



WINTER PREPAREDNESS PROGRESS REPORT

PRESENTED BY:

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Chief Grid Optimization & Resiliency Officer (CGORO)

November 30, 2021

Informational Update

OBJECTIVES & TAKEAWAYS



- **PROVIDE STATUS OF THE CITY OF SAN ANTONIO (CoSA) COMMITTEE ON EMERGENCY PREPAREDNESS (CEP) REPORT RECOMMENDATIONS**

AGENDA



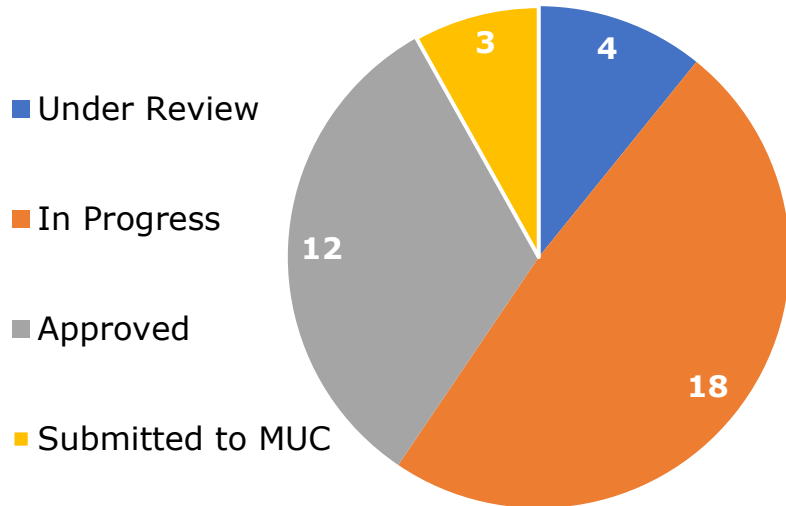
- **CEP RECOMMENDATION STATUS OVERVIEW**
- **CEP RECOMMENDATION STATUS UPDATE**
- **CEP RECOMMENDATION PARTNER STATUS UPDATE**
- **NEXT STEPS**

CoSA CEP RECOMMENDATION

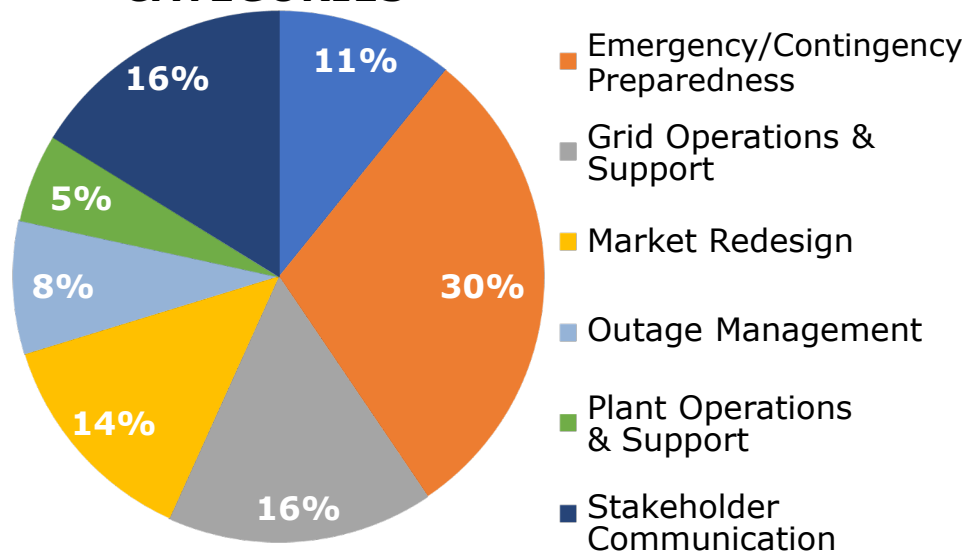
STATUS OVERVIEW



CEP RECOMMENDATION ACTION PLAN STATUS



CEP RECOMMENDATION CATEGORIES



Majority of action plans identifying our activities to resolve recommendations are effectively complete pending administrative closeout & submittal.

