



Item 8.4: Market Credit Update

Austin Rosel

Director, Settlements, Retail and Credit

Reliability and Markets Committee Meeting

ERCOT Public

April 22, 2024

Market Credit Update: Overview

- **Purpose**

Provide updates on key Credit indicators and other Credit-related developments

- **Voting Items / Requests**

No action is requested of the Reliability and Markets (R&M) Committee or Board; for discussion only

- **Key Takeaways**

- Market-wide average Total Potential Exposure (TPE) decreased from \$1.80 billion in January 2024 to \$1.34 billion in February 2024
 - TPEA (TPE related to Real-Time and Day Ahead exposure) decreased due to lower forward adjustment factors and market prices
- Average Discretionary Collateral decreased from \$5.57 billion in January 2024 to \$4.60 billion in February 2024
- 4 defaults resulting from NPRR1165, Revisions to Requirements of Providing Audited Financial Statements and Providing Independent Amount
 - No market losses due to these defaults
 - All 4 participants were inactive in the ERCOT markets

Credit NPRRs

- **NPRR 1165 - Revisions to Requirements of Providing Audited Financial Statements and Providing Independent Amount [ERCOT]**
 - Recommended for approval at the August 31, 2023 Board of Directors Meeting; Implemented on April 1, 2024
 - Related to NPRR1112, Elimination of Unsecured Credit Limits
 - Removes exemptions that allow Counter-Parties to avoid posting an Independent Amount
 - Current exemptions are based on total assets or Tangible Net Worth of the Counter-Party or a guarantor
 - Independent Amount is \$500,000 to participate in all ERCOT markets, or \$200,000 to participate in all ERCOT markets except for the CRR market.
- Market notices reminding Qualified Scheduling Entities (QSEs) of this change were sent out in advance: 2/1/24, 3/1/24 and 3/21/24.
- ERCOT reached out to Counter-Parties that would potentially receive a collateral call due to NPRR1165 on March 25, a week before implementation. ERCOT had to reach out to 67 Counter-Parties.

Credit NPRRs

- **NPRR 1205 - Revisions to Credit Qualification Requirements of Banks and Insurance Companies [ERCOT]**
 - Recommended for approval unanimously at Technical Advisory Committee (TAC) meeting on March 29, 2024
 - Scheduled for a vote at the April 23, 2024 Board meeting
 - Specific changes include strengthening and clarifying minimum credit quality qualifications for:
 - Banks, which issue letters of credit on behalf of Market Participants to ERCOT; and
 - Insurance companies, which issue surety bonds on behalf of Market Participants to ERCOT
 - Comments filed by Luminant that doubles the maximum issuer limits as a percentage of tangible net worth per issuer
 - Balances the higher credit rating threshold by providing more credit capacity available for Market Participants
 - Approach remains more conservative compared to other ISOs
 - The overall limit of \$750M per issuer was not changed

Issuer Credit Limits vs Total LC Amounts Per Issuer

| Issuer Name | Total LC Amounts Per Issuer(US\$) | Tangible Net Worth(US\$) | Issuer Limits based on Tangible Net Worth(US\$) | Unused Capacity based on Tangible Net Worth(US\$) | Over CL |
|--|-----------------------------------|-----------------------------|---|---|------------|
| Lloyds Bank Corporate Markets PLC | \$ 570,471,139 | \$ 40,955,359,400 | \$ 327,642,875 | \$ (242,828,264) | 174% |
| Credit Agricole Corporate & Investment Bank SA | \$ 285,909,399 | \$ 28,605,867,700 | \$ 228,846,942 | \$ (57,062,457) | 125% |
| BBVA | \$ 400,000,000 | \$ 48,022,768,500 | \$ 336,159,380 | \$ (63,840,621) | 119% |
| CoBank ACB | \$ 86,400,000 | \$ 10,224,688,000 | \$ 86,909,848 | \$ 509,848 | 99% |
| BNP Paribas | \$ 600,662,008 | \$ 120,721,538,800 | \$ 750,000,000 | \$ 149,337,992 | 80% |
| Societe Generale | \$ 339,810,044 | \$ 64,038,926,800 | \$ 480,291,951 | \$ 140,481,907 | 71% |
| DNB Bank ASA | \$ 136,650,003 | \$ 24,384,000,000 | \$ 207,264,000 | \$ 70,613,997 | 66% |
| Unicredit Bank AG | \$ 93,700,001 | \$ 21,145,656,200 | \$ 148,019,593 | \$ 54,319,592 | 63% |
| National Australia Bank Limited | \$ 179,000,000 | \$ 36,199,708,200 | \$ 307,697,520 | \$ 128,697,520 | 58% |
| Royal Bank of Canada | \$ 350,000,001 | \$ 71,446,069,601 | \$ 607,291,592 | \$ 257,291,591 | 58% |
| Others (29 banks) | \$ 1,811,610,334 | \$ 1,410,722,084,081 | \$ 9,860,956,441 | \$ 8,049,346,106 | 18% |
| Totals | \$ 4,854,212,930 | \$ 1,876,466,667,282 | \$ 13,341,080,141 | \$ 8,486,867,211 | 36% |

