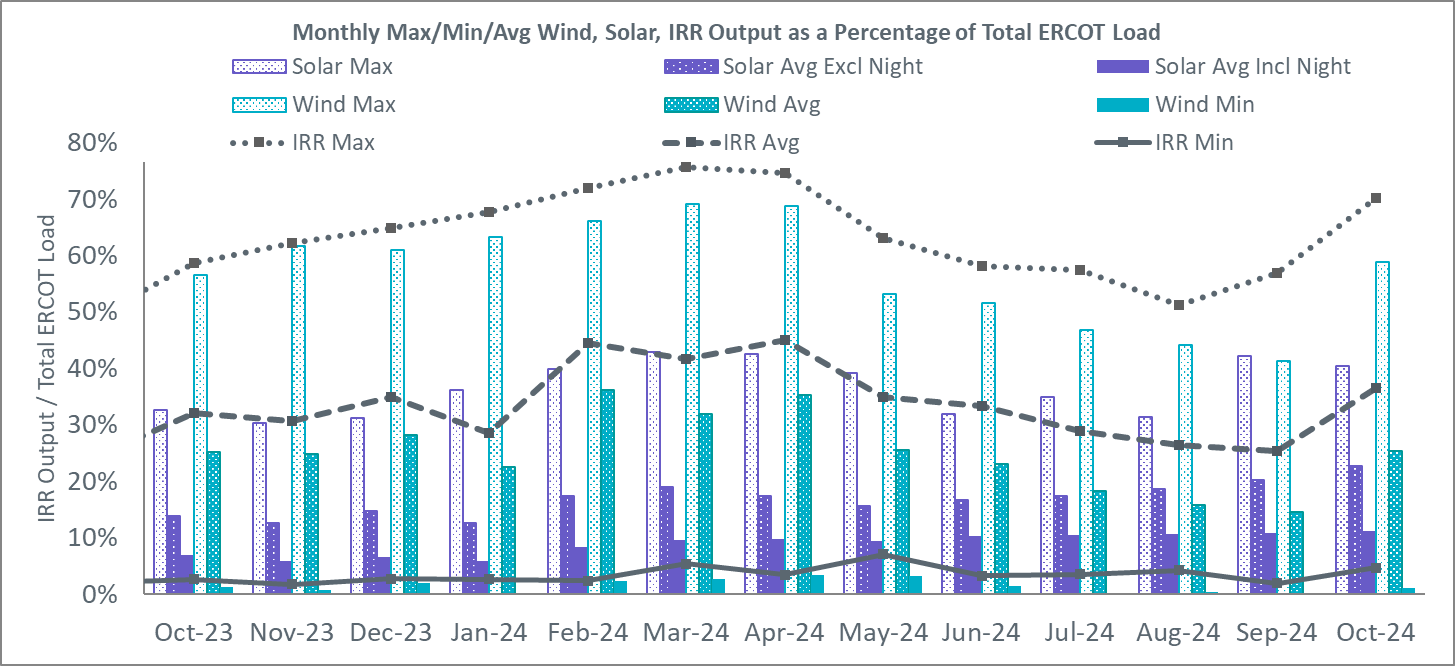
There were no DRUC commitments.

There were 49 HRUC commitments.

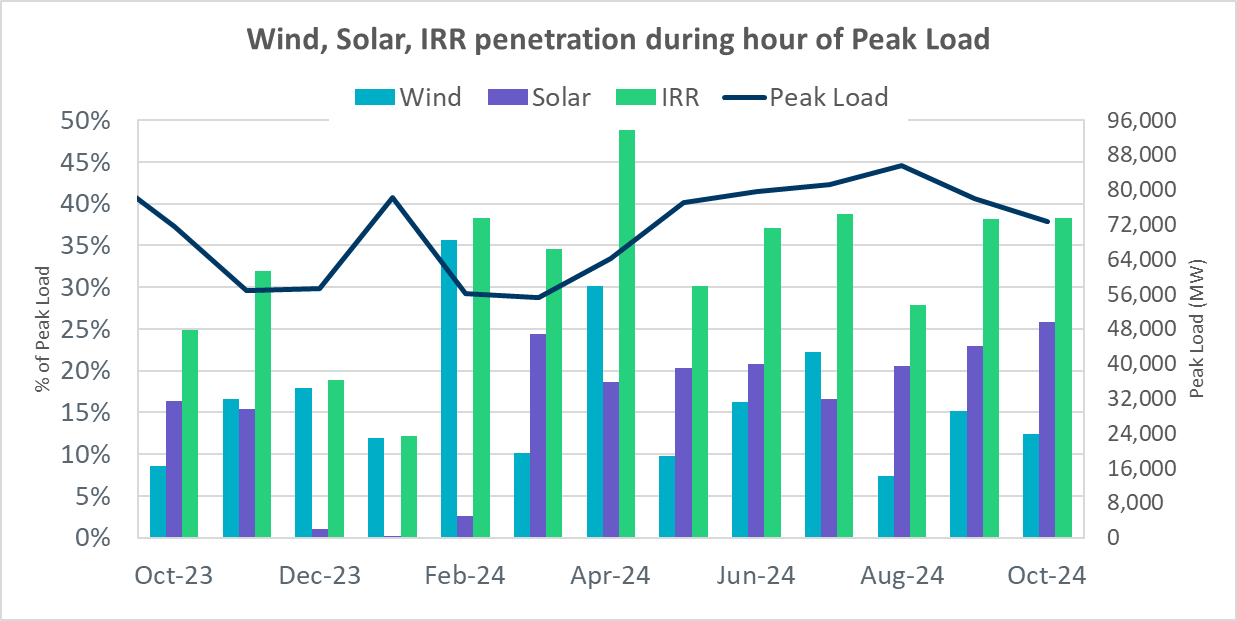
|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Resource Location** | **# of Resources** | **Operating Day** | **Total # of Hours Committed** | **Total MWhs** | **Reason for Commitment** |
| COAST, NORTH\_CENTRAL | 2 | 2-Oct-24 | 9 | 1,069 | Congestion |
| NORTH\_CENTRAL | 3 | 4-Oct-24 | 20 | 1,643 | Congestion |
| NORTH\_CENTRAL, SOUTH\_CENTRAL | 5 | 6-Oct-24 | 32 | 5,016 | Congestion |
| NORTH\_CENTRAL | 1 | 8-Oct-24 | 8 | 813 | Congestion |
| NORTH, NORTH\_CENTRAL, SOUTH\_CENTRAL | 4 | 9-Oct-24 | 15 | 3,285 | System Capacity |
| COAST, EAST, NORTH\_CENTRAL, SOUTH\_CENTRAL | 5 | 10-Oct-24 | 22 | 3,750 | System Capacity |
| NORTH\_CENTRAL | 5 | 13-Oct-24 | 40 | 11,151 | Congestion, System Capacity |
| NORTH\_CENTRAL | 1 | 14-Oct-24 | 6 | 1,050 | Congestion |
| NORTH\_CENTRAL | 2 | 15-Oct-24 | 8 | 1,834 | Congestion |
| NORTH\_CENTRAL | 3 | 16-Oct-24 | 10 | 2,876 | Congestion |
| EAST, NORTH\_CENTRAL | 4 | 22-Oct-24 | 15 | 4,207 | System Capacity |
| NORTH\_CENTRAL, SOUTH\_CENTRAL | 3 | 23-Oct-24 | 17 | 6,213 | Congestion, System Capacity |
| NORTH\_CENTRAL | 1 | 24-Oct-24 | 18 | 5,813 | Congestion |
| COAST | 2 | 25-Oct-24 | 12 | 2,838 | Congestion, System Capacity |
| NORTH\_CENTRAL, #N/A | 3 | 26-Oct-24 | 16 | 3,958 | Congestion, System Capacity |
| NORTH\_CENTRAL | 2 | 27-Oct-24 | 4 | 904 | Congestion, System Capacity |
| NORTH\_CENTRAL | 3 | 31-Oct-24 | 16 | 992 | Congestion |

# IRR, Wind, and Solar Generation as a Percent of Load

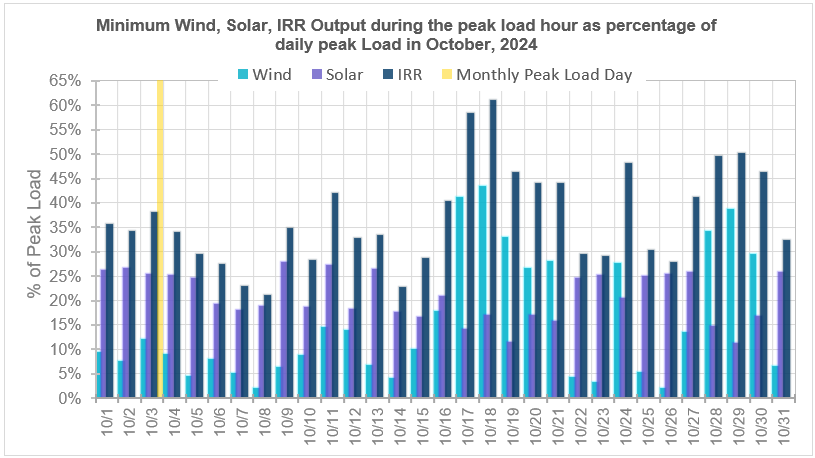
The graph below shows the maximum, minimum and average aggregate solar, wind and IRR output as a percentage of total ERCOT load when evaluated as 10-minute averaged intervals, over the past 13 months. Current wind and solar generation and penetration records are listed in the footnote below[[1]](#footnote-2). Maximum IRR penetration for October 2024 was 70.21% on 10/18/2024 interval ending 12:00 and minimum IRR penetration for the month was 4.66% on 10/26/2024 interval ending 18:50.



During the hour of peak load for the month, hourly integrated wind generation was 9,015 MW and solar generation was 18,815 MW. The graph below shows the wind and solar penetration percentage during the hour of the peak load in the last 13 months.



Lastly, the graph below shows the minimum wind, solar, and IRR output during the peak load hour as a percentage of the daily peak load for every day in the month.



# Largest Net-Load Ramps

The net-load ramp is defined as the change in net-load (load minus wind and PVGR generation) during the defined time horizon. Such a variation in net-load needs to be accommodated in grid operations to ensure that the reliability of the grid is satisfactorily maintained. The largest net-load ramps over 5-minute, 10-minute, 15-minute, 30-minute, and 60-minute intervals in October 2024 were 1,628 MW, 2,476 MW, 3,373 MW, 5,487 MW, and 9,761 MW, respectively. A comparison with historical values is provided in the table below.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Month and Year** | **5 min** | **10 min** | **15 min** | **30 min** | **60 min** |
| October 2014 | 780 MW | 1,796 MW | 2,152 MW | 2,780 MW | 4,579 MW |
| October 2015 | 1,141 MW | 1,553 MW | 1,839 MW | 2,779 MW | 4,606 MW |
| October 2016 | 863 MW | 1,543 MW | 2,035 MW | 3,213 MW | 5,335 MW |
| October 2017 | 812 MW | 1,338 MW | 1,820 MW | 3,029 MW | 5,347 MW |
| October 2018 | 860 MW | 1,386 MW | 1,907 MW | 2,824 MW | 5,346 MW |
| October 2019 | 1,192 MW | 1,728 MW | 2,465 MW | 3,537 MW | 6,408 MW |
| October 2020 | 1,048 MW | 1,600 MW | 2,488 MW | 3,578 MW | 6,269 MW |
| October 2021 | 1,371 MW | 1,949 MW | 2,709 MW | 5,037 MW | 9,438 MW |
| October 2022 | 925 MW | 1,645 MW | 2,292 MW | 4,366 MW | 7,413 MW |
| October 2023 | 2,789 MW | 3,018 MW | 4,023 MW | 7,209 MW | 10,797 MW |
| October 2024 | 1,628 MW | 2,476 MW | 3,373 MW | 5,487 MW | 9,761 MW |
| All months in 2014-2024 | 2,789 MW | 3,107 MW | 4,588 MW | 8,901 MW | 16,522 MW |
| 10/13/2023 | 1/12/2024 | 1/12/2024 | 1/12/2024 | 1/12/2024 |
| (IE 12:01) | (IE 17:24) | (IE 17:31) | (IE 17:33) | (IE 17:47) |