CoSA CEP RECOMMENDATION

PLANT OPERATIONS & SUPPORT – 2



CEP Recommendation: CPS 2	Enhance current practices for purchasing and transporting natural gas
CPS Priority: 1	Resolution: CPS Energy took the following actions to resolve 1) Secured natural gas transportation contracts sufficient to deliver gas for the expected usage 2) Increased daily withdrawal capacity from natural gas storage 3) Added additional natural gas storage capacity
Status: In Progress	
Estimated Completion Date: 12/31/2021	
Estimated Cost:	

Note: Complete, pending Administrative Closeout

CoSA CEP RECOMMENDATION

PLANT OPERATIONS & SUPPORT – 4



CEP Recommendation: CPS 4	Support operational excellence at generation plants through renewed emphasis and focus on best practices
CPS Priority: 1	Resolution: CPS Energy is completing several operational excellence initiatives before the upcoming winter: 1) Implement key elements of weatherization improvement plan 2) Conduct repairs for aging burner systems & upgrades to Spruce fan control system 3) Revise 2021 - 2022 Planned Outage Schedule to maximize CPS Energy's unit availability this winter 4) Perform a detailed inspection of all outside piping & revised Freeze Protection Program at the South Texas Project
Status: In Progress	
Estimated Completion Date: 12/31/2021	
Estimated Cost:	

Note: Complete, pending Administrative Closeout

CoSA CEP RECOMMENDATION

OUTAGE MANAGEMENT– 5



CEP Recommendation: CPS 5	CPS Energy should review the automated rotating outages process
CPS Priority: 2	Resolution: <ol style="list-style-type: none">1) Implement improvements in existing systems and infrastructure to manage an ERCOT load shed event of at least 20,000 MW for winter 2021-222) Engaged system vendor to design, test, and implement necessary system changes in control system3) Review and update the Load Shed operating procedures to incorporate lessons learned from this past winter event4) Perform modeling and assessment of improvements made for winter 2021-22
Status: Approved/Complete	
Estimated Completion Date: 12/31/2021	
Estimated Cost: \$296K	

Note: Complete, pending Administrative Closeout

CoSA CEP RECOMMENDATION

OUTAGE MANAGEMENT– 6



CEP Recommendation: CPS 6	Review options for mandatory load shed management and coordinate with critical service providers
CPS Priority: 2	Resolution: 1) Increase load shed capacity through re-assessment of critical circuits and Under-Frequency Load Shed (UFLS) circuits to ensure only the most critical loads are prioritized for uninterrupted service 2) We increased the load shed capacity to manage an event similar to February 2021 through identifying only the most critical loads in the system 3) Criteria will be reassessed based on guidance expected from the PUC later this year
Status: Approved/Complete	
Estimated Completion Date: 12/31/2021	
Estimated Cost: \$139K	

Note: Complete, pending Administrative Closeout

CoSA CEP RECOMMENDATION

GRID OPERATIONS & SUPPORT – 7



CEP Recommendation: CPS 7	Assist SAWS in securing redundancy for its critical facilities
CPS Priority: 3	Resolution: 1)Coordinated with SAWS to identify most critical sites and performed high-level review of options 2)Performing detail assessment of most critical sites to design infrastructure options for resilient service 3)Reviewing necessary equipment & assessing operational impacts
Status: Approved/Complete	
Estimated Completion Date: 12/31/2021	
Estimated Cost:	

Note: Complete, pending Administrative Closeout

CoSA CEP RECOMMENDATION

COMMUNICATIONS – 8



CEP Recommendation: CPS 8	<p>Collaborate with the CoSA EOC to develop emergency communications procedures</p> <ul style="list-style-type: none"> A. Simplify customer messaging with focus on safety and clear calls to action B. Revise and enhance how conservation calls are communicated to public C. Develop advanced notification process for mandatory load shed event; Coordinate messaging with the Emergency Operations Center (EOC); Provide advanced notification of mandatory load shed events where possible; Consider informing customer if they are subject to the risk of power loss during mandatory load shed events; Provide customer with key information for support services
CPS Priority: 4	<p>Resolution:</p> <ul style="list-style-type: none"> 1) CPS Energy updating its Crisis Communications Plan with a public relations agency 2) Undergoing training for Online Community Relationship management 3) Develop customer actions for various levels of conservation needs 4) Proactively asking customers to update their emergency contact information 5) Coordinate with the EOC & Joint Information Center on aligned messaging to the public 6) Include key information for support services
Status: In Progress	
Estimated Completion Date: 12/31/2021	
Estimated Cost:	

CoSA CEP RECOMMENDATION

COMMUNICATIONS – 9



CEP Recommendation: CPS 9	Collaborate with the CoSA and municipal partners to develop a continuous emergency preparedness campaign
CPS Priority: 5	Resolution: CPS Energy met with CoSA and SAWS and determined in the short term, CPS Energy will share Ready South Texas information as part of our ongoing awareness campaign.
Status: In Progress	
Estimated Completion Date: 12/31/2021	
Estimated Cost:	

