



Paula Gold-Williams

President & CEO

Keeping People First!

April 25, 2019

Mr. Douglas Melnick
City of San Antonio Office of Sustainability
1400 S. Flores
San Antonio, TX 78204

Dear Mr. Melnick:

CPS Energy appreciates the opportunity to provide comments on the City of San Antonio's (COSA's) draft Climate Action and Adaptation Plan (CAAP). Addressing climate change and mitigating the impacts of global warming, are complex challenges for our local community. In turn, the CAAP is a key milestone effort in understanding and potentially managing these challenges.

As San Antonio's municipally owned electric and natural gas utility for the last 76 years, we are motivated to create and deliver value-added services that improve the quality of life for the present and future generations in our community. Our mission is to provide world-class energy solutions to meet the diverse and unique needs of our customers, while acting as an economic engine to drive value and growth in our community. Given our role as the community's primary utility energy provider, **we at CPS Energy, are in the business of thinking both strategically and long-term, about:**

- **Securing and safeguarding our community's assets;**
- **Driving consistent service reliability and resiliency;**
- **Protecting our environment;**
- **Igniting broad and continual innovation;**
- **Ensuring the short-, medium-, and long-term affordability of our services;**
- **Supporting education and life-long learning; and**
- **Working with other organizations across San Antonio to enable more economic development.**

CPS Energy has already embraced the transition from traditional fuel sources to renewable energy, and we understand our role in helping our customers think about energy differently. As a matter of fact, we have been steadily controlling energy usage and reducing our carbon intensity for decades.

Additionally, we launched our “**Save for Tomorrow Energy Plan**” (STEP) that encourages and rewards interested customers for their conservation and efficiency efforts. STEP has helped our community avoid building another large generation plant that most likely would have been coal fueled. See the attachment.

CPS Energy has taken the time to internally discuss the proposals in the CAAP, including the potential far reaching impact on our customers, community and employees. Please see our comments that follow.

MITIGATION STRATEGIES 1-3: INCREASE CARBON-FREE ENERGY

PROPOSED NEW ADVISORY COMMITTEE:

1. The CAAP states the City will initiate an on-going energy planning process with its key partners, including CPS Energy, key stakeholders and the general public to ensure continued collaboration towards carbon reduction goals. We unequivocally welcome and value feedback. This said, creating a new governing committee, solely focused on our environmental generation planning is problematic and presents significant challenges to our historically highly effective business model and approach.

As the entity traditionally charged with ensuring reliability, resiliency and affordability for all customers, it has been invaluable that we make decisions that address multiple dimensions of consideration. While they include making the environment increasingly better, we are still a business owned by a community. We must consider all of our investors who are our customers, as well as those who have prudently loaned us money to maintain and improve our complex systems.

In fact, financial investors have actually helped us create a funding pathway to be the:

- #1 Utility in solar in the State of Texas, according to Environment Texas Research and Policy Center; and
- Top Environmental Champion, for the 3rd year in a row, according to Market Strategies.

Accordingly, it is critical that we are able to make the decisions that keep us on track to achieve progressive, definitive, and prudent improvements. Planning for generation is a continuous and comprehensive process. We look at our resources through multiple planning horizons, including 15-minutes, hourly, daily, weekly, and seasonally, as well as strategically from 1-to-25 years.

Furthermore, we currently have and will continue to have many opportunities and channels for our community to engage with us such as:

- Our Board of Trustees, who host multiple Public Input sessions each year on a variety of topics.
- We have a 15-member Citizens Advisory Committee (CAC) that was created by the City Council in 1997 to enhance public participation. To this day, the City of San Antonio council members nominate 10 of the 15 members, one representing each of the 10 districts. The remaining five members are selected at-large. The CAC members are citizens who volunteer from across our service territory and who serve as individual and collective conduits for sharing information between CPS Energy, the Council, and all of our customers.
- We host a variety of stakeholder meetings for the purposes of information sharing and receiving constructive feedback. As an example, since 2012, we have held Quarterly Environmental Stakeholder meetings.
- Additional stakeholder groups are being developed, which will focus on solar, business, and tech community inputs.
- Our **People First** Customer Care Fairs, are held throughout our community and allow for face-to-face engagement with our general public and for input via brief written surveys.
- We utilize multiple social media outlets, designed for customer convenience.
- We actually encourage our Call Center Energy Advisors to spend more time on the phone with our customers, ensuring all of their concerns are thoroughly addressed.

The use of all of these communication channels, will continue to be strong and helpful sources of input. In turn, management will make balanced, yet progressive recommendations to our Board of Trustees and the City Council. As usual, those recommendations will consider all city, state, and federal policies, regulations, and legislations.

Also, at the Council level, customers have avenues for input. We pay close attention to those comments, promptly addressing issues and improving our approach along the way.

The last major consideration on this topic is creating a new governing body outside of our historical norm could cause concerns from the **Ratings Agencies**. Currently, our strong credit ratings are significantly driven by our strong management team, as well as our balanced strategic approach.

ZERO EMISSIONS GOAL:

2. Next, there is a proposed mitigation strategy to reduce the emission factor of supplied electricity to 0.0 kg CO₂e/kWh by 2050. An in-depth analysis of the costs related to increasing the penetration of renewables to supply 50% by 2040 and 100% by 2050 needs to be performed. It will need to include not only the cost of the renewables, but also the cost to reliably back them up, as well as the cost of phasing out fossil fuel generation over time. Importantly, the speed of generation matters. Further, it must be pointed out that, our traditional generation assets continue to be an important bridge to the future to ensure reliability to our customers. Managing the transition prudently will absolutely matter.