# Congestion Analysis

## Notable Constraints

Nodal protocol section 3.20 specifies that ERCOT shall identify transmission constraints that are binding in Real-Time three or more Operating Days within a calendar month. As part of this process, ERCOT reports congestion that meets this criterion to ROS. In addition, ERCOT also highlights notable constraints that have an estimated congestion rent exceeding $1,000,000 for a calendar month. These constraints are detailed in the table below, including approved transmission upgrades from TPIT that may provide some congestion relief based on ERCOT’s engineering judgement. Rows highlighted in blue indicate the congestion was affected by one or more outages. For a list of all constraints activated in SCED, please see Appendix A at the end of this report.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Contingency Name** | **Overloaded Element** | **Contingency Name** | **Overloaded Element** | **# of Days Constraint Binding** | **Congestion Rent** | **Transmission Project** |
|  |
| DWLFMOS5 | 6520\_\_E | WLFSW-MOSSW 345&WLFSW-ODEHV 345\_\_\_\_TRPLCKT-1of3 | Odessa Ehv Switch - Yarbrough Sub 138kV | 29 | $31,436,632.31 |  |  |
| DCONLNG5 | 6095\_\_G | CONSW-MGSES\_and\_CONSW-LNGSW\_345kV\_DBLCKT | Alkali Lake - Jim Payne Poi 138kV | 24 | $16,222,947.94 | Oncor\_FW\_52332\_Lamesa - Paul Davis Tap 138 kV Line Section (52332) |  |
| BASE CASE | WESTEX | Basecase | WESTEX GTC | 11 | $15,879,291.22 |  |  |
| DSALTM58 | 610\_\_B | SALSW TO KNBSW 345 AND TMPSW TO BELCNTY 138 DBLCKT | Temple Switch - Temple Southeast 138kV | 12 | $15,265,367.20 | ONCOR\_SE\_87709\_Temple\_Belton\_138 kV Line(24RPG001, MOD 87709) |  |
| DSALKLN5 | 610\_\_A | SALSW TO KLNSW 345 DBLCKT | Temple South - Belton 138kV | 17 | $9,667,687.82 | ONCOR\_SE\_87709\_Temple\_Belton\_138 kV Line(24RPG001, MOD 87709) |  |
| DSALGA58 | 610\_\_B | SALSW TO KNBSW 345 AND SALSW TO BELCNTY 138 DBLCKT | Temple Switch - Temple Southeast 138kV | 7 | $7,726,070.89 | ONCOR\_SE\_87709\_Temple\_Belton\_138 kV Line(24RPG001, MOD 87709) |  |
| DKRWLWS5 | 106\_\_A | KRWSW TO WDENT 345 AND KRWSW TO LWSSW 345 DBLCKT | Hicks Switch - Alliance 345kV | 3 | $4,287,430.43 |  |  |
| BASE CASE | PNHNDL | Basecase | PNHNDL GTC | 15 | $4,202,269.38 |  |  |
| SBWDDBM5 | LPLYH\_T3P | BLACKWATER DRAW SWITCH to DOUBLE MOUNTAIN SWITCH LIN 1 | Yellow House Canyon Substation 345kV | 8 | $4,092,694.20 |  |  |
| SW\_LVLT5 | 15060\_\_B | wett\_long\_draw to Volta LIN 1 | Koch Tap - Vealmoor 138kV | 9 | $4,057,042.37 |  |  |
| SSTILOM8 | SCARBI\_TITAN\_1\_1 | STILLMAN to LOMA ALTA SUBSTATION LIN 1 | Titan Substation - South Carbide 138kV | 3 | $3,706,839.07 | AEP\_TCC\_Union Carbide Rebuild (76082) |  |
| DHENZOR8 | 261T272\_1 | Mccala-Henne & Zorn 138kV | Crosswinds - Turnersville 138kV | 3 | $2,997,087.59 |  |  |
| DMTSCOS5 | 6437\_\_F | DMTSW TO SCOSW 345 DBLCKT | Knapp - Scurry Chevron 138kV | 17 | $2,913,777.73 |  |  |
| DWAP\_JN5 | BI\_WAP50\_A | TWR (345) JN-WAP64 & JN-WAP72 | Bellaire - Wa Parish 345kV | 4 | $2,652,131.53 |  |  |
| DKRWLWS5 | 108\_\_A | KRWSW TO WDENT 345 AND KRWSW TO LWSSW 345 DBLCKT | Roanoke Switch - Exchange Switch 345kV | 3 | $2,026,705.18 |  |  |
| DBYRBOW5 | 6011\_\_B | RILEY-BOMSW 345&BYRSW-BOMSW 345\_DBLCKT | Fisher Road Switch - Riley 345kV | 6 | $1,838,788.99 |  |  |
| SBALJEW5 | PRY\_PRY1 | BALE SWITCH to JEWETT LIN \_B | Perry 138kV | 10 | $1,829,480.74 |  |  |
| DCONLNG5 | 6046\_\_A | CONSW-MGSES\_and\_CONSW-LNGSW\_345kV\_DBLCKT | Falcon Seaboard - Morgan Creek Ses 345kV | 8 | $1,706,888.75 |  |  |
| DBRABRA8 | C4\_L2\_1 | Braunig-Coliseum&Highland 138kV | Kirby - St\_Hedwg 138kV | 4 | $1,485,978.56 |  |  |
| BASE CASE | E\_PATA | Basecase | E\_PATA GTC | 6 | $1,419,990.76 |  |  |
| SCOMKEN8 | 115T123\_1 | KENDALL to COMFORT LIN 1 | Kerrville Stadium - Kendall 138kV | 6 | $1,374,023.07 |  |  |
| SW\_GODE5 | 15045\_\_A | ODESSA EHV SWITCH to ODESSA EHV SWITCH LIN 1 | Expanse Switch - Grady 138kV | 3 | $1,302,854.99 |  |  |
| SBOMJC25 | 35020\_\_B | COBB SWITCHING STATION to COBB SWITCHING STATION LIN \_A | Garvey Road Switch - Graham Ses 345kV | 6 | $1,283,234.02 |  |  |
| SBWDDBM5 | LPLMK\_LPLNE\_1 | BLACKWATER DRAW SWITCH to DOUBLE MOUNTAIN SWITCH LIN 1 | Mackenzie Substation - Northeast Substation 115kV | 6 | $1,258,793.88 |  |  |
| DCAGCO58 | 656T656\_1 | Cagnon-Kendal 345 & Cico-Comfor 138 | Bergheim - Kendall 345kV | 8 | $1,161,363.27 |  |  |
| DSALKLN5 | 630\_\_B | SALSW TO KLNSW 345 DBLCKT | Harker Heights South - Killeen Switch 138kV | 3 | $1,148,153.50 | ONCOR\_SE\_87699\_Belton - Killeen 138 kV\_Line (24RPG001) |  |
| DFPPHOL5 | 196T171\_1 | Fppyd2-Lytton\_S & Holman 345kV | Settlers - Sim Gideon 138kV | 13 | $1,049,502.33 |  |  |
| XDIL89 | DILLEYSW\_69A1 | DILLEY SWITCH AEP TRX 69\_1 138/69 | Dilley Switch Aep 138kV | 10 | $992,403.37 |  |  |
| XLOB258 | ASHERT\_CATARI1\_1 | LOBO TRX A1 345/138 | Asherton - Catarina 138kV | 15 | $940,978.91 | AEP\_TCC\_AshertontoPiloncillo138kVLine\_rebuild (73100) |  |
| MCEDBAK5 | HARGRO\_TWINBU1\_1 | Manual BAKRFLD\_CEDCA2 345kV Phase 1 | Hargrove - Twin Buttes 138kV | 5 | $931,683.60 |  |  |
| DLWSRNK5 | 587\_\_A | LWSSW TO RNKSW AND LWSSW TO KRWSW 345 DBLCKT | Argyle - Highlands Tnp 138kV | 5 | $919,193.64 |  |  |
| DBAKCED5 | HARGRO\_TWINBU1\_1 | BAKESW-CEDACA 345kV & BAKESW-CEDACA 345kV | Hargrove - Twin Buttes 138kV | 6 | $893,994.03 |  |  |
| SCOLPAW5 | COLETO\_ROSATA1\_1 | COLETO CREEK to COLETO CREEK LIN 1 | Coleto Creek - Rosata Tap 138kV | 8 | $881,156.06 |  |  |
| BASE CASE | E\_PASP | Basecase | E\_PASP GTC | 7 | $847,596.43 |  |  |
| DFPPHOL5 | 190T152\_1 | Fppyd2-Lytton\_S & Holman 345kV | Sim Gideon - Winchester 138kV | 7 | $734,181.79 |  |  |
| SI\_DI\_48 | I\_DUPP\_I\_DUPS2\_1 | DUPONT PP1 - INGLESIDE to DUPONT PP1 - INGLESIDE LIN 1 | Dupont Pp1 - Ingleside - Dupont Switch - Ingleside 138kV | 8 | $673,543.71 |  |  |
| DVLSPAC5 | 1561\_\_A | VLSES-PACSW 345&PRSSW-VLYSO 345 DBLCKT | Rivercrest Ses - Deport Rea 138kV | 7 | $650,847.13 |  |  |
| BASE CASE | WHARTN | Basecase | WHARTN GTC | 7 | $649,083.72 |  |  |
| DLCRKIN8 | LCRANE\_RIOPEC1\_1 | LCRANE TO KINGMO AND CASTIL 138 KV | Rio Pecos - Crane Lcra 138kV | 5 | $594,868.64 |  |  |
| DSCOTKW5 | 6215\_\_A | SCOSW TO TKWSW 345 DBLCKT | Bluff Creek Switch - China Grove Switch 138kV | 7 | $577,149.62 |  |  |
| DDILCOT8 | DILLEYSW\_69A1 | Dilleysw-Sanmgsw&Cotulas 138kV | Dilley Switch Aep 138kV | 13 | $565,843.94 |  |  |
| DRILKRW5 | 106\_\_A | RILEY TO KRWSW 345 DBLCKT | Hicks Switch - Alliance 345kV | 3 | $515,655.80 |  |  |
| DBAKCED5 | 6056\_\_A | BAKESW-CEDACA 345kV & BAKESW-CEDACA 345kV | Longshore Switch - Consavvy Switch 345kV | 4 | $509,227.35 |  |  |
| DSTVSTN8 | 6635\_\_G | STEPHENVILLE (ONCOR) to STEPHENVILLE BEPC and LINGLEVILLE TAP | Morton Valley (Oncor) - Eastland 69kV | 4 | $501,077.19 |  |  |
| SHAYZO25 | 6T227\_1 | HAYS ENERGY to ZORN LIN 1 | Zorn - Hays Energy 345kV | 6 | $498,617.87 |  |  |
| DENTSCS5 | 1350\_\_E | ENTPR TO TRSES 345 AND MLSES TO SCSES 345 DBLCKT | Lufkin Switch - Nacogdoches South Tap 138kV | 3 | $496,313.16 |  |  |
| SLENFLT8 | 6635\_\_G | Flat Creek Switch to Flat Creek Switch LIN \_A | Morton Valley (Oncor) - Eastland 69kV | 5 | $467,237.96 |  |  |
| SCMNCPS5 | 651\_\_B | COMANCHE SWITCH (Oncor) to COMANCHE PEAK SES LIN \_A | Comanche Tap - Comanche Switch (Oncor) 138kV | 5 | $457,077.33 |  |  |
| STHSVE65 | 35045\_\_A | SAM SWITCH to VENUS SWITCH LIN \_A | Sam Switch - Files Valley Switch 345kV | 3 | $453,336.47 |  |  |
| SCOBBOM5 | 35020\_\_B | COBB SWITCHING STATION to BOWMAN SWITCH LIN \_A | Garvey Road Switch - Graham Ses 345kV | 3 | $447,640.59 |  |  |
| BASE CASE | EBONY\_GENTIE\_1 | Basecase | EBONY\_GENTIE\_1 GTC | 3 | $426,028.44 |  |  |