- As of April 3, 2024
- There are a total of 36 banks that have issued LCs



Credit NPRRs

- **NPRR 1215 - Clarifications to the Day-Ahead Market (DAM) Energy-Only Offer Calculation [ERCOT]**
 - Clarifies certain calculations performed in determining the exposure of bids and offers submitted in the Day-Ahead Market
 - Credit exposure calculation for DAM Energy-Only Offers zeroes out negative values in calculating the percentile of historical hourly differences between Real-Time and Day-Ahead prices
 - Corrects a paragraph reference error
 - Incorporation of the as-built value of “e2” used in the calculation of the credit exposure for DAM Energy-Only Offers. The “e2” value which was in an Other Binding Document (OBD) previously approved by ERCOT Board of Directors was inadvertently omitted when the OBD was incorporated into the Protocols.

Market Credit Update

Appendices

LC Issuing Bank Credit Limit

(iii) Letters of credit are subject to an overall limit per letter of credit issuer for all ERCOT Counter-Parties as determined below:

| If the issuing entity has | | Then |
|----------------------------|----------------|---|
| Long-Term or Issuer Rating | | Maximum letter of credit issuer limit as a percentage of Tangible Net Worth of issuer |
| S&P or Fitch | Moody's | |
| AAA | Aaa | 1.00% |
| AA+ | Aa1 | 0.95% |
| AA | Aa2 | 0.90% |
| AA- | Aa3 | 0.85% |
| A+ | A1 | 0.80% |
| A | A2 | 0.75% |
| A- | A3 | 0.70% |
| Below A- | Below A3 | Not accepted |

(A) Each letter of credit issuer limit is also subject to an overall limit of \$750 million per issuer.

