

Board of Trustees Meeting

BROAD & MAJOR TOPICS:

<u>RELIABILITY</u> – Please see the separate ATTACHED REPORT, entitled
<u>"WINTER STORM URI LESSIONS LEARNED STATUS UPDATE."</u>



WINTER STORM URI LESSONS LEARNED STATUS UPDATE Municipal Utilities Committee (MUC) Report Board of Trustees Summary Report October 2021

- <u>The report currently includes 129 Action Items that we are</u> working on that were developed as a result of Winter Storm Uri. It includes actions also being directly monitored by the City of San Antonio's Municipal Utilities Committee (MUC).
- <u>CREDIT RATINGS AGENCIES</u> We are currently in the process of remarketing our Junior Lien Bonds. After several recent meetings, Standard and Poor's (S&P) re-affirmed those bonds at A+. They have kept the Outlook Negative. They are continuing to closely monitor our major topics, including the following:
 - Elevated Governance Risk,
 - State Regulatory Risk via the Electric Reliability Council of Texas (ERCOT) and the Public Utility Commission (PUC),
 - Leadership Succession, and
 - A Potential Rate Case to Address the Continued Pressure on Our Metrics.

See the attached report.

S&P Global Ratings	
	RatingsDirect [*]
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Board of Trustees Meeting

- **<u>COMMUNITY OUTREACH UPDATE</u>**:
 - Pre-Rate Increase Consideration Period:
 - * No Increase has been officially declared.
 - We are transparently talking with our community about the possibility of an increase while we fine tune our potential rate request.



*** AUGUST & SEPTEMBER 2021:**

- We held two virtual Community Town Halls on August 12 and September 14 that focused on updates on the *Flexible Path*SM and the *FlexPOWER Bundle*SM.
- Corporate Communications and the *FlexPOWER BundleSM* team will continue to keep our internal employees and community apprised of the progress.

*** OCTOBER 2021:**

 We are proactively pursuing engagement with numerous stakeholder groups.



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Board of Trustees Meeting

We know processing feedback is essential. See some of the key themes we are hearing thus far.

CONSISTENT THEMES

Some of the things we've heard include:

- Customers are still upset about Winter Storm Uri
- Customers recognize that it's been a long time since we have raised rates
- Applying a focused "equity lens" on our rate increase is critical to getting community support



Clearly, we need to balance this current landscape with the need for continued *Financial Stability*. There is much more work to be done.

Accordingly, we are continuing to help customers wherever and whenever we can. See the sample session below. These Assistance Fairs are being held to provide help, and to inform and educate citizens across our community. We are working closely with City Council Members to keep providing these important Pop-Up Outreach Sessions.





Board of Trustees Meeting

Accordingly, we are pulling this month's Board Agenda Item 6. In turn, we are directly focusing on fine tuning and potentially further reducing our ultimate rate request. So far, we have reduced our BILL IMPACT estimate from approximately 10% to about 8%. There is more to come.

• UPDATE ON BOARD AGENDA ITEMS:

- CHAIRS PRIORITIES: ITEM 5 WINTER PREPAREDNESS PROGRESS REPORT:
 - * While we have 129 items we are actively working, we are also closely monitoring the 37 aligned Action Items that were generated by the MUC.





Board of Trustees Meeting

• <u>ITEM 10 – NEW CITIZEN ADVISORY COMMITTEE (CAC) MEMBER</u> <u>UPDATE: Board Approval is needed.</u>



• ITEM 11 – REAL ESTATE: JONES AVENUE PROPERTY UPDATE:

- In 2015, the CPS Energy Board of Trustees declared the former Jones Avenue Service Center, located at 326 W. Jones Ave, a surplus property that was no longer needed to support operations. In April 2016, the last truck officially rolled through the gate.
- In 2015, the Board of Trustees directed former CEO Doyle Beneby to negotiate with the San Antonio Museum of Art (SAMA) to convey the southern half of the 6.94-acre Jones Avenue property (Jones South) to SAMA. The remaining 3.5 acres were designated to be sold.
- The SAMA conveyance provisions were developed and agreed to on September 22, 2015.
- The conveyance agreement had to be extended several times as CPS Energy and SAMA worked through the required details of the conveyance.
- Ultimately, the documents conveying the property were not finalized before the agreement ended on December 31, 2019.
- Since then, our focus has been navigating the global pandemic and February's Winter Storm Uri.