| DSALHUT5 | 1710\_\_C | SALSW - HUTTO 345KV | Bell County - Salado Switch 138kV | 7 | $402,930.04 | ONCOR\_SE\_87695\_Bell\_County\_138 kV Switch (24RPG001) |  |
| DFOWSMG5 | CATARI\_PILONC1\_1 | FOWLRTON TO SAN MIGUEL DOUBLE CIRCUIT CONTINGENCY | Catarina - Piloncillo 138kV | 6 | $381,459.29 | AEP\_TCC\_AshertontoPiloncillo138kVLine\_rebuild (73100) |  |
| XPEA89 | DILLEYSW\_69A1 | PEARSALL SWITCHING STATION TRX 69\_4 138/69 | Dilley Switch Aep 138kV | 7 | $299,999.63 |  |  |
| SBCESND5 | 421\_\_A | BELL COUNTY EAST SWITCH to BELL COUNTY EAST SWITCH LIN \_A | Sandow Switch - Bell County East Switch 345kV | 5 | $270,586.76 |  |  |
| SESPK8 | DT\_PK\_91\_A | EASTSIDE to EASTSIDE LIN A | Downtown - Polk 138kV | 4 | $258,574.37 |  |  |
| DBIGKEN5 | FORTMA\_YELWJC1\_1 | Bighil-Kendal 345kV | Yellow Jacket - Fort Mason 138kV | 10 | $255,139.47 |  |  |
| DCONLNG5 | 6045\_\_A | CONSW-MGSES\_and\_CONSW-LNGSW\_345kV\_DBLCKT | Falcon Seaboard - Midland East 345kV | 4 | $241,728.05 |  |  |
| SWINWAR8 | 187T222\_1 | WINCHESTER to WARDA LIN 1 | Giddings - Winchester 138kV | 3 | $189,511.02 |  |  |
| SCARFRI8 | ATSO\_SONR1\_1 | Carver to Carver LIN 1 | Atlantic Sonora - Sonora 69kV | 6 | $179,477.30 |  |  |
| SBTPBNT8 | MYRA\_VAL\_1 | BENNETT ROAD SWITCH to WISE COUNTY LIN \_B | Myra - Valley View Bepc 138kV | 3 | $174,563.00 | BEPC\_TPIT4645\_MYRA\_SPRING (4645) |  |
| SI\_DI\_38 | I\_DUPP\_I\_DUPS1\_1 | DUPONT PP1 - INGLESIDE to DUPONT PP1 - INGLESIDE LIN 1 | Dupont Pp1 - Ingleside - Dupont Switch - Ingleside 138kV | 3 | $165,537.13 |  |  |
| STHSVE65 | 35050\_\_B | SAM SWITCH to VENUS SWITCH LIN \_A | Venus Switch - Fort Smith Switch 345kV | 3 | $163,820.24 |  |  |
| DCAGCI58 | 255T279\_1 | Cagnon-Kendal 345 &Cico-Mengcr 138 | Medina Lake - Pipe Creek 138kV | 3 | $162,737.55 |  |  |
| DFOWSMG5 | LARDVN\_LASCRU1\_1 | FOWLRTON TO SAN MIGUEL DOUBLE CIRCUIT CONTINGENCY | Laredo Vft North - Las Cruces 138kV | 10 | $161,490.69 | AEP\_TCC\_Laredo VFT North - Las Cruces 138 kV Line Rebuild (58008) |  |
| SBLSJAC8 | 560\_\_B | JACK COUNTY to RENO LIN 1 | Bridgeport Tap (Oncor) - Bridgeport (Oncor) 138kV | 3 | $154,110.24 |  |  |
| BASE CASE | VALEXP | Basecase | VALEXP GTC | 6 | $148,294.98 | The Lower Rio Grande Valley (LRGV) System Enhancement Project (21RPG017) will improve but not eliminate the need for this GTC. |  |
| SPEBTRU8 | 940\_\_A | GAMMA to GAMMA LIN \_D | Ennis West Switch - Templeton 138kV | 19 | $125,996.86 | Oncor\_ME\_71156\_Ennis West Switch-Waxahachie Switch 138 kV Line (71156) |  |
| SBAKCED5 | HARGRO\_TWINBU1\_1 | BAKERSFIELD SWITCHYARD to CEDAR CANYON LIN 1 | Hargrove - Twin Buttes 138kV | 3 | $119,605.93 |  |  |
| DBIGKEN5 | FORTMA\_YELWJC1\_1 | Bighil-Kendal 345kV | Yellow Jacket - Fort Mason 138kV | 10 | $115,822.30 |  |  |
| SSCLWF18 | 6840\_\_B | WINDTHORST SWITCH to RICE SWITCH LIN \_C | Anarene - Navy Kickapoo Switch 69kV | 6 | $111,109.58 |  |  |
| BASE CASE | NELRIO | Basecase | NELRIO GTC | 7 | $94,351.84 | The Lower Rio Grande Valley (LRGV) System Enhancement Project (21RPG017) will cause there to be no stability constraint for NelsonSharpe\_RioHondoGTC under normal conditions. |  |
| SLOLFOR8 | GOHLKE\_JOSLIN1\_1 | LOLITA to FORMOSA LIN 1 | Gohlke - Joslin 138kV | 6 | $89,277.06 | AEP\_TCC\_DupontJoslin (73441) |  |
| SHUDMU8 | AE\_STR26\_A | HUDSON to HUDSON LIN A | Angleton - Stratt 138kV | 3 | $82,611.95 |  |  |
| SSANFER8 | CORONA\_AT4 | FERGUSON to FERGUSON LIN 1 | Coronado 138kV | 5 | $78,871.49 |  |  |
| MANGWHP5 | BLESSI\_LOLITA1\_1 | Manual from ANGSTROM to WHITE\_PT 345 kv Update | Blessing - Lolita 138kV | 3 | $72,815.69 |  |  |
| MHARNED5 | HAINE\_\_LA\_PAL1\_1 | Manual dbl ckt for NEDIN-BONILLA 345kV & RIOH-PRIM138kV | Haine Drive - La Palma 138kV | 3 | $66,647.53 |  |  |
| BASE CASE | ZAPSTR | Basecase | ZAPSTR GTC | 6 | $64,508.23 |  |  |
| SFOWLOB5 | LARDVN\_LASCRU1\_1 | AVANZADA to FOWLERTON LIN 1 | Laredo Vft North - Las Cruces 138kV | 3 | $64,304.07 | AEP\_TCC\_Laredo VFT North - Las Cruces 138 kV Line Rebuild (58008) |  |
| DSALKLN5 | 610\_\_B | SALSW TO KLNSW 345 DBLCKT | Temple Switch - Temple Southeast 138kV | 4 | $62,852.17 |  |  |
| SBAKCED5 | 6056\_\_A | BAKERSFIELD SWITCHYARD to CEDAR CANYON LIN 1 | Longshore Switch - Consavvy Switch 345kV | 5 | $62,347.94 |  |  |
| DJACALV8 | 2115\_\_B | JACKCNTY TO BOW 138 AND WISECNTY TO ALVRD 138 DBLCKT | Tower One - Bennett Road Switch 69kV | 3 | $59,516.95 |  |  |
| DVICDUP8 | BIGTRE\_V\_DUPS1\_1 | VICTORIA DUPONT SWITCH TO VICTORIA DOUBLE CKT 138KV | Big Three - Victoria Dupont Switch 138kV | 11 | $55,093.16 |  |  |
| BASE CASE | HMLTN | Basecase | HMLTN GTC | 7 | $52,383.21 |  |  |
| DCPSST58 | 1785\_\_A | CPSES TO CMNSW 345 AND CPSES TO STNVL 138 DBLCKT | Stephenville (Oncor) - Stephenville Bepc 138kV | 3 | $51,904.60 |  |  |
| DCAGCO58 | 583T583\_1 | Cagnon-Kendal 345 & Cico-Comfor 138 | Mason Creek - Bandera 138kV | 3 | $51,659.17 |  |  |
| BASE CASE | NE\_LOB | Basecase | NE\_LOB GTC | 4 | $49,704.75 | The Lower Rio Grande Valley (LRGV) System Enhancement Project (21RPG017) will improve the NorthEd\_LoboGTC to support up to 80% of total wind and solar generation capacity in the LRGV area. |  |
| SMADSAP8 | MADDUX\_SAPOWE2\_1 | MADDUX to SAN ANGELO POWER STATION LIN 1 | Maddux - San Angelo Power Station 138kV | 6 | $44,666.70 |  |  |
| MEXCHCK5 | 595\_\_A | MANUAL EXCSW TO HCKSW 345 KV DBLCKT | Bennett Road Switch - Decatur (Oncor) 138kV | 3 | $39,314.24 |  |  |
| MLOFOW25 | CATARI\_PILONC1\_1 | manual Lobo to Fowlerton #2 345 | Catarina - Piloncillo 138kV | 3 | $39,257.37 | AEP\_TCC\_AshertontoPiloncillo138kVLine\_rebuild (73100) |  |
| SBRAPIN8 | HAMILT\_MAVERI1\_1 | BRACKETTVILLE to BRACKETTVILLE LIN 1 | Hamilton Road - Maverick 138kV | 9 | $36,226.73 | Escondido to Hamilton Road 138 kV Line Rebuild Project (22RPG044) |  |
| DWCSH285 | 583\_\_D | WCSWS TO HCKSW 345 2 AND EMSES TO BNTSW 138 TRPLCKT 2 OF 3 | Denton Creek Switch - Allison 138kV | 3 | $33,737.03 |  |  |
| MLOBFOR5 | CATARI\_PILONC1\_1 | manual double Lobo to fowlerton 1&2 345 | Catarina - Piloncillo 138kV | 3 | $28,698.09 | AEP\_TCC\_AshertontoPiloncillo138kVLine\_rebuild (73100) |  |
| SN\_SAJO5 | LASPUL\_RAYMND1\_1 | AJO to AJO LIN 1 | Las Pulgas - Raymondville 2 138kV | 3 | $20,585.94 |  |  |
| SGOHJOS8 | FORMOS\_LOLITA1\_1 | JOSLIN to VICTORIA DUPONT SWITCH LIN 1 | Formosa - Lolita 138kV | 3 | $19,594.90 |  |  |
| DSCOTKW5 | 6474\_\_A | SCOSW TO TKWSW 345 DBLCKT | Morgan Creek Ses - Sun Switch 138kV | 3 | $14,489.43 |  |  |
| DFOWSMG5 | ASHERT\_CATARI1\_1 | FOWLRTON TO SAN MIGUEL DOUBLE CIRCUIT CONTINGENCY | Asherton - Catarina 138kV | 5 | $11,305.47 | AEP\_TCC\_AshertontoPiloncillo138kVLine\_rebuild (73100) |  |
| STANPAW5 | CALLIC\_LON\_HI1\_1 | TANGO to PAWNEE SWITCHING STATION LIN 1 | Lon Hill - Callicoatte 138kV | 4 | $11,005.70 |  |  |
| SSTAWIC8 | 138\_IH2\_COT\_1 | STAGHORN TNP to WICKETT TNP LIN 1 | Ih 20 Tnp - Collie Field Tap Tnp 138kV | 14 | $8,494.96 |  |  |
| DFOWSMG5 | ASHERT\_CATARI1\_1 | FOWLRTON TO SAN MIGUEL DOUBLE CIRCUIT CONTINGENCY | Asherton - Catarina 138kV | 5 | $6,326.46 | AEP\_TCC\_AshertontoPiloncillo138kVLine\_rebuild (73100) |  |
| SSTAPYO8 | 138\_IH2\_COT\_1 | PYOTE TNP to PYOTE TNP LIN 1 | Ih 20 Tnp - Collie Field Tap Tnp 138kV | 4 | $3,399.73 |  |  |
| SFORGIL8 | CORONA\_AT4 | GILLESPIE LCRA to FORT MASON LIN 1 | Coronado 138kV | 3 | $3,028.04 |  |  |

## Generic Transmission Constraint Congestion

|  |  |
| --- | --- |
| GTC | Days Congestion |
| Panhandle GTC | 20 |
| West Texas Export | 14 |
| Wharton County | 7 |
| South Texas Export (E\_PASP) | 8 |
| Nelson Sharpe to Rio Hondo | 10 |
| Valley Export | 8 |
| Zapata Starr | 11 |
| North Edinburg to Lobo | 9 |
| South Texas Export (E\_PATA) | 12 |
| South Texas Import (I\_KALO) | 4 |
| North to Houston | 2 |

There was no activity on the remaining GTCs during the month.