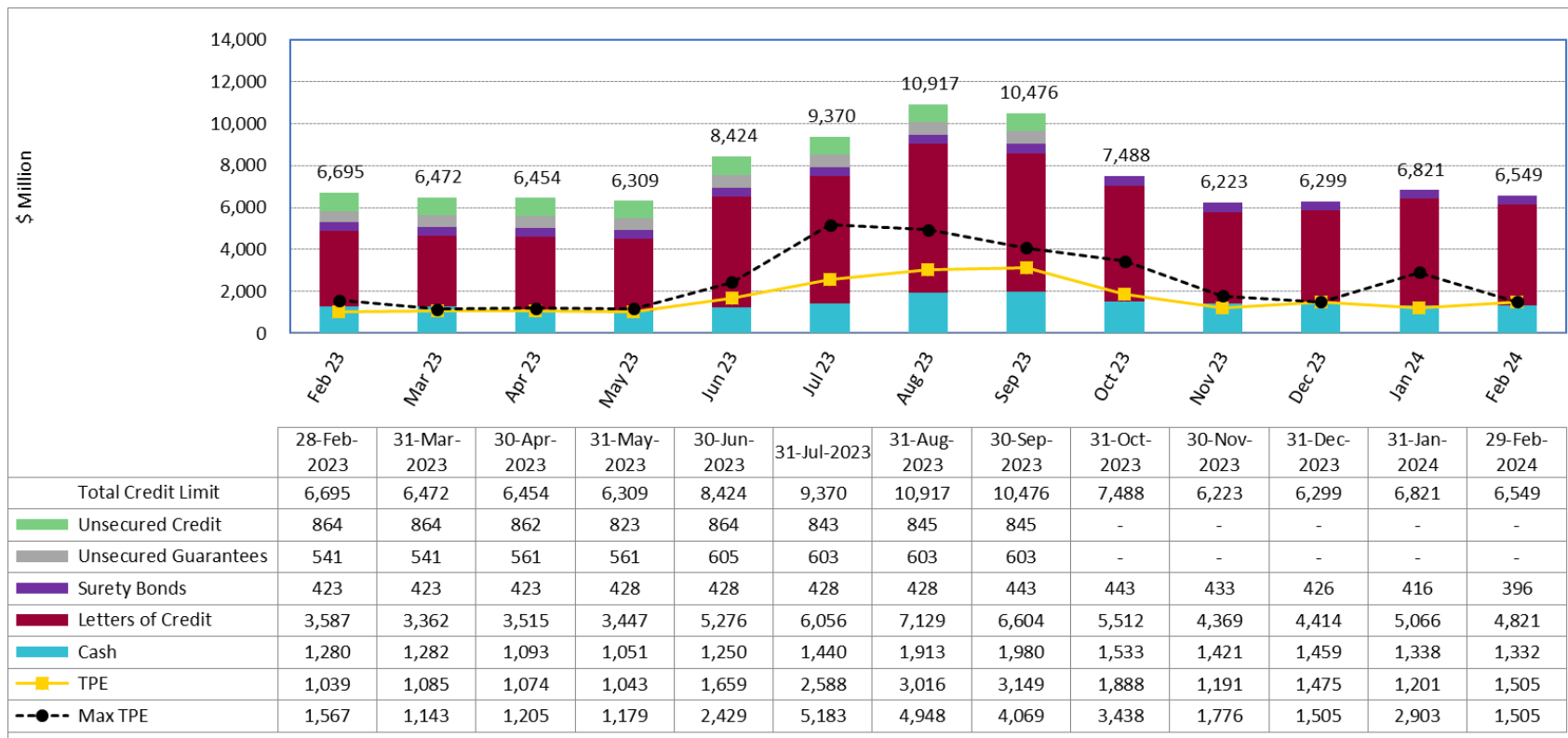
- (B) Each Bank Business Day, ERCOT will issue a report of each letter of credit issuer detailing the issuer's dollar amount of the letters of credit currently issued to ERCOT, the issuer's computed aggregate concentration limit, and the unused capacity under that limit. Market Participants may inquire of ERCOT about intra-day changes to the amount of posted letters of credit.
- (C) If a letter of credit issuer limit is breached, Counter-Parties utilizing that issuer will be notified and no new letters of credit from the issuer will be accepted while the limit remains breached.
- (D) After four months of the limit in breach, ERCOT will no longer accept new letters of credit or amendments to existing letters of credit from that issuer.

LC Issuing bank criteria comparison amongst different ISO/RTO's

| | ERCOT | MISO | NYISO | CAISO | PJM | ISO-NE | SPP |
|---|--|---|---|---|---|---|---|
| LC issuing bank minimum credit rating criteria | As long as one of the rating agencies provides a rating of A-/A3. In other words, we do accept BBB ratings | A-/A3 | A/A2. However, A-/A3 is acceptable as long as at least one rating is at least A/A2. | A-/A3 | A / A2 | Min A- rating by at least 1 of the agencies (any banks on Chicago Mercantile Exchange list of LC banks also permissible) | A-/A3 |
| Do accept BBB/BBB+ rated banks? | Yes, as long as at least 1 of the agencies has a min A-/A3 rating | No | No | No | No | See above | No |
| Rating definition | Long term rating, issuer rating or long term bank deposit rating (domestic), but excludes long term counterparty rating | Long term rating | Long term rating or issuer rating | Long term/issuer rating or an equivalent short-term debt rating | Does not include short term ratings- P-1's etc as acceptable ratings. Only Long term or issuer ratings apply. | Long-term senior unsecured / corporate rating | |
| LC language change option | Non negotiable | Non negotiable | Non negotiable | Minor changes acceptable | Only non-substantive/non material changes. No wordsmithing | Non negotiable | Non negotiable |
| Exercise of discretion | Discretion is allowed, however, in practical terms not exercised | Discretion for unreasonable credit risk as well as tariff language for material adverse change | Discretion for unreasonable credit risk as well as tariff language for material adverse change | None | None | None | Discretion for unreasonable credit risk as well as tariff language for material adverse change |