Board of Trustees Meeting

- There have been multiple meetings this month on this subject:
 - The Board Chair was involved and actively participated in these sessions. He championed the constructive resolution of the matter that will be discussed in Executive Session and will be potentially voted on by the entire Board later this afternoon.

• ITEM 12: FlexPOWER BundleSM UPDATE:

- We continue to thoughtfully move forward with our *FlexPOWER BundleSM* request for proposal (RFP) execution. As part of our evaluation of each firm / project, we utilize criteria encompassing all 6 of our *Guiding Pillars*.
 - To accomplish this, we have an opportunity to issue another RFP that focuses on distributed solar projects that bring local installers, or other forms of local impact, into the *FlexPOWER Bundlesm*. To be clear, the 900MW goal has not changed. This local impact focus is part of the total 900MW.
 - Typically, distributed generation projects are more expensive per unit because they are smaller. However, they often help the local economy.





Board of Trustees Meeting

ALIGNED REPORTING:

• **RELIABILITY:** AGAIN, PLEASE SEE THE ATTACHED REPORT FOR MORE INFORMATION:



• AGAIN, PLEASE SEE THE ATTACHED OCTOBER 22, 2021, S&P CREDIT RATINGS REPORT FOR MORE INFORMATION:

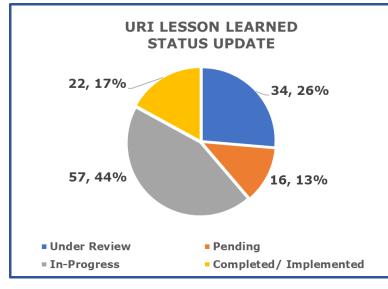




CPS Energy's management team continues its cooperation and focus on needed operational improvements.

We are appreciative of the Committee on Emergency Preparedness (CEP) that came up with 37 suggestions for improvement that we are currently working through. Of these Action Items, we have direct influence on 32. The remaining 5 relate to State / The Electric Reliability Council of Texas (ERCOT)-level items, such as desired changes to market design / regulation. We have incorporated the applicable CEP items into a broader list of Action Items that include more opportunities for improvement. The broader Lessons Learned Status Update report has 129 items, noted as follows:

Lessons Learned Status by Category	Under Review	Pending	In-Progress	Completed/ Implemented	Total
Accommodations	6	-	3	1	10
Back Up Systems	1	1	4	1	7
Communication	4	2	6	5	17
Facilities	6	-	2	1	9
Gas Systems	-	1	2	3	6
Plant Operations & Support	-	3	4	1	8
Staffing	7	1	4	3	15
System Architecture	2	1	3	1	7
Vehicles	2		4	2	8
Weatherization	1	3	10	3	17
Customers	2		3	-	5
Process Improvement	-	2	4	-	6
Security	-	2	2	1	5
Training	2		3	-	5
General Observation	1		3	-	4
Total	34	16	57	22	129
Ratio	26.4%	12.4%	44.2%	17.1%	100.0%





With a constructive sense of self-criticality, we developed this more comprehensive list of Action Items across the enterprise, which we believe will help us improve our preparedness when another storm of this magnitude occurs. This list has been categorized using the descriptions below. We currently expect to complete most items by the end of our fiscal year.

Accommodations – Although we had not experienced anything like Winter Storm Uri in our community, our closest comparison was the storm in 2011. Yet the lessons learned and applied following that storm still fell short of preparing us for Winter Storm Uri. As such, and compounded by the pandemic, we did not have the necessary logistics (i.e., meals, cots, cold weather gear and equipment, toiletries, etc.) in place for crews, and other key contributors, to adequately sustain extended 24-hour restoration operations during an extreme weather event. We have taken action to execute contracts that will establish stockpiles of these items prior to the upcoming winter season. We have one lesson learned that could be linked back to some aspect of the CEP recommendations.