Note: This is how many times a constraint has been activated to avoid exceeding a GTC limit, it does not imply an exceedance of the GTC occurred or that the GTC was binding.

## Manual Overrides

None

## Congestion Costs for Calendar Year 2024

The following table represents the top twenty active constraints for the calendar year based on the estimated congestion rent attributed to the congestion. ERCOT updates this list on a monthly basis.

|  |  |  |  |
| --- | --- | --- | --- |
| **Contingency** | **Overloaded Element** | **# of 5-min SCED** | **Estimated Congestion Rent (2024)** |
| Basecase | WESTEX GTC | 20832 | $110,797,143.72 |
| MGSES TO CCRSW 345 AND BTRCK TO MGSES 345 DBLCKT | Tonkawa Switch - Morgan Creek Ses 345kV | 7456 | $87,576,954.87 |
| MGSES-LNGSW\_and\_MGSES-CONSW\_345\_DBLCKT | Morgan Creek Ses - Navigation Sub 138kV | 10428 | $78,670,280.67 |
| WLFSW-MOSSW 345&WLFSW-ODEHV 345\_\_\_\_TRPLCKT-1of3 | Odessa Ehv Switch - Yarbrough Sub 138kV | 16184 | $59,542,864.86 |
| SALSW - HUTTO 345KV | Bell County - Salado Switch 138kV | 9359 | $47,930,165.63 |
| BAKERSFIELD SWITCHYARD to CEDAR CANYON LIN 1 | Hargrove - Twin Buttes 138kV | 6595 | $40,880,292.83 |
| Basecase | NE\_LOB GTC | 24843 | $33,081,112.24 |
| Basecase | PNHNDL GTC | 24654 | $32,233,352.11 |
| Manual dbl ckt for NEDIN-BONILLA 345kV & RIOH-PRIM138kV | Burns Sub - Rio Hondo 138kV | 14719 | $32,004,313.71 |
| CONSW-MGSES\_and\_CONSW-LNGSW\_345kV\_DBLCKT | Morgan Creek Ses - Navigation Sub 138kV | 9919 | $29,958,921.00 |
| BLACKWATER DRAW SWITCH to DOUBLE MOUNTAIN SWITCH LIN 1 | Northwest Substation - Mcdonald Substation 115kV | 4834 | $26,523,546.74 |
| SALSW TO KNBSW 345 AND TMPSW TO BELCNTY 138 DBLCKT | Temple Switch - Temple Southeast 138kV | 1765 | $23,816,058.37 |
| NAAMAN to NAAMAN LIN 1 | College - Jupiter 138kV | 2485 | $19,241,454.25 |
| CONSW-MGSES\_and\_CONSW-LNGSW\_345kV\_DBLCKT | Alkali Lake - Jim Payne Poi 138kV | 5600 | $16,783,729.18 |
| wett\_long\_draw to Volta LIN 1 | Koch Tap - Vealmoor 138kV | 5388 | $16,751,984.89 |
| AUSTROP to DAFFIN GIN LIN 1 | Decker Power Plant - Aen Dunlap 138kV | 1316 | $16,416,974.49 |
| Bighil-Kendal 345kV | Yellow Jacket - Fort Mason 138kV | 3207 | $16,376,272.71 |
| manual double NEDIN to PALMITO 345 & NEDIN to STEWART 345 | Burns Sub - Rio Hondo 138kV | 1833 | $15,606,001.64 |
| CONSW-MGSES\_and\_CONSW-LNGSW\_345kV\_DBLCKT | Falcon Seaboard - Morgan Creek Ses 345kV | 8186 | $14,988,907.99 |
| Basecase | I\_KALO GTC | 1611 | $14,560,255.10 |

# System Events

## ERCOT Peak Load

The unofficial ERCOT peak load for October 2024 was 72,540 MW and occurred on 10/03/2024, during hour ending 17:00. Instantaneous peak was 73,057 MW. Actual peak for the same month last year was 71,234 MW.

## Load Shed Events

None.

## Stability Events

None.

## Notable PMU Events

ERCOT analyzes PMU data for any significant system disturbances that do not fall into the Frequency Events category reported in section 2.1. The results are summarized in this section once the analysis has been completed.

There were no PMU events outside of those reported in section 2.1.

## DC Tie Curtailment

None.

## TRE/DOE Reportable Events

AEN submitted a DOE-417 for 10/21/2024 – Complete loss of monitoring or control capability at its staffed Bulk Electric System control center for more than 30 minutes.

## New/Updated Constraint Management Plans

None.

## New/Modified/Removed RAS

None.

## New Procedures/Forms/Operating Bulletins

|  |  |  |
| --- | --- | --- |
| **Date** | **Subject** | **Bulletin No.** |
| 10/31/2024 | Transmission and Security Desk V1 Rev 115 | 1158 |
| 10/31/2024 | Scripts V1 Rev 60 | 1157 |
| 10/31/2024 | Real Time Desk V1 Rev 99 | 1156 |
| 10/31/2024 | Communications Protocols V1 Rev 11 | 1155 |

# Emergency Conditions

## OCNs

|  |  |
| --- | --- |
| **Date and Time** | **Message** |
| Oct 04, 2024, 10:25 CST | An OCN has been issued due to ERCOT developing a modified Generic Transmission Constraint due to new updated limit. |
| Oct 08, 2024, 10:01 CST | At 9:55, ERCOT is issuing an OCN for a topology change in the PNHNDL region. |
| Oct 09, 2024, 12:00 CST | OCN has been issued for the predicted extreme hot weather event for the ERCOT Region for Saturday, October 12, 2024 through Sunday, October 13, 2024. |
| Oct 15, 2024, 8:06 CST | ERCOT is issuing an OCN for a topology change in the PNHNDL region. |
| Oct 17, 2024, 10:00 CST | At 10:00, ERCOT issued an AAN due to a possible future Emergency Condition of reserve capacity deficiency beginning Tuesday October 22, 2024, HE 1700 through Wednesday October 23, 2024, HE 2100. ERCOT may Delay/Withdraw Approved or Accepted Resource Outages. ERCOT may seek up to 4682 MW from an OAE and then make the OSA. On Friday October 18, 2024, at 10:00. ERCOT will execute an OAE if deemed necessary. Please notify ERCOT by email aan@ercot.com if a specific resource cannot be considered in the OAE. |
| Oct 21, 2024, 9:29 CST | ERCOT is issuing an OCN for PNHNDL IROL due to planned outage and topology change. |
| Oct 28, 2024, 15:47 CST | ERCOT is taking manual action on the PNHDL IROL for a planned outage. |

## Advisories

|  |  |
| --- | --- |
| **Date and Time** | **Message** |
| Oct 07, 2024, 22:08 CST | Advisory issued for a geomagnetic disturbance of K-7 until October 8, 2024 0400. |
| Oct 10, 2024, 11:26 CST | Advisory issued for a geomagnetic disturbance of K-7 until October 11, 2024 0100. |
| Oct 10, 2024, 12:24 CST | Advisory issued for a geomagnetic disturbance of K-8 until October 11, 2024 0100. |
| Oct 11, 2024, 5:22 CST | Advisory issued for a geomagnetic disturbance of K-7 until October 11, 2024 0100. |

## Watches

None.

## Emergency Notices

None.

# Application Performance

## TSAT/VSAT Performance Issues

None

## Communication Issues

None.

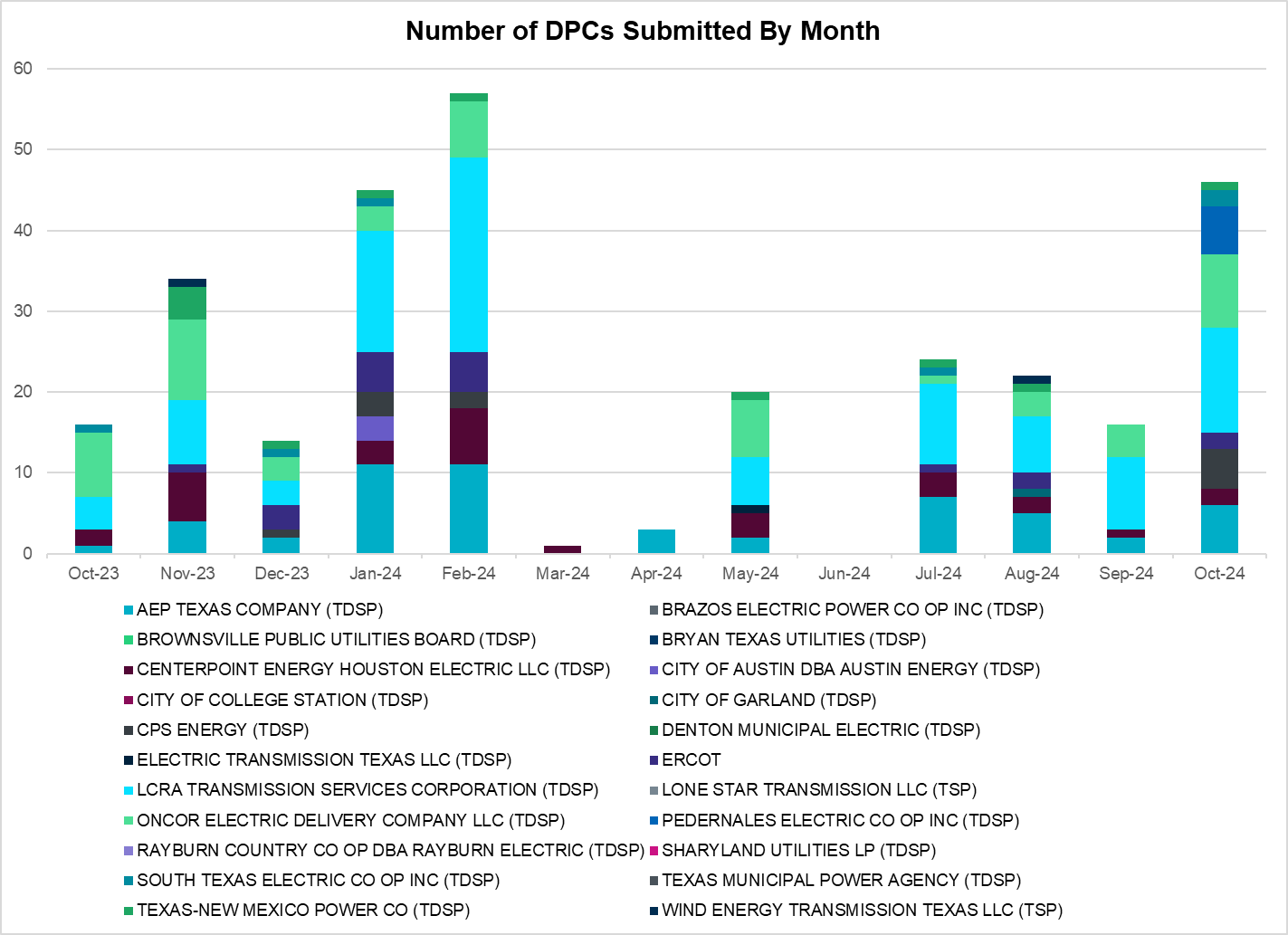
## Market System Issues

None.

# Model Updates

The Downstream Production Change (DPC) process allows ERCOT to make changes in the one-line Network Operations Model without loading a completely new model. The purpose of this process is to allow for reliable grid operations as system conditions change between designated Network Operations Model database loads. The DPC process is limited in scope to just those items listed below, with equipment ratings updates being the most common. ERCOT has seen a rise in the use of the DPC process to make on-line updates to the Network Operations Model in recent years, instead of through the standard Network Operations Model Change Request process.