CoSA CEP RECOMMENDATION

MARKET REDESIGN – 1



CEP Recommendation: CPS 1	A. Support legislation development that ensures ERCOT has sufficient reserve capacity from all generation sources B. Support the state's evaluation of making an investment to connect to grids outside of Texas C. Suggest that the state pursue efforts to guarantee loans to build or contract additional capacity to meet demands
CPS Priority: 6	Resolution: CPS Energy is engaging in 34 meetings addressing 37 PUC rulemakings & ERCOT protocol revisions that address energy market redesign. We will continue to monitor and engage until closure.
Status: In Progress	
Estimated Completion Date: 12/31/2021	
Estimated Cost:	

CoSA CEP RECOMMENDATION

MARKET REDESIGN – 3



CEP Recommendation: CPS 3	Support development of legislation that ensures ERCOT has sufficient energy reserve capacity from all generation sources
CPS Priority: 6	Resolution: CPS Energy is engaging in 34 meetings addressing 37 PUC rulemakings & ERCOT protocol revisions that address energy market redesign. We will continue to monitor and engage until closure.
Status: In Progress	
Estimated Completion Date: 12/31/2021	
Estimated Cost:	

CoSA CEP RECOMMENDATION

SAWS – 2, 3, 5, 8, 16



CEP Recommendation: SAWS 2, 3, 5, 8, & 16	Support SAWS in improving their resiliency, emergency preparedness, communications protocols & PUC compliance.
CPS Priority: Various	Resolution: 1) Met with SAWS to identify critical sites 2) Continue progress on resiliency improvement plans 3) Conducted table-top exercises with focus on communication & readiness 4) Collaborated on joint operations including load shed criteria 5) Maintain effort with SAWS in developing options for on-site back-up generation
Status: Various	
Estimated Completion Date: 12/31/2021	
Estimated Cost:	

CoSA CEP RECOMMENDATION

EOC – 1-3, 8, 10-14, 18-20, 23-24



CEP Recommendation: EOC 1-3, 8, 10-14, 18-20, 23-24	Support CoSA EOC in their efforts to improve their resiliency, emergency preparedness, communications protocols & overall emergency operations during extended duration outages.
CPS Priority: Various	Resolution: 1) CoSA EOC identified preliminary list of critical facilities 2) Continue to inform & support resiliency improvement plans 3) Conducted table-top exercises with focus on communication & readiness 4) Held meetings with partners to build understanding & communication channels 5) Updated our Crisis Communication Plan to ensure synchronous communications
Status: Various	
Estimated Completion Date: 12/31/2021	
Estimated Cost:	

Winter Preparations



Plant Operations & Support

- Enhanced weatherization completed
- Third-party validation of improvements
- Increased natural gas storage ability
- Moved plant maintenance schedule ahead of winter months



Outage Management

- Improved load-shed capacity with more circuits to minimize customer impact, i.e., better rotation of outages
- Third-party validation of improvements
- Additional use of advanced technologies



Grid Operations & Support

- More collaboration with City of San Antonio, Bexar County, SAWS & emergency managers
- Review of procedures completed
- Updated procedures for winter operations



Emergency Preparedness

- Ongoing participation in local, state & federal training
- Executive liaison assigned to regional Emergency Operations Center



Stakeholder Communications

- Ongoing collaboration with City of San Antonio, Bexar County, SAWS & emergency operations
- Launched stakeholder text alerts
- Engaging in public input & feedback opportunities



Customer Communications

- Review & refresh communications plans
- Multi-pronged approach to reach customers
- Updated 100,000 customer contacts through Manage My Account to date
- Community town halls & utility assistance fairs



Policy Activity

- Engaging with local, state & federal regulators & policy makers
- Participating in regulatory proceedings
- Involved in development of ERCOT protocol revisions

CPS Energy is committed to continuing overall infrastructure & communications improvements to ensure reliability & resiliency for our customers.

NEXT STEPS

- Continue status updates at monthly Municipal Utilities Committee (MUC) meeting & to the Board of Trustees
- Detailed updates at Operations Oversight Committee (OOC) meetings
- Finalize action plans for all recommendations
- Integrate tracking & reporting of lessons learned activities

Significant mitigation activities to address the CEP recommendations continue & will be completed prior to the upcoming winter season.



Thank You