Back-Up Systems – During Winter Storm Uri, we were minutes away from catastrophic grid failure. The ERCOT-directed outages impacted our entire system by causing unanticipated failures of some systems. Due to the extended outage and associated weather conditions, any systems that contained some level of back-up systems (e.g., batteries) failed without back-up generation. Most of our plans to address these lessons learned are underway. Gas Solutions implemented a plan to function-check back-up generation on Delivery Stations prior to severe weather events. We have one lesson learned that could be linked back to some aspect of the CEP recommendations.

Communication – This category casts a wide net, and not only includes customer communication, but it also includes internal communication and communications systems (i.e., radios, cell phones, communications equipment, etc.). While we acknowledge the need to better inform and assist our customers in preparing for potential extended outages, failure on some of our communications systems may have adversely impacted restoration operations by impacting our ability to communicate effectively with personnel during the storm. This involved all personnel, regardless of their involvement in restoration activities, because many of our employees live in the communities where we experienced extended outages. We anticipate that the upcoming deployment of our new Alamo Area Regional Radio System (AARRS) will help improve communications during restoration operations. We have five lessons learned that could be linked back to some aspect of the CEP recommendations.



Facilities – We encountered a myriad of facility issues during Winter Storm Uri which included items ranging from the failure of automatic gates, ice accumulation, and fuel availability. Additionally, the extended power outages caused our card readers used for building access to fail, restricting entry to our district centers. Moreover, the overwhelming amount of load we were directed to reduce overwhelmed the system operators and we had no extra computer systems that additional personnel could use to assist with the ERCOT-directed load reductions. These items alone compounded our restoration efforts. However, we have since increased the PC inventory at our Energy Operations Center to assist with the management of load reductions of similar magnitude in the future. We have one lesson learned that could be linked back to some aspect of the CEP recommendations.

Gas Solutions – While we may have experienced some natural gas supply issues for our plants to operate, we had the volumes necessary to supply and sustain our customer demand. As with our electrical crews, our gas solutions personnel experienced the same challenges regarding 24-hour coverage during the storm. They were stretched thin due to the necessity to recuperate between shifts to ensure that they worked *Safely*. This requirement reduced the number of available personnel; however, this was addressed by ensuring we have initiated a 12-hour shift format to reduce fatigue.

While we work to maintain proper pressure on our supply lines, we noted that some electronic pressure recorders (EPRs) experienced some operational issues during the storm. We have since completed troubleshooting these EPRs finding no new issues. As a preventative measure, we added a daily verification step on our system EPRs to ensure they are communicating correctly to our cold weather event operating procedures.

Plant Operations & Support – We have taken great lengths in our plant operations to bolster our ability to sustain operations in an extreme weather event. An immediate step was to add uninsulated drain piping to our routine inspection program. This afforded us the opportunity to make all necessary repairs and will allow us to detect and mitigate any freezing in future extreme weather events before it causes significant issues. We are also reviewing our spare parts and supply list specific to each plant to ensure we have those items on-hand prior to the winter season. Additionally, we intend to develop an equipment functional exercise program to maintain operational readiness during stand-by periods. We have six lessons learned that could be linked back to some aspect of the CEP recommendations.



Staffing – We labeled the human resource issues we experienced as Staffing due to the wide range of focus. Due to the intensity of the storm, we recognized that we did not have the appropriate restoration staffing, at many levels, to sustain the extended operations while keeping *Safety* top of mind. As stated in other areas, we recognized the need to stagger our workforce to ensure they are well rested. We identified the need to place members from each discipline on paid stand-by prior to an extreme weather event. We have two lessons learned that could be linked back to some aspect of the CEP recommendations.