| Non US Bank | If the LOC is issued from the US or Canadian branch of the foreign bank, and the branch does not have a standalone rating, the parent rating is used | US branch of the foreign bank MUST have a stand-alone rating that meets the above criteria | If the LOC is issued from the US or Canadian branch of the foreign bank, and the branch does not have a standalone rating, the parent rating is used | US branch of the foreign bank MUST have a stand-alone rating that meets the above criteria | US branch of the foreign bank MUST have a stand-alone rating that meets the above criteria | US branch of the foreign bank MUST have a stand-alone rating that meets the above criteria | US branch of the foreign bank MUST have a stand-alone rating that meets the above criteria |
| Cap on total amount of LC's | Yes. \$750MM or \$ calculated according to the protocols, whichever is the lower | None | None | None | None | Posting entity may not provide LCs from an affiliate and that a bank may not issue LCs exceeding \$100 million for any single posting entity or \$150 million for a group of affiliated posting entities. | None |
| Funding timeline | LC funded by EOD next business day (regardless of what time the LC was submitted the prior day) | If presented before 10:00 AM where the bank is located, the LC draft needs to be funded same day. If submitted after 10:00 A.M. then the draft needs to be funded by the next business day. | If presented before 10:00 AM where the bank is located, the LC draft needs to be funded same day. If submitted after 10:00 A.M. then the draft needs to be funded by the next business day. | Within 3 hours after such presentation (unless such presentation occurs after 1:00 p.m., Pacific Time, on the day of such presentation, in which event payment will be made within 3 hours after the opening of business at the office specified above on the next business day). | Same day payment if presentation is made by 10:00AM local time. If after 10:00 AM then payment is made next business day. | If presented before 10:00 AM where the bank is located, the LC draft needs to be funded same day. If submitted after 10:00 A.M. then the draft needs to be funded by the next business day. | If presented before 10:00 AM where the bank is located, the LC draft needs to be funded same day. If submitted after 10:00 A.M. then the draft needs to be funded by the next business day. |