* Static Line ratings (Interim Update)
* Dynamic Line ratings (non-Interim Update)
* Autotransformer ratings (non-Interim Update)
* Breaker and Switch Normal status (Interim Update)
* Contingency Definitions (Interim Update)
* RAP and RAS changes or additions (Interim Update)
* Net Dependable and Reactive Capability (NDCRC) values (Interim Update)
* Impedance Updates (non-Interim)



|  |  |
| --- | --- |
| **Transmission Operator** | **Number of DPCs** |
| AEP TEXAS COMPANY (TDSP) | 6 |
| BRAZOS ELECTRIC POWER CO OP INC (TDSP) | 0 |
| BROWNSVILLE PUBLIC UTILITIES BOARD (TDSP) | 0 |
| BRYAN TEXAS UTILITIES (TDSP) | 0 |
| CENTERPOINT ENERGY HOUSTON ELECTRIC LLC (TDSP) | 2 |
| CITY OF AUSTIN DBA AUSTIN ENERGY (TDSP) | 0 |
| CITY OF COLLEGE STATION (TDSP) | 0 |
| CITY OF GARLAND (TDSP) | 0 |
| CPS ENERGY (TDSP) | 5 |
| DENTON MUNICIPAL ELECTRIC (TDSP) | 0 |
| ELECTRIC TRANSMISSION TEXAS LLC (TDSP) | 0 |
| ERCOT | 2 |
| LCRA TRANSMISSION SERVICES CORPORATION (TDSP) | 13 |
| LONE STAR TRANSMISSION LLC (TSP) | 0 |
| ONCOR ELECTRIC DELIVERY COMPANY LLC (TDSP) | 9 |
| PEDERNALES ELECTRIC CO OP INC (TDSP) | 6 |
| RAYBURN COUNTRY CO OP DBA RAYBURN ELECTRIC (TDSP) | 0 |
| SHARYLAND UTILITIES LP (TDSP) | 0 |
| SOUTH TEXAS ELECTRIC CO OP INC (TDSP) | 2 |
| TEXAS MUNICIPAL POWER AGENCY (TDSP) | 0 |
| TEXAS-NEW MEXICO POWER CO (TDSP) | 1 |
| WIND ENERGY TRANSMISSION TEXAS LLC (TSP) | 0 |