System Architecture – While our load shed application was set up to manage an ERCOT-directed load shed similar to the 2011 storm, it was not set up to manage the direct load shed we experienced during Winter Storm Uri. Following the 2011 winter event we increased the capacity to 8,000MW. Yet the load shed capacity we were directed to shed was three times that capacity and in a much more expedited manner. As we did following the 2011 event, we increased our load shed capacity yet again by reducing the number of customers assigned to critical circuits. We also developed a dashboard to provide a real-time status to our system operators. We have two lessons learned that could be linked back to some aspect of the CEP recommendations.

Vehicles – In South Texas it is extremely rare for us to experience a weather phenomenon like Winter Storm Uri. As such, our vehicles were not equipped with the necessary equipment (i.e., tire chains, deicer, etc.) to help them navigate the treacherous road conditions *Safely*. This significantly impacted our restoration efforts causing us to, in many cases, suspend efforts until road conditions improved. As a corrective measure, we decided that strategically staging support vehicles would be beneficial to our restoration efforts during extreme weather events. We have one lesson learned that could be linked back to some aspect of the CEP recommendations.

Weatherization – As stated earlier, it is rare that we experience weather like Winter Storm Uri in South Texas. The extended duration of this weather anomaly caused abnormal failure, or substandard performance, in critical equipment on our system. This category contains the largest group of lessons learned. We developed plans to replace prior to, or inspect this equipment during, extreme weather events. In one instance, we recognized the need to install auto mode swapping thermostats in some of our system switchgear. We have nine lessons learned that could be linked back to some aspect of the CEP recommendations.



Customers – As Winter Storm Uri descended upon us, we did not have full visibility into customers that could lend their support to our load shed initiative or customers that are critical to the *Safety* and welfare of our community. We also learned that there were some mapping issues for the system supporting one of our largest customers. Additionally, we recognized the need to better inform our customers of the potential for extended gas outages and the various levels of curtailment.

Process Improvement – As we continued our self-evaluation following Winter Storm Uri, we recognized that following an extensive outage the instant demand from the power being restored, or cold load pickup, was too much for some of the equipment to handle at one time and the number of alerts in System Operations was overwhelming. We also learned that our load shed application was wrought with limitations that had not been revealed in previous extended outages. We have already implemented changes to our load shed application and they are under evaluation by a third-party consultant. We have three lessons learned that could be linked back to some aspect of the CEP recommendations.

Security – The prolonged outages caused by Winter Storm Uri impacted our ability to keep our buildings and equipment **Secure**. The card readers at various locations did not operate properly during load shed. We also experienced situations where our personnel did not have adequate access to areas where our customers have additional **Security** protocols. We have since obtained the necessary permissions to grant access to these areas.

Training – As stated in previous sections, Winter Storm Uri revealed where we were underprepared due to the magnitude and extent of the storm. As such, we recognize that we need a training program to help our employees navigate "cold load pickup," black start operations, heat trace panels and other areas related to winter operations or extended outage recovery. We have one lesson learned that could be linked back to some aspect of the CEP recommendations.

General Observations – As we continued our self-evaluation following Winter Storm Uri, we noted that having some winter peak loading information for distribution and transmission, as it relates to extreme weather events, would have been useful. We could have used this information to develop winter load models that could enhance our system *Resiliency*. Additionally, we did not activate our Crisis Team to help manage operations during Winter Storm Uri.



RatingsDirect[®]

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Related Research

Summary: San Antonio; Combined Utility

Credit Profile

US\$102.0 mil elec & gas sys var rate jr lien rev rfdg bnds rmktd 12/1/21 ser 2015B due 02/01/2033 Long Term Rating A+/Negative New

Rating Action

S&P Global Ratings assigned its 'A+' long-term rating to San Antonio, Texas' electric and gas systems' series 2015B variable-rate junior-lien revenue refunding bonds. The outlook is negative. The City Public Service Board of San Antonio (or CPS Energy) manages and operates the city's electric and gas systems.