Available Credit by Type Compared to Total Potential Exposure (TPE) Month-End February 2023 – February 2024

This shows TPE compared to the forms of collateral held.

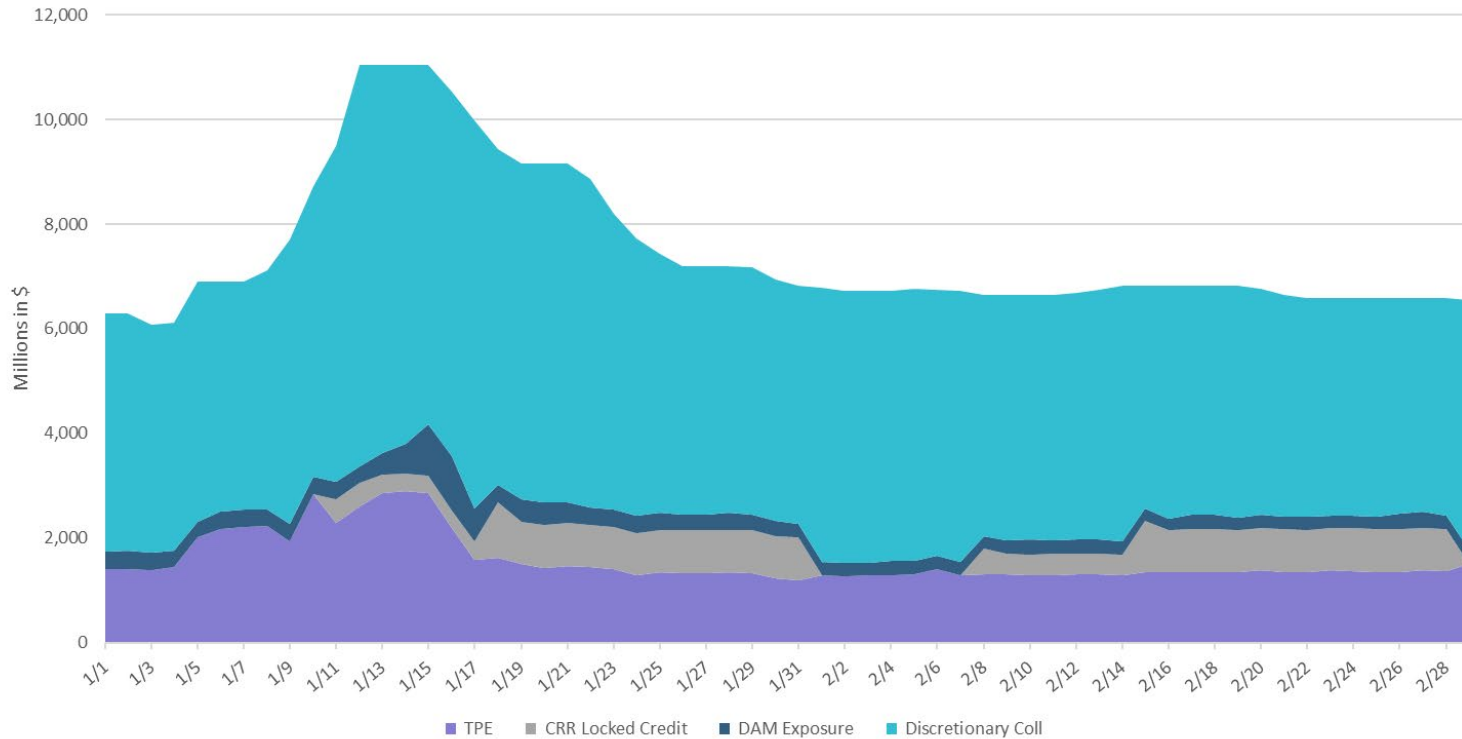


- Numbers are as of month-end except for Max TPE
- Max TPE is the highest TPE for the corresponding month



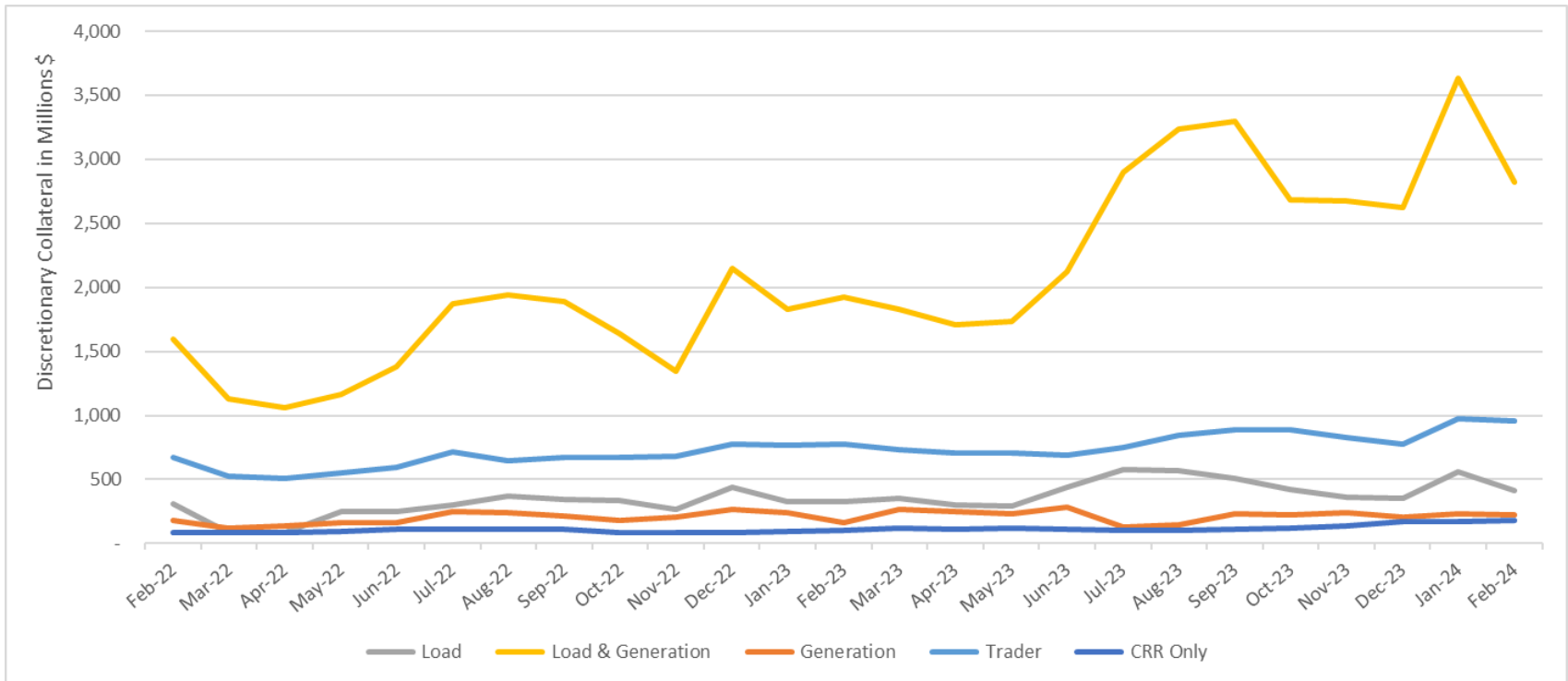
Discretionary Collateral January 2024 – February 2024

ERCOT Counter-Parties typically provide a large measure of collateral in excess of that required to cover TPE, Day-Ahead Market (DAM) activity and Congestion Revenue Right (CRR) auctions.