# Appendix A: Real-Time Constraints

The following is a complete list of constraints activated in SCED. Full contingency descriptions can be found in the Standard Contingencies List located on the MIS secure site at Grid 🡪 Generation 🡪 Reliability Unit Commitment.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Year | Month | Contingency Name | Overloaded Element | From Station | To Station | Count of Days |
| 2024 | October | DWLFMOS5 | 6520\_\_E | ODEHV | YARBR | 30 |
| 2024 | October | DCONLNG5 | 6095\_\_G | ALKLK | JPPOI | 27 |
| 2024 | October | DCONLNG5 | 6095\_\_G | JPPOI | ALKLK | 27 |
| 2024 | October | SPEBTRU8 | 940\_\_A | TMPTN | ENWSW | 22 |
| 2024 | October | SPEBTRU8 | 940\_\_A | ENWSW | TMPTN | 22 |
| 2024 | October | BASE CASE | PNHNDL | n/a | n/a | 20 |
| 2024 | October | DMTSCOS5 | 6437\_\_F | SCRCV | KNAPP | 19 |
| 2024 | October | DSALKLN5 | 610\_\_A | BLTON | TMSTH | 17 |
| 2024 | October | BASE CASE | HMLTN | n/a | n/a | 16 |
| 2024 | October | DDILCOT8 | DILLEYSW\_69A1 | DILLEYSW | DILLEYSW | 16 |
| 2024 | October | DFPPHOL5 | 196T171\_1 | GIDEON | SETTLE | 15 |
| 2024 | October | SW\_LVLT5 | 15060\_\_B | VEALMOOR | KOCHTAP | 15 |
| 2024 | October | XLOB258 | ASHERT\_CATARI1\_1 | ASHERTON | CATARINA | 15 |
| 2024 | October | BASE CASE | WESTEX | n/a | n/a | 14 |
| 2024 | October | SSTAWIC8 | 138\_IH2\_COT\_1 | IH20 | TNCOLIET | 14 |
| 2024 | October | DCONLNG5 | 6046\_\_A | MGSES | FLCNS | 13 |
| 2024 | October | DFOWSMG5 | LARDVN\_LASCRU1\_1 | LARDVNTH | LASCRUCE | 13 |
| 2024 | October | DBIGKEN5 | FORTMA\_YELWJC1\_1 | YELWJCKT | FORTMA | 12 |
| 2024 | October | DBIGKEN5 | FORTMA\_YELWJC1\_1 | FORTMA | YELWJCKT | 12 |
| 2024 | October | BASE CASE | E\_PATA | n/a | n/a | 12 |
| 2024 | October | DSALTM58 | 610\_\_B | TMPSW | TMPSE | 12 |
| 2024 | October | SW\_GODE5 | 15045\_\_A | EXPSW | GRADY | 12 |
| 2024 | October | SBRAPIN8 | HAMILT\_MAVERI1\_1 | HAMILTON | MAVERICK | 11 |
| 2024 | October | DVICDUP8 | BIGTRE\_V\_DUPS1\_1 | BIGTRE | V\_DUPSW | 11 |
| 2024 | October | MLOFOW25 | LARDVN\_LASCRU1\_1 | LARDVNTH | LASCRUCE | 11 |
| 2024 | October | DCONLNG5 | 6045\_\_A | FLCNS | MDLNE | 11 |
| 2024 | October | DVICDUP8 | BIGTRE\_V\_DUPS1\_1 | V\_DUPSW | BIGTRE | 11 |
| 2024 | October | BASE CASE | ZAPSTR | n/a | n/a | 11 |
| 2024 | October | DSALGA58 | 610\_\_B | TMPSW | TMPSE | 11 |
| 2024 | October | DSALHUT5 | 1710\_\_C | BELCNTY | SALSW | 10 |
| 2024 | October | SCOLPAW5 | COLETO\_ROSATA1\_1 | COLETO | ROSATA | 10 |
| 2024 | October | XDIL89 | DILLEYSW\_69A1 | DILLEYSW | DILLEYSW | 10 |
| 2024 | October | BASE CASE | NELRIO | n/a | n/a | 10 |
| 2024 | October | SBALJEW5 | PRY\_PRY1 | PRY | PRY | 10 |
| 2024 | October | DFPPHOL5 | 190T152\_1 | WINCHES | GIDEON | 9 |
| 2024 | October | XPEA89 | DILLEYSW\_69A1 | DILLEYSW | DILLEYSW | 9 |
| 2024 | October | SBWDDBM5 | LPLYH\_T3P | LPLYH | LPLYH | 9 |
| 2024 | October | SHAYZO25 | 6T227\_1 | HAYSEN | ZORN | 9 |
| 2024 | October | DCAGCO58 | 656T656\_1 | KENDAL | BERGHE | 9 |
| 2024 | October | DFOWSMG5 | CATARI\_PILONC1\_1 | PILONCIL | CATARINA | 9 |
| 2024 | October | BASE CASE | NE\_LOB | n/a | n/a | 9 |
| 2024 | October | BASE CASE | VALEXP | n/a | n/a | 8 |
| 2024 | October | SCOMKEN8 | 115T123\_1 | KENDAL | KERRST | 8 |
| 2024 | October | SBWDDBM5 | LPLMK\_LPLNE\_1 | LPLMK | LPLNE | 8 |
| 2024 | October | BASE CASE | E\_PASP | n/a | n/a | 8 |
| 2024 | October | SCARFRI8 | ATSO\_SONR1\_1 | SONR | ATSO | 8 |
| 2024 | October | SI\_DI\_48 | I\_DUPP\_I\_DUPS2\_1 | I\_DUPP1 | I\_DUPSW | 8 |
| 2024 | October | DKRWLWS5 | 106\_\_A | HCKSW | ALLNC | 8 |
| 2024 | October | DFOWSMG5 | ASHERT\_CATARI1\_1 | ASHERTON | CATARINA | 8 |
| 2024 | October | DFOWSMG5 | ASHERT\_CATARI1\_1 | CATARINA | ASHERTON | 8 |
| 2024 | October | DVLSPAC5 | 1561\_\_A | DPREA | RCSES | 7 |
| 2024 | October | DBAKCED5 | 6056\_\_A | LNGSW | CONSW | 7 |
| 2024 | October | SSCLWF18 | 6840\_\_B | NVKSW | ANARN | 7 |
| 2024 | October | BASE CASE | WHARTN | n/a | n/a | 7 |
| 2024 | October | SSTAPYO8 | 138\_IH2\_COT\_1 | IH20 | TNCOLIET | 7 |
| 2024 | October | DSCOTKW5 | 6215\_\_A | BCKSW | CGRSW | 7 |
| 2024 | October | DVLSPAC5 | 1561\_\_A | RCSES | DPREA | 7 |
| 2024 | October | SBCESND5 | 421\_\_A | BCESW | SNDSW | 7 |
| 2024 | October | SSANFER8 | CORONA\_AT4 | CORONA | CORONA | 6 |
| 2024 | October | DLCRKIN8 | LCRANE\_RIOPEC1\_1 | RIOPECOS | LCRANE | 6 |
| 2024 | October | SBAKCED5 | 6056\_\_A | LNGSW | CONSW | 6 |
| 2024 | October | DSALKLN5 | 610\_\_B | TMPSE | TMPSW | 6 |
| 2024 | October | DSALKLN5 | 610\_\_B | TMPSW | TMPSE | 6 |
| 2024 | October | DBYRBOW5 | 6011\_\_B | RILEY | FSHSW | 6 |
| 2024 | October | SLENFLT8 | 6635\_\_G | MRVLY | ESTLD | 6 |
| 2024 | October | SBOMJC25 | 35020\_\_B | GRVSW | GRSES | 6 |
| 2024 | October | DBRABRA8 | C4\_L2\_1 | C4 | L2 | 6 |
| 2024 | October | SGOHJOS8 | FORMOS\_LOLITA1\_1 | FORMOSA | LOLITA | 6 |
| 2024 | October | DBAKCED5 | HARGRO\_TWINBU1\_1 | TWINBU | HARGROVE | 6 |
| 2024 | October | SCOBBOM5 | 35020\_\_B | GRVSW | GRSES | 6 |
| 2024 | October | BASE CASE | EBONY\_GENTIE\_1 | EBNY\_ESS | EBNY\_ESS | 6 |
| 2024 | October | SMADSAP8 | MADDUX\_SAPOWE2\_1 | MADDUX | SAPOWER | 6 |
| 2024 | October | SFOWLOB5 | LARDVN\_LASCRU1\_1 | LARDVNTH | LASCRUCE | 6 |
| 2024 | October | SLOLFOR8 | GOHLKE\_JOSLIN1\_1 | JOSLIN | GOHLKE | 6 |
| 2024 | October | SBRAPIN8 | ESCOND\_GANSO1\_1 | GANSO | ESCONDID | 5 |
| 2024 | October | DNOESGT5 | HARGRO\_TWINBU1\_1 | TWINBU | HARGROVE | 5 |
| 2024 | October | SBRAPIN8 | ESCOND\_GANSO1\_1 | ESCONDID | GANSO | 5 |
| 2024 | October | DCAGCI58 | 255T279\_1 | PIPECR | MEDILA | 5 |
| 2024 | October | SHASTNN8 | G138\_8B\_1 | HDNLAKES | LEAGCITY | 5 |
| 2024 | October | DHENZOR8 | 261T272\_1 | TURNER | CROSSWI | 5 |
| 2024 | October | DCAGCO58 | 583T583\_1 | BANDER | MASOCR | 5 |
| 2024 | October | SFORGIL8 | CORONA\_AT4 | CORONA | CORONA | 5 |
| 2024 | October | STHSVE65 | 35050\_\_B | FTSSW | VENSW | 5 |
| 2024 | October | DZORHAY5 | 85T329\_1 | BERGHE | DEVIHI | 5 |
| 2024 | October | STANPAW5 | CALLIC\_LON\_HI1\_1 | LON\_HILL | CALLICOA | 5 |
| 2024 | October | DLWSRNK5 | 587\_\_A | ARGYL | LWSVH | 5 |
| 2024 | October | SCMNCPS5 | 651\_\_B | CMNSW | CMNTP | 5 |
| 2024 | October | XLOB258 | CATARI\_PILONC1\_1 | CATARINA | PILONCIL | 5 |
| 2024 | October | DSTVSTN8 | 6635\_\_G | MRVLY | ESTLD | 5 |
| 2024 | October | MCEDBAK5 | HARGRO\_TWINBU1\_1 | TWINBU | HARGROVE | 5 |
| 2024 | October | DENTSCS5 | 1350\_\_E | NCSTP | LFKSW | 4 |
| 2024 | October | DRAZSA89 | UVALDE\_W\_BATE1\_1 | UVALDE | W\_BATESV | 4 |
| 2024 | October | DMCOPHA8 | AZTECA\_HEC1\_1 | HEC | AZTECA | 4 |
| 2024 | October | SBROALP9 | FTST\_69T1 | FTST | FTST | 4 |
| 2024 | October | SPEBTRU8 | 940\_\_B | TMPTN | WXHCH | 4 |
| 2024 | October | SFOWLOB5 | CATARI\_PILONC1\_1 | PILONCIL | CATARINA | 4 |
| 2024 | October | DNOECED5 | HARGRO\_TWINBU1\_1 | TWINBU | HARGROVE | 4 |
| 2024 | October | MCEDBAK5 | 6056\_\_A | LNGSW | CONSW | 4 |
| 2024 | October | XFTS89 | ALPINE\_BRONCO1\_1 | BRONCO | ALPINE | 4 |
| 2024 | October | SSPUASP8 | ASPM\_SWEN1\_1 | SWEN | ASPM | 4 |
| 2024 | October | DRILKRW5 | 106\_\_A | HCKSW | ALLNC | 4 |
| 2024 | October | SPEBTRU8 | 940\_\_B | WXHCH | TMPTN | 4 |
| 2024 | October | DWAP\_JN5 | BI\_WAP50\_A | WAP | BI | 4 |
| 2024 | October | SESPK8 | DT\_PK\_91\_A | PK | DT | 4 |
| 2024 | October | XFTS89 | ALPINE\_BRONCO1\_1 | ALPINE | BRONCO | 4 |
| 2024 | October | DSALHUT5 | 270\_\_A | KNBSW | TMPSW | 4 |
| 2024 | October | DSCOTKW5 | 6474\_\_A | SUNSW | MGSES | 4 |
| 2024 | October | SMCEESK8 | MKLT\_TRNT1\_1 | TRNT | MKLT | 4 |
| 2024 | October | DMGSCON5 | 6471\_\_C | MGSES | NAVIG | 4 |
| 2024 | October | SI\_DI\_38 | I\_DUPP\_I\_DUPS1\_1 | I\_DUPP1 | I\_DUPSW | 4 |
| 2024 | October | BASE CASE | I\_KALO | n/a | n/a | 4 |
| 2024 | October | SW\_GVLT5 | 6095\_\_G | JPPOI | ALKLK | 4 |
| 2024 | October | SSANPIT8 | 34T267\_1 | CTECBU | SANDMO | 3 |
| 2024 | October | DJEWBAL5 | PRY\_PRY1 | PRY | PRY | 3 |
| 2024 | October | DNOECED5 | 6056\_\_A | LNGSW | CONSW | 3 |
| 2024 | October | DSALKLN5 | 610\_\_C | TMSTH | SANDW | 3 |
| 2024 | October | DMTSCOS5 | 6474\_\_A | SUNSW | MGSES | 3 |
| 2024 | October | DBIGKEN5 | TREADW\_YELWJC1\_1 | TREADWEL | YELWJCKT | 3 |
| 2024 | October | DKRWLWS5 | 108\_\_A | EXCSW | RNKSW | 3 |
| 2024 | October | DPKRBNB5 | 108\_\_A | EXCSW | RNKSW | 3 |
| 2024 | October | DJACALV8 | 2115\_\_B | TOWER | BNTSW | 3 |
| 2024 | October | SBLSJAC8 | 560\_\_B | BRGPR | BTPTM | 3 |
| 2024 | October | DLWSRNK5 | 584\_\_A | KRMSW | ARGYL | 3 |
| 2024 | October | DCONLNG5 | 6471\_\_C | MGSES | NAVIG | 3 |
| 2024 | October | MHARNED5 | HAINE\_\_LA\_PAL1\_1 | LA\_PALMA | HAINE\_DR | 3 |
| 2024 | October | SBAKCED5 | HARGRO\_TWINBU1\_1 | TWINBU | HARGROVE | 3 |
| 2024 | October | UIN2CTG1 | I\_DUPP\_I\_DUPS1\_1 | I\_DUPSW | I\_DUPP1 | 3 |
| 2024 | October | SNEWGLF8 | LAN\_CT\_PAVLOV1\_1 | LAN\_CTY | PAVLOV | 3 |
| 2024 | October | DSCOTKW5 | 6095\_\_G | JPPOI | ALKLK | 3 |