The negative outlook reflects the continued uncertainty associated with many factors facing utilities throughout the state, related to the potential financial and operational effects of the winter storm in 2021. The utility remains exposed to credit risk associated with elevated governance risk, including uncertainties related to the Electric Reliability Council of Texas (ERCOT) market, including primarily the socialization of costs, uncertain regulatory environment, and exposure to the market's price volatility, which require the need for enhanced risk management practices. We believe its governance risk is more pronounced because of recent turnover at senior leadership positions while the utility is simultaneously seeking a rate increase. We understand the utility's CEO recently announced plans to resign in early 2022, following the COO's resignation earlier this month, and the chief legal officer was replaced in June. While CPS Energy indicated the CEO's recent announcement should not delay its rate increase process, the recent turnover reflects the need for stability among senior leadership positions as the utility navigates its operational, financial, and legal challenges.

Despite the utility's diverse generation fleet and projected long power supply position compared to its winter peak demand, as with many peer Texas utilities, San Antonio could continue to face challenges associated with the market's relative price volatility, heightened reliability risks, and weaker grid interconnectivity as compared with other states. In our view, utilities still need to demonstrate the effectiveness of recent governance reforms enacted for ERCOT, which include winterization requirements for power generators and utilities in Texas, and legislation providing a pathway for cooperatives to recover storm costs via securitization. However, protocols have yet to be established for the natural gas supply system. The utility remains vulnerable to the natural gas supply chain in Texas that has proven constrained during extreme weather events, and we believe the delays in strengthening winterization requirements for natural gas producers perpetuates operating and financial risk exposures. In addition, the utility's sizable delinquent customer balances could constrain cash flow absent timely recovery.

CPS Energy's electric and gas systems' net revenue pledge secures the senior- and junior-lien revenue debt. The lower junior-lien rating reflects the debt's subordinate status. The city plans to remarket its \$102 million series 2015B variable-rate junior-lien revenue bonds subject to mandatory tender on Dec. 1, 2021, and will convert the bonds to a fixed mode from a term mode at a fixed interest rate until final maturity. We understand the conversion of the bonds to

a fixed mode is irreversible according to the bond ordinance, and following the remarketing, the bonds will no longer be subject to a mandatory tender. CPS Energy had \$6.0 billion in total debt at the end of fiscal 2021, including \$3.8 billion in parity senior-lien bonds outstanding.

For more information on our long-term ratings on the utility's bonds, please see our full analysis on CPS Energy, published Oct. 5, 2021, on RatingsDirect.

Credit overview

In response to the severe winter weather event in February and up to \$1 billion in estimated bills related to unbudgeted gas and electricity purchases during that event, CPS Energy has focused on preserving on-balance-sheet liquidity, adding external liquidity, and disputing natural gas supply costs. It launched lawsuits against 18 natural gas suppliers disputing \$496 million of the \$670 million the suppliers seek for natural gas sold to CPS Energy during that week. To date, the utility has paid \$450 million in power and natural gas supply costs from the winter event and management contemplates raising rates by up to 10% before the end of fiscal 2022 to recover the unbudgeted electric and gas procurement costs it has already paid. It also envisions applying portions of the proposed rate increase to its capital program. Management is using debt proceeds to discharge the procurement costs CPS Energy is not disputing, and we believe that if the lawsuits are unsuccessful, the utility will issue debt proceeds to discharge those costs. Debt allows management to amortize storm costs over many years to temper retail rate increases. Though the magnitude of rate increase is uncertain, we expect the city council to approve one before the end of fiscal 2022 to preserve healthy financial metrics.

The rating further reflects our opinion of CPS Energy's:

- Coverage metrics that have been robust, equal to 1.5x in fiscal 2021 that we expect could decline to around 1.4x in fiscal 2022 based on our view of management's financial forecast, which includes a potential rate increase and sizable transfer of surplus net revenues to the city of San Antonio;
- Historically sufficient liquidity and reserves relative to weather variability and operational needs, with \$892 million of total on-balance-sheet liquidity for fiscal 2021 equal to over 200 days' cash, an additional \$500 million external line of credit, and \$300 million in undrawn taxable commercial paper as of Sept. 1; and
- Broad and diverse service area economy and very diverse and steadily growing customer base that promote revenue predictability.