* TPE adjusted to exclude short pay entities eliminating data skew

Discretionary Collateral by Market Segment February 2022 - February 2024

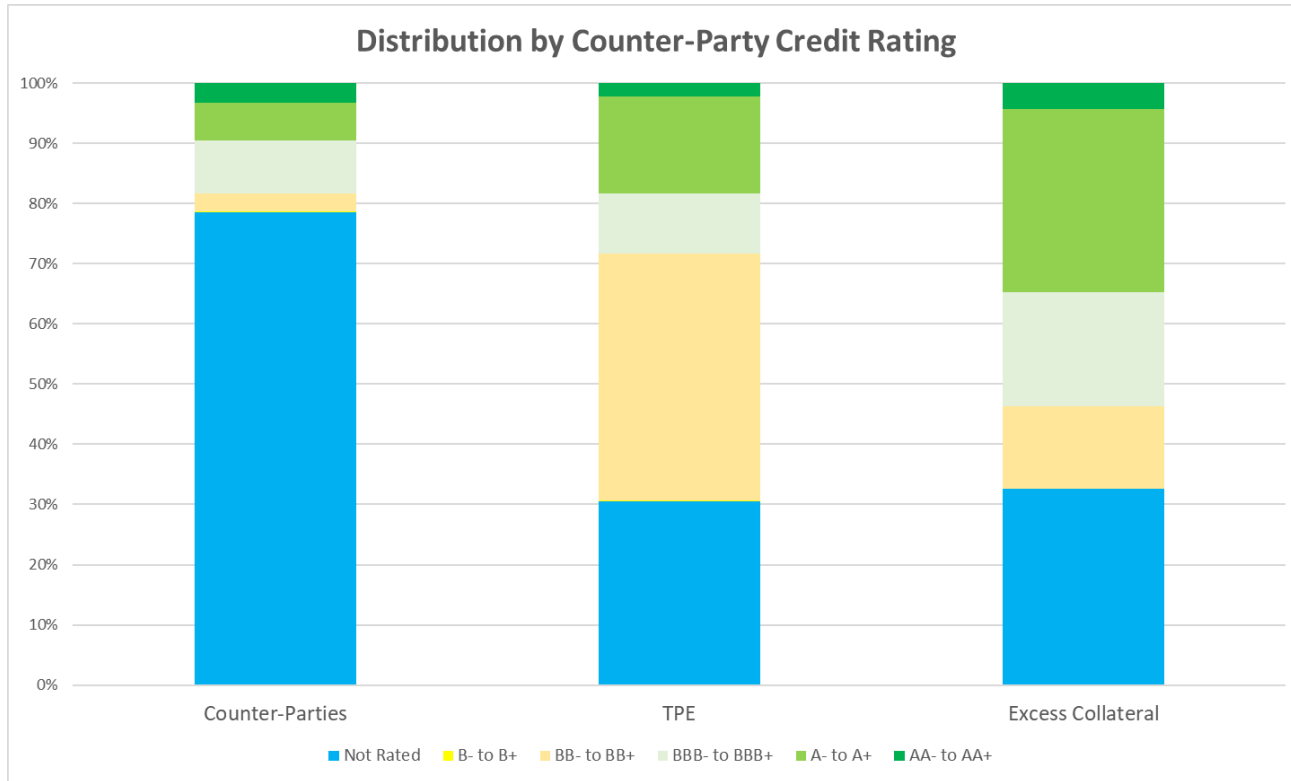


* Discretionary Collateral adjusted to exclude short pay amounts eliminating data skew



Distributions by Counter-Party Credit Rating – February 2024

Most ERCOT Counter-Parties are not agency-rated. However, unrated entities account for proportionately less TPE and excess collateral than agency-rated entities.



* TPE is average for the month

* Excess collateral (TPE less unsecured credit and secured collateral) is average for the month

TPEA Coverage of Settlements January 2023 – January 2024

Total Potential Exposure – Any (TPEA) is estimated credit exposure for non-CRR market activities.