| 2024 | October | DSGTSCH5 | HARGRO\_TWINBU1\_1 | TWINBU | HARGROVE | 3 |
| 2024 | October | DCPSST58 | 1785\_\_A | STV | STNVL | 3 |
| 2024 | October | MLOBFOR5 | LARDVN\_LASCRU1\_1 | LARDVNTH | LASCRUCE | 3 |
| 2024 | October | SBLSJAC8 | 583\_\_D | DCRSW | ALISN | 3 |
| 2024 | October | SCMNCPS5 | 651\_\_C | CMNTP | SHILO | 3 |
| 2024 | October | DCAGCI58 | 656T656\_1 | KENDAL | BERGHE | 3 |
| 2024 | October | SWILJA28 | JACKCNTY\_BLSRA\_1 | JACKCNTY | BLSRA | 3 |
| 2024 | October | MHARNED5 | LASPUL\_RAYMND1\_1 | LASPULGA | RAYMND2 | 3 |
| 2024 | October | SN\_SAJO5 | LASPUL\_RAYMND1\_1 | LASPULGA | RAYMND2 | 3 |
| 2024 | October | SCOLPAW5 | MAGRUD\_VICTOR2\_1 | VICTORIA | MAGRUDER | 3 |
| 2024 | October | DWO5\_EU8 | MIDPK\_90\_A | MID | PK | 3 |
| 2024 | October | SSTILOM8 | SCARBI\_TITAN\_1\_1 | SCARBIDE | TITAN\_SU | 3 |
| 2024 | October | DMGSFLC5 | 6095\_\_G | JPPOI | ALKLK | 3 |
| 2024 | October | SHUDMU8 | AE\_STR26\_A | AE | STR | 3 |
| 2024 | October | DELMSAN5 | BLESSI\_LOLITA1\_1 | LOLITA | BLESSING | 3 |
| 2024 | October | MLOBFOR5 | CATARI\_PILONC1\_1 | PILONCIL | CATARINA | 3 |
| 2024 | October | MLOFOW25 | CATARI\_PILONC1\_1 | PILONCIL | CATARINA | 3 |
| 2024 | October | SSOLALM8 | COCS\_FTST1\_1 | FTST | COCS | 3 |
| 2024 | October | SPAWCAL5 | COLETO\_ROSATA1\_1 | COLETO | ROSATA | 3 |
| 2024 | October | SCOLPAW5 | LOOP\_VICTORIA\_1 | VICTORIA | L\_463S | 3 |
| 2024 | October | DKRWLWS5 | 107\_\_A | HCKSW | RNKSW | 3 |
| 2024 | October | SKRWBDG5 | 107\_\_A | HCKSW | RNKSW | 3 |
| 2024 | October | SWINWAR8 | 187T222\_1 | WINCHES | GIDDIN | 3 |
| 2024 | October | DWCSH285 | 583\_\_D | DCRSW | ALISN | 3 |
| 2024 | October | MEXCHCK5 | 595\_\_A | BNTSW | DCATR | 3 |
| 2024 | October | DGRSPKR5 | 6377\_\_A | BRTSW | ORANS | 3 |
| 2024 | October | MANGWHP5 | BLESSI\_LOLITA1\_1 | LOLITA | BLESSING | 3 |
| 2024 | October | SLOLFOR8 | BROOKT\_JOSLIN1\_1 | JOSLIN | BROOKTAP | 3 |
| 2024 | October | SI\_DALI8 | I\_DUPP\_I\_DUPS1\_1 | I\_DUPSW | I\_DUPP1 | 3 |
| 2024 | October | SLOLBLE8 | LOOP\_VICTORIA\_1 | VICTORIA | L\_463S | 3 |
| 2024 | October | SBTPBNT8 | MYRA\_VAL\_1 | MYRA | VALYVIEW | 3 |
| 2024 | October | DRILKRW5 | 108\_\_A | EXCSW | RNKSW | 3 |
| 2024 | October | SWORBRD8 | 138\_WIC\_STG\_1 | WICKETT | STAGHORN | 3 |
| 2024 | October | DSALKLN5 | 630\_\_B | KLNSW | HHSTH | 3 |
| 2024 | October | SWHILON5 | NCARBI\_SEADRF1\_1 | NCARBIDE | SEADRFTC | 3 |
| 2024 | October | STHSVE65 | 35045\_\_A | SAMSW | FVLSW | 3 |
| 2024 | October | DJEWBAL5 | 1220\_\_G | RIESW | GRSBK | 2 |
| 2024 | October | DSTEDES8 | STERT\_FMR1 | STERT | STERT | 2 |
| 2024 | October | DFPPHOL5 | 615T615\_1 | WINCHES | PAIGE | 2 |
| 2024 | October | DMTSCOS5 | 6240\_\_C | SACRC | DPCRK | 2 |
| 2024 | October | SCRMSAR8 | CONCHO\_VRBS1\_1 | CONCHO | VRBS | 2 |
| 2024 | October | DBAKCED5 | HARGRO\_PUMPJA1\_1 | HARGROVE | PUMPJACK | 2 |
| 2024 | October | DWAP\_JN5 | OB\_WAP98\_A | WAP | OB | 2 |
| 2024 | October | SMDOOAS5 | OB\_WAP98\_A | WAP | OB | 2 |
| 2024 | October | DKRWLWS5 | 106\_\_B | ALLNC | RNKSW | 2 |
| 2024 | October | DLYTCIS5 | 196T171\_1 | GIDEON | SETTLE | 2 |
| 2024 | October | SMVHS\_M8 | 480T480\_1 | N\_MERCED | HARLNSW | 2 |
| 2024 | October | SNEDNED8 | 480T480\_1 | N\_MERCED | HARLNSW | 2 |
| 2024 | October | SW\_GODE5 | 6095\_\_G | JPPOI | ALKLK | 2 |
| 2024 | October | SBIGV\_D8 | GREENL\_WEAVER1\_1 | WEAVERRD | GREENLK | 2 |
| 2024 | October | DWEIHW89 | MCKENZ\_WESTSI1\_1 | WESTSIDE | MCKENZIE | 2 |
| 2024 | October | BASE CASE | N\_TO\_H | n/a | n/a | 2 |
| 2024 | October | DWPWFWP5 | STPWAP39\_1 | STP | WAP | 2 |
| 2024 | October | DRILKRW5 | 106\_\_B | ALLNC | RNKSW | 2 |
| 2024 | October | DRAZSA89 | 2585\_1 | DOWNIES | MOORE | 2 |
| 2024 | October | SWALWLN8 | 568\_\_A | RYSSW | NEVADA | 2 |
| 2024 | October | DSCOFAR5 | 6437\_\_F | SCRCV | KNAPP | 2 |
| 2024 | October | DCC3\_NED | ASHERT\_CATARI1\_1 | ASHERTON | CATARINA | 2 |
| 2024 | October | DWAP\_JN5 | BI\_SMR98\_A | SMITHERS | BI | 2 |
| 2024 | October | SBRAPIN8 | GANSO\_MAVERI1\_1 | GANSO | MAVERICK | 2 |
| 2024 | October | DNOECED5 | HARGRO\_PUMPJA1\_1 | HARGROVE | PUMPJACK | 2 |
| 2024 | October | SBAKCED5 | HARGRO\_PUMPJA1\_1 | HARGROVE | PUMPJACK | 2 |
| 2024 | October | SKBBI8 | HOCKB\_90\_A | HOC | KB | 2 |
| 2024 | October | MCEDBAK5 | LAKENA\_SAMATH1\_1 | LAKENASW | SAMATHIS | 2 |
| 2024 | October | STANPAW5 | LON\_HI\_WHITE\_1\_1 | LON\_HILL | WHITE\_PT | 2 |
| 2024 | October | DBIGSCH5 | PALOUS\_WOLFCA1\_1 | PALOUSE | WOLFCAMP | 2 |
| 2024 | October | SSUNMGS8 | 6240\_\_C | SACRC | DPCRK | 2 |
| 2024 | October | DCPSST58 | 651\_\_B | CMNSW | CMNTP | 2 |
| 2024 | October | SSCLWF18 | 6840\_\_A | ANARN | CRDSW | 2 |
| 2024 | October | SCOCBAR9 | ALPINE\_BRONCO1\_1 | BRONCO | ALPINE | 2 |
| 2024 | October | SWE2GLI8 | MAGRUD\_VICTOR2\_1 | VICTORIA | MAGRUDER | 2 |
| 2024 | October | DFPPLOS5 | 197T171\_1 | AUSTRO | SETTLE | 2 |
| 2024 | October | SBCESN35 | 431\_\_A | BCESW | SNDSW | 2 |
| 2024 | October | DWHICOT5 | FARMLAND\_LONGD\_1 | FARMLAND | W\_LD\_345 | 2 |
| 2024 | October | SMCEABS8 | MKLT\_TRNT1\_1 | TRNT | MKLT | 2 |
| 2024 | October | DKENCA58 | 255T279\_1 | PIPECR | MEDILA | 2 |
| 2024 | October | DCAGCI58 | 460T460\_1 | MEDILA | W1 | 2 |
| 2024 | October | MLOFOW25 | ASHERT\_CATARI1\_1 | CATARINA | ASHERTON | 2 |
| 2024 | October | SBIRGON8 | LULING\_AT1 | LULING | LULING | 2 |
| 2024 | October | SKATLON5 | VICTO\_WARBU\_1A\_1 | VICTORIA | WARBURTN | 2 |
| 2024 | October | DRILKRW5 | 107\_\_A | HCKSW | RNKSW | 2 |
| 2024 | October | DCDHMCS8 | 3150\_\_A | OKCLS | CDCSW | 2 |
| 2024 | October | SVENFTS5 | 35055\_\_A | SAMSW | VENSW | 2 |
| 2024 | October | MEXCHCK5 | 583\_\_D | DCRSW | ALISN | 2 |
| 2024 | October | SABRSPR8 | 584\_\_A | KRMSW | ARGYL | 2 |
| 2024 | October | DRNKLWS5 | 595\_\_A | BNTSW | DCATR | 2 |
| 2024 | October | DWCSH285 | 595\_\_A | BNTSW | DCATR | 2 |
| 2024 | October | SDUKNED8 | ADERHO\_ELSA1\_1 | ADERHOLD | ELSA | 2 |
| 2024 | October | DSTEXP12 | BLESSI\_LOLITA1\_1 | LOLITA | BLESSING | 2 |
| 2024 | October | SKLELOY8 | LOYOLA\_69\_1 | LOYOLA | LOYOLA | 2 |
| 2024 | October | DWPWFCK5 | STPWAP39\_1 | STP | WAP | 2 |
| 2024 | October | DMBDBNB5 | 6125\_\_C | MSTLT | HMPHL | 2 |
| 2024 | October | SRICAE8 | AE\_STR26\_A | AE | STR | 2 |
| 2024 | October | XALM689 | ALMC\_T2 | ALMC | ALMC | 2 |
| 2024 | October | DNVAMHO5 | FARMLAND\_LONGD\_1 | FARMLAND | W\_LD\_345 | 2 |
| 2024 | October | SJOSBRO8 | FORMOS\_LOLITA1\_1 | FORMOSA | LOLITA | 2 |
| 2024 | October | SBRAPIN8 | GANSO\_MAVERI1\_1 | MAVERICK | GANSO | 2 |
| 2024 | October | DLC\_PG\_8 | LAN\_CT\_PAVLOV1\_1 | LAN\_CTY | PAVLOV | 2 |
| 2024 | October | DAUSLOS5 | 196T171\_1 | GIDEON | SETTLE | 2 |
| 2024 | October | DCRLNO25 | 1140\_\_C | DFWD1 | DFWCE | 1 |
| 2024 | October | SBALJEW5 | 1210\_\_C | HAN1 | NVARO | 1 |
| 2024 | October | SMCCCNR5 | 1390\_\_F | MESFR | BCKHM | 1 |
| 2024 | October | SW\_LVLT5 | 15060\_\_A | KOCHTAP | BUZSW | 1 |
| 2024 | October | DVLSPAC5 | 1650\_\_G | RCSES | TALTP | 1 |
| 2024 | October | SANDBER8 | 372T359\_1 | GABRIE | GLASSC | 1 |
| 2024 | October | DSALKLN5 | 610\_\_D | SANDW | TMPSE | 1 |
| 2024 | October | DSCOTKW5 | 6135\_\_F | GUNSW | HPPOD | 1 |
| 2024 | October | SENSENW8 | 940\_\_A | ENWSW | TMPTN | 1 |
| 2024 | October | DNEDWED8 | AZTECA\_HEC1\_1 | HEC | AZTECA | 1 |
| 2024 | October | SBRAHAM8 | BRACKE\_ESCOND1\_1 | BRACKETT | ESCONDID | 1 |
| 2024 | October | SSACBUR9 | CEDRHI\_SILT1\_1 | CEDRHILL | SILT | 1 |
| 2024 | October | SYOACUE8 | DEERCR\_AT1 | DEERCR | DEERCR | 1 |
| 2024 | October | SBRAHAM8 | ESCOND\_GANSO1\_1 | ESCONDID | GANSO | 1 |
| 2024 | October | SSOLALM8 | FTST\_69T1 | FTST | FTST | 1 |
| 2024 | October | SBUNKN8 | HOCKB\_90\_A | HOC | KB | 1 |
| 2024 | October | SBIJN5 | JN\_AT1L | JN | JN | 1 |
| 2024 | October | DNOESGT5 | LAKENA\_SAMATH1\_1 | LAKENASW | SAMATHIS | 1 |
| 2024 | October | SFOWLOB5 | LOBO\_A3 | LOBO | LOBO | 1 |
| 2024 | October | SN\_SLON5 | LOYOLA\_69\_1 | LOYOLA | LOYOLA | 1 |
| 2024 | October | DWAP\_OB5 | MDOPHR99\_A | MDO | PHR | 1 |
| 2024 | October | DMCEBUT8 | MKLT\_TRNT1\_1 | TRNT | MKLT | 1 |
| 2024 | October | DHILMAR5 | PAR\_TRI\_CNTY\_1 | PARKWA | F5 | 1 |
| 2024 | October | DSALTM58 | SEA\_AAT1 | SEA | SEA | 1 |
| 2024 | October | DRAZHON8 | UVALDE\_W\_BATE1\_1 | UVALDE | W\_BATESV | 1 |
| 2024 | October | SGODTAN5 | VICTO\_WARBU\_1A\_1 | VICTORIA | WARBURTN | 1 |
| 2024 | October | SSTAWIC8 | 138\_COT\_BPT\_1 | TNCOLIET | BRDSPRYT | 1 |
| 2024 | October | DCONLNG5 | 15045\_\_A | EXPSW | GRADY | 1 |
| 2024 | October | SRRDLCS5 | 235\_\_B | BALSW | JEWET | 1 |
| 2024 | October | DTOKJK\_5 | 260\_A\_1 | JEWET | SNG | 1 |
| 2024 | October | SBERBUR8 | 372T359\_1 | GABRIE | GLASSC | 1 |
| 2024 | October | SECRDMT8 | 6215\_\_A | BCKSW | CGRSW | 1 |
| 2024 | October | DSALKLN5 | 641\_\_A | KLNSW | STAGE | 1 |
| 2024 | October | SSACSUN8 | 6474\_\_A | SUNSW | MGSES | 1 |
| 2024 | October | DCOMKER8 | 77T121\_1 | COMFOR | CYPRCR | 1 |
| 2024 | October | SPETSNU8 | AE\_STR26\_A | AE | STR | 1 |