Partly offsetting the above credit strengths, are the utility's:

- Diverse power supply mix and generation fleet that the February winter storm event showed to be exposed to operational risks related to extreme weather events and the utility's significant purchase power and natural gas costs incurred during the storm event;
- Competitive retail electric rates and our view that rate affordability could weaken in the near term based on income levels and affordability in a market where 12% of customer balances are past due totaling \$119 million and over 25,000 customers are on payment plans; and
- Additional debt needs that will likely increase its debt-to-capitalization ratio of 61% in fiscal 2021 to roughly 65% over the next two years.

Environmental, social, and governance factors

The severe winter event in February 2021 has brought into sharper focus a spectrum of environmental, social, and governance (ESG)-related risks that could inform our credit analyses and ratings over the long term. In our opinion, CPS Energy and many other Texas utilities face greater environmental risk than do most of their peers nationally. Given wide fluctuations in temperatures in CPS Energy's territory, the utility, along with many of its Texas-based peers, faces heightened risk related to climate change. In our view, the specter of climate change could weigh more heavily as a credit risk factor for Texas municipal utilities. In particular, we consider the adequacy of management's counterbalancing measures to plan for, mitigate, or adapt to risks associated with extreme weather conditions that have the potential to disrupt its power supply and cause a short energy position.

Management has taken steps to improve operational flexibility and mitigate natural gas price risk by adding physical storage, expanding first-of-the-month financial instruments, and planning to increase its natural gas hedges up to 50% of supply before the winter months. The utility has increased its maximum daily draw capacity from natural gas storage 25%, which would provide 14 days of supply (assuming a 66% increase over average daily demand). Management has also scheduled its planned plant outages to earlier in the fall to ensure planned outages do not occur during winter months. Management intends to invest roughly \$2 million in winterization in 2021 and 2022 after funding \$17 million in winterizing its assets since 2011. The utility's plans to retire certain aging natural gas-fired generation will reduce emissions, but operating coal (20% of energy sales) and natural gas-fired generation (31%) will continue to create environmental exposures.

We believe CPS Energy's exposure to social factors (including health and safety issues related to COVID-19) could present elevated risk as the utility's rate increase plans could challenge rate affordability for some of its customers. While management indicated disconnections could resume this fall and improve collections, we understand a majority of the roughly 114,000 customer balances that are past due as of September could be eligible for disconnection.

In our view, governance risk is heightened given that the environment in which CPS Energy operates increasingly requires stronger liquidity, proactive planning, hedging, and financial flexibility, which could be costly, versus most utilities in other regions where these risks are lower. We believe senior-level management turnover introduces risk given a pending rate increase proposal and managing the aftermath of the February winter storm. While CPS Energy has not implemented a rate increase since 2014, we believe the city council's willingness to implement timely rate increases to support the maintenance of its financial profile to be an important credit factor.

Negative Outlook

Downside scenario

Based on the operational and financial exposures the utility could face during extreme weather, along with the uncertain magnitude and timing of potential rate increases that must be approved by the San Antonio City Council, we could lower the rating one notch if needed rate increases weaken our view of the utility's rate competitiveness or if fixed-charge coverage metrics come under additional pressure. In addition, the utility's sizable delinquent customer balances reflect its rate affordability pressures and could constrain cash flow absent timely recovery.

Return to stable scenario

We continue to monitor ERCOT's market reforms to assess the extent to which they address CPS Energy's exposure to market pricing. We could revise the outlook to stable if the ERCOT reforms, which we currently view as a work in progress, reduce the utility's exposure to market-price volatility. Before returning the outlook to stable we will assess the state of the ERCOT market and our assessment of the utility's resilience to extreme weather events. A return to a stable outlook will be based on our assessment of the interplay among ERCOT market reforms, rate increases, financial metrics, and management stability.

Related Research

• Through The ESG Lens 2.0: A Deeper Dive Into U.S. Public Finance Credit Factors, April 28, 2020

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