| 2024 | October | SSOLALM8 | BELD\_BRONCO1\_1 | BRONCO | BELD | 1 |
| 2024 | October | SD1Z18 | BIG\_FO\_PLEASA1\_1 | BIG\_FOOT | PLEASANT | 1 |
| 2024 | October | SBOSWHT5 | BOS\_WHI\_1 | BOSQUESW | WHTNY | 1 |
| 2024 | October | SW\_GODE5 | CMTAP\_GRADY\_1 | CORMIDTP | GRADY | 1 |
| 2024 | October | SDUKNED8 | ELSA\_WESLAC1\_1 | ELSA | WESLACO | 1 |
| 2024 | October | STREMAD8 | FORTMA\_YELWJC1\_1 | YELWJCKT | FORTMA | 1 |
| 2024 | October | SMDOPHR5 | G138\_10B\_1 | SEMINOLE | MAGNO\_TN | 1 |
| 2024 | October | SDVJN8 | HOCKB\_90\_A | HOC | KB | 1 |
| 2024 | October | SIRSO8 | HOCKB\_90\_A | HOC | KB | 1 |
| 2024 | October | BASE CASE | MCCAMY | n/a | n/a | 1 |
| 2024 | October | DALNRYS5 | NAAMA\_WALNU\_1 | WALNUT1 | NAAMAN | 1 |
| 2024 | October | DTMETM18 | PRY\_PRY1 | PRY | PRY | 1 |
| 2024 | October | SLOLBLE8 | RAY\_L\_46\_1 | L\_463S | RAYBURN | 1 |
| 2024 | October | SCOLBAL8 | SANA\_FMR1 | SANA | SANA | 1 |
| 2024 | October | MHARNED5 | SCARBI\_STILLM1\_1 | SCARBIDE | STILLMAN | 1 |
| 2024 | October | DHJWFCK5 | STPWAP39\_1 | STP | WAP | 1 |
| 2024 | October | SBOSELM5 | WHTNY\_MR2L | WHTNY | WHTNY | 1 |
| 2024 | October | SPACVLS5 | 403\_\_A | PRSSW | VLYSO | 1 |
| 2024 | October | DFERWIR8 | 40T189\_1 | FERGUS | WIRTZ | 1 |
| 2024 | October | SMYRSPR8 | 583\_\_D | DCRSW | ALISN | 1 |
| 2024 | October | SVEALUT8 | 6135\_\_F | GUNSW | HPPOD | 1 |
| 2024 | October | SALLHCK5 | 6270\_\_D | HCKSW | WGROB | 1 |
| 2024 | October | DODEMOS5 | 6513\_\_A | ODESA | ODNTH | 1 |
| 2024 | October | DENWSTE8 | 921\_\_F | SHKSW | GAMMA | 1 |
| 2024 | October | XNIX89 | DEERCR\_AT1 | DEERCR | DEERCR | 1 |
| 2024 | October | SSHAFRO8 | FRONTE\_PALMHR1\_1 | FRONTERA | PALMHRTP | 1 |
| 2024 | October | SGA2ROM8 | GARZA\_69A1 | GARZA | GARZA | 1 |
| 2024 | October | DLOBCEN5 | GODDAR\_TANGO1\_1 | GODDARD | TANGO | 1 |
| 2024 | October | SDELLAR8 | LARDVN\_LASCRU1\_1 | LARDVNTH | LASCRUCE | 1 |
| 2024 | October | SFOWLOB5 | LASCRU\_MILO1\_1 | LASCRUCE | MILO | 1 |
| 2024 | October | SBIRLUL8 | LULING\_AT1 | LULING | LULING | 1 |
| 2024 | October | SPAWCAL5 | MAGRUD\_VICTOR2\_1 | VICTORIA | MAGRUDER | 1 |
| 2024 | October | XLOB258 | NLARSW\_PILONC1\_1 | PILONCIL | NLARSW | 1 |
| 2024 | October | DWO5\_EU8 | PK\_MID90\_A | MID | PK | 1 |
| 2024 | October | DVICEDN8 | RAY\_L\_46\_1 | L\_463S | RAYBURN | 1 |
| 2024 | October | DBIGSCH5 | SANTAR\_WOLFCA1\_1 | WOLFCAMP | SANTARIT | 1 |
| 2024 | October | SBOSELM5 | WHTNY\_HT1L | WHTNY | WHTNY | 1 |
| 2024 | October | DMLSTYG5 | 1350\_\_E | NCSTP | LFKSW | 1 |
| 2024 | October | DHILMAR5 | 361T361\_1 | SCHERT | PARKWA | 1 |
| 2024 | October | SHAYZOR5 | 388T388\_1 | HAYSEN | ZORN | 1 |
| 2024 | October | DCAGCO58 | 392T392\_1 | MASOCR | PIPECR | 1 |
| 2024 | October | DRNKLWS5 | 583\_\_D | DCRSW | ALISN | 1 |
| 2024 | October | SBLSJAC8 | 595\_\_A | BNTSW | DCATR | 1 |
| 2024 | October | SGODTAN5 | ASHERT\_CATARI1\_1 | ASHERTON | CATARINA | 1 |
| 2024 | October | SSOLALM8 | BELD\_COCS1\_1 | COCS | BELD | 1 |
| 2024 | October | SKATLON5 | BIGTRE\_V\_DUPS1\_1 | V\_DUPSW | BIGTRE | 1 |
| 2024 | October | UST2STP1 | BLESSI\_LOLITA1\_1 | LOLITA | BLESSING | 1 |
| 2024 | October | SWCOWCO8 | G138\_17\_1 | BRAZORIA | RT | 1 |
| 2024 | October | SBRAHAM8 | GANSO\_MAVERI1\_1 | GANSO | MAVERICK | 1 |
| 2024 | October | MWHPLON5 | GODDAR\_TANGO1\_1 | GODDARD | TANGO | 1 |
| 2024 | October | BASE CASE | HOCKB\_90\_A | HOC | KB | 1 |
| 2024 | October | DDL\_STF8 | HOCKB\_90\_A | HOC | KB | 1 |
| 2024 | October | DFOWSMG5 | LASCRU\_MILO1\_1 | LASCRUCE | MILO | 1 |
| 2024 | October | SLHLLCS5 | LCSES\_MR1L | LCSES | LCSES | 1 |
| 2024 | October | SES2FRI8 | MIDW\_OZONA1\_1 | OZONA | MIDW | 1 |
| 2024 | October | MLOBFOR5 | NLARSW\_PILONC1\_1 | NLARSW | PILONCIL | 1 |
| 2024 | October | SBOSWHT5 | PRY\_PRY1 | PRY | PRY | 1 |
| 2024 | October | DRAZSA89 | READIN\_UVALDE1\_1 | UVALDE | READING | 1 |
| 2024 | October | DCONLNG5 | 14040\_\_I | PCTSW | WRPOD | 1 |
| 2024 | October | DBERNAR8 | 1680\_\_A | RRWES | GEORSO | 1 |
| 2024 | October | SFTSFVL5 | 35055\_\_A | SAMSW | VENSW | 1 |
| 2024 | October | DRNKLWS5 | 584\_\_A | KRMSW | ARGYL | 1 |
| 2024 | October | DCPSST58 | 6025\_\_A | LNCRK | MULBERRY | 1 |
| 2024 | October | DCOUBO58 | 6855\_D\_1 | SMR | SMRTP | 1 |
| 2024 | October | DVLSPAC5 | 870\_\_A | COMSW | COMSO | 1 |
| 2024 | October | SALIBNT8 | 910\_\_A | DCRTP | RHOME | 1 |
| 2024 | October | SFOWLOB5 | ASHERT\_CATARI1\_1 | CATARINA | ASHERTON | 1 |
| 2024 | October | SBENS\_M8 | BENTS\_FRTER\_1B\_1 | FRONTERA | S\_MISSIN | 1 |
| 2024 | October | DFANFAN8 | HOCKB\_90\_A | HOC | KB | 1 |
| 2024 | October | DHOCGV89 | HOCKB\_90\_A | HOC | KB | 1 |
| 2024 | October | SWEIGLI8 | MAGRUD\_VICTOR2\_1 | VICTORIA | MAGRUDER | 1 |
| 2024 | October | XVIC89 | MAGRUD\_VICTOR2\_1 | VICTORIA | MAGRUDER | 1 |
| 2024 | October | SWHILON5 | NUECES\_WHITE\_2\_1 | NUECES\_B | WHITE\_PT | 1 |
| 2024 | October | SSJNBAL5 | PRY\_PRY1 | PRY | PRY | 1 |
| 2024 | October | SBUSDAN9 | TAB\_DANS\_1 | DANSBY | TABOR | 1 |
| 2024 | October | DRNS\_TB5 | THWZEN71\_A | ZEN | THW | 1 |
| 2024 | October | SCONMGS5 | 6056\_\_A | LNGSW | CONSW | 1 |
| 2024 | October | MGTNGRS8 | 6830\_\_B | CRDSW | OLNEY | 1 |
| 2024 | October | SRICGRS8 | 6840\_\_B | NVKSW | ANARN | 1 |
| 2024 | October | DPHAMCO8 | AZTECA\_HEC1\_1 | HEC | AZTECA | 1 |
| 2024 | October | SGODTAN5 | BIGTRE\_V\_DUPS1\_1 | V\_DUPSW | BIGTRE | 1 |
| 2024 | October | DSGTSCH5 | HARGRO\_PUMPJA1\_1 | HARGROVE | PUMPJACK | 1 |
| 2024 | October | SEBHUG8 | LAN\_CT\_PAVLOV1\_1 | LAN\_CTY | PAVLOV | 1 |
| 2024 | October | DDILPE89 | LIPTON\_W\_BATE1\_1 | W\_BATESV | LIPTON | 1 |
| 2024 | October | XVI2C89 | MAGRUD\_VICTOR2\_1 | VICTORIA | MAGRUDER | 1 |
| 2024 | October | DKOCNUE8 | MCKENZ\_WESTSI1\_1 | WESTSIDE | MCKENZIE | 1 |
| 2024 | October | DNUEGIL8 | MCKENZ\_WESTSI1\_1 | WESTSIDE | MCKENZIE | 1 |
| 2024 | October | DBWNAMO5 | SAPOWE\_SAST1\_1 | SAPOWER | SAST | 1 |
| 2024 | October | DBLBYWF5 | STPWAP39\_1 | STP | WAP | 1 |
| 2024 | October | DBRABRA8 | V2\_Z5\_1 | Z5 | V2 | 1 |
| 2024 | October | SGODKAT5 | VICTO\_WARBU\_1A\_1 | VICTORIA | WARBURTN | 1 |
| 2024 | October | DPRSHWK8 | 1561\_\_A | DPREA | RCSES | 1 |
| 2024 | October | SFPPLOS5 | 197T171\_1 | AUSTRO | SETTLE | 1 |
| 2024 | October | DLTPBCE5 | 325\_\_A | BLFSW | TMPCR | 1 |
| 2024 | October | DSNDBCE5 | 36040\_\_A | KNBSW | SALSW | 1 |
| 2024 | October | SBROBUZ8 | 6135\_\_F | GUNSW | HPPOD | 1 |
| 2024 | October | DBUZLME8 | 6217\_\_D | LMESA | KEYSB | 1 |
| 2024 | October | DKENCA58 | 656T656\_1 | KENDAL | BERGHE | 1 |
| 2024 | October | SALIBNT8 | 910\_\_E | RHOME | PEDENRD | 1 |
| 2024 | October | XFTS89 | ALMC\_69T1 | ALMC | ALMC | 1 |
| 2024 | October | DBUNMYK8 | AM\_AM\_26\_1 | AM | AM | 1 |
| 2024 | October | SBONWF28 | BNMSW\_FMR1 | BNMSW | BNMSW | 1 |
| 2024 | October | SLOLFOR8 | CHOCBA\_GOHLKE1\_1 | GOHLKE | CHOCBAYU | 1 |
| 2024 | October | DRILTES5 | FARMLAND\_LONGD\_1 | FARMLAND | W\_LD\_345 | 1 |
| 2024 | October | DBI\_BI\_8 | HOCKB\_90\_A | HOC | KB | 1 |
| 2024 | October | DBUNMYK8 | HOCKB\_90\_A | HOC | KB | 1 |
| 2024 | October | MCEDBAK5 | JERRY\_PUMPJA1\_1 | PUMPJACK | JERRY | 1 |
| 2024 | October | DBAKCED5 | LAKENA\_SAMATH1\_1 | LAKENASW | SAMATHIS | 1 |
| 2024 | October | SEBHUG8 | LAN\_CT\_PAVLOV1\_1 | PAVLOV | LAN\_CTY | 1 |
| 2024 | October | DVICEDN8 | LOOP\_VICTORIA\_1 | VICTORIA | L\_463S | 1 |
| 2024 | October | DJEWBAL5 | 1210\_\_B | HUBRD | HAN1 | 1 |
| 2024 | October | DVLSPAC5 | 1650\_\_D | TALTP | MNTTP | 1 |
| 2024 | October | DCAGCI58 | 243T278\_1 | CICO | PIPECR | 1 |
| 2024 | October | SSAMFVL5 | 35055\_\_A | SAMSW | VENSW | 1 |
| 2024 | October | SCMNCPS5 | 6025\_\_A | LNCRK | MULBERRY | 1 |
| 2024 | October | XFTS89 | ALMC\_T2 | ALMC | ALMC | 1 |
| 2024 | October | SSOLALM8 | BELD\_BRONCO1\_1 | BELD | BRONCO | 1 |
| 2024 | October | DELMSAN5 | COLETO\_ROSATA1\_1 | COLETO | ROSATA | 1 |
| 2024 | October | SGUACUE8 | DEERCR\_AT1 | DEERCR | DEERCR | 1 |
| 2024 | October | SHINDIL8 | DILLEYSW\_69A1 | DILLEYSW | DILLEYSW | 1 |
| 2024 | October | SPALFRO8 | FRONTE\_MAYBER1\_1 | FRONTERA | MAYBERRY | 1 |
| 2024 | October | DPHRAL58 | G138\_10B\_1 | SEMINOLE | MAGNO\_TN | 1 |
| 2024 | October | SPITFOR8 | GILLES\_AT1 | GILLES | GILLES | 1 |
| 2024 | October | SRAYRI38 | HAINE\_\_LA\_PAL1\_1 | LA\_PALMA | HAINE\_DR | 1 |
| 2024 | October | SBUNHO28 | HOCKB\_90\_A | HOC | KB | 1 |
| 2024 | October | DHIWARC8 | MORRIS\_WESTSI1\_1 | MORRIS | WESTSIDE | 1 |
| 2024 | October | SOBWAP5 | OB\_WAP98\_A | WAP | OB | 1 |
| 2024 | October | SZENTH35 | THWZEN71\_A | ZEN | THW | 1 |
| 2024 | October | DCAGPIN8 | U4\_X1\_1 | X1 | U4 | 1 |
| 2024 | October | SWHILON5 | WHITE\_PT\_T3H | WHITE\_PT | WHITE\_PT | 1 |

1. Current Wind Generation Record: 27,881 MW on 06/17/2024 at 21:15 | Current Wind Penetration Record: 69.15% on 04/10/2022 at 01:43

   Current Solar Generation Record: 21,667 MW on 09/08/2024 at 14:03 | Current Solar Penetration Record: 44.17% on 11/20/2024 at 14:55 [↑](#footnote-ref-2)