Over the years, we have been thoughtful about adding renewables, while ensuring that we remain a reliable and affordable energy company. We have to be specific about what, when, and how to make sure we have enough flexible, real-time generation that is “dispatchable” (e.g., available on demand), considering power needs naturally fluctuate to meet the needs of a flourishing and thriving community. Renewable energy sources must be firmed up to adjust for their intermittency that is caused by a lack of around-the-clock sun or wind.

Even so, as some of our older fossil fuel power plants reach their retirement dates, we will be thoughtful about how and when to replace that generation. We are exploring and planning for additional sources of firm back-up such as energy storage. We are therefore evaluating various scenarios as technologies evolve and become both readily available and affordable.

Part of providing reliable power also means having resiliency during extreme weather events. They range from today’s storms to those that are projected to be more intense as global climate changes manifest. Without solid firming capacity, renewables by themselves will not be able to function well in any type of bad weather scenario.

For these reasons, the CAAP timeline needs to provide enough flexibility for the current undefined technology wedge to become more tangible and effective. As we decarbonize the grid and transition away from traditional fossil generation, we will need to thoroughly evaluate the benefits and risks associated with future technologies.

Every year going forward, we will therefore estimate actual costs, as they change. This will inherently pose challenges in making preliminary assumptions about those costs. Even so, these are challenges we can address, working together as a community.

INCENTIVES:

3. Third, the Community Mitigation Strategy calls for promoting and incenting the comprehensive switch from natural gas to electricity for existing buildings, including industrial, production, and manufacturing. This will require more thoughtful and detailed discussion in our community.

As an example, San Antonio is a culinary city that often prefers gas cooking over electric or even induction methods. 100% switching from natural gas might be problematic for the restaurant and food industries.

Further, many of our industrial and commercial customers depend on natural gas use for their processes and do not have a readily available secondary source of power. This for example may apply to customers who reside outside of the City of San Antonio boundaries.

Impacts to customers' bills and business operations must be considered. The CAAP therefore needs to ensure that:

- All customers are part of the conversation;
- Customer preferred fuel choices are considered; and
- The impact on their bills and economic viability is considered.

MITIGATION STRATEGIES 4-8: REDUCING BUILDING ENERGY CONSUMPTION

Mitigation Strategies have the goal of reducing building energy consumption. Through CPS Energy's "**Save for Tomorrow Energy Plan**" (STEP), both residential and commercial customers, have been reducing their consumption. This program has helped our community avoid building another large fossil-fueled asset. This program has, therefore, been quite successful. **STEP is on track to achieve its savings' goals ahead of schedule and for less than the planned funding.**

Several of the initiatives in the CAAP could be addressed through a second phase of the STEP, currently informally referred to as version 2.0. Our STEP 2.0 Program is early in its development phase. Our goal is to gather public input and thoughtfully plan for the next stage of effective incentives that will help reduce our customers' overall energy demands.

The CAAP also has city-driven energy efficiency reduction measures such as:

- Commercial and multi-family benchmarking along with disclosure requirements which will most likely be enacted by ordinance;
- A commercial and residential energy rating system; and
- Zero net energy building code.

It should be noted that our STEP programs take into account reductions that are above and beyond the current building codes. Conversely, as the building codes get tighter, our STEP programs may not be able to perform at the same level they have in the past, technically reducing the benefits we have achieved thus far. This may also be true as appliance codes rise. CPS Energy will need discretion in designing and implementing energy efficiency programs that reach, maintain, and grow our community's net efficiency improvements. Each strategy will need a separate evaluation to make sure that the energy efficiency and demand-side management programs that are offered, are in fact cost effective.

These programs will need to be inclusive of all of customers to include:

- Residential;
- Small Business;
- Commercial & Industrial;
- Multifamily; and
- Other Customer Segments.

SECURITY

Commercial benchmarking will decrease consumption, but CPS Energy will need to consider privacy issues to ensure protection of each customers' information. Therefore, any implementation of Mitigation Strategy Number 4 or 5, regarding benchmarking, will require more thought. Creating rating systems and disclosure of energy use have inherent privacy issues that will need to be addressed, as those Mitigation Strategy implementation plans are evaluated.

Our STEP program has been very successful to date and we have had approximately 20% participation from commercial customers. The forward looking goals in the CAAP would require 100% participation to achieve the proposed targets. On the residential side, rooftop solar alone will not achieve a zero net energy home, and our customers will need to make changes in behaviors.

MITIGATION STRATEGIES 9-13: REDUCE TRANSPORTATION ENERGY CONSUMPTION

The next section of Mitigation Strategies are aimed at reductions in the transportation sector by supporting vehicle electrification, including education of its benefits, plus promotional programs and incentives. CPS Energy has installed over 100 Electric Vehicle (EV) chargers throughout our service territory, and have purchased EVs within our own fleet.

GreenBiz Insights Events Videos Circular Economy Energy Transportation Sustainability Supply Chain Cities Buildings Water



AVAILABLE FRIDAYS
Listen and subscribe on iTunes

An idea for accelerating the path to carbon-free transportation

Deb Frodl Tuesday, April 23, 2019 - 1:00am

share this article [Twitter](#) [Facebook](#) [LinkedIn](#)



Deb Frodl
Board Member
XL
[@dfrodl](#)



CPS Energy's purchase of 34 XLP Plug-In Hybrid Electric Ford F-150 pickup trucks in spring 2018 was the largest purchase of plug-in F-150s of any utility or private company to date.

Trending

-  7 things every company must know about AI
-  A Green New Deal for natural gas
-  Tesla benchmarks its carbon impact for the first time
-  Cities hold the keys to greener, more efficient homes
-  Carbon capture legislation: a small step on the long corporate climate march

Hybrids: The change enabler

Hybrid and plug-in hybrid electric propulsion technologies are uniquely positioned to overcome the challenges outlined above, particularly for the millions of heavily polluting, class 2-6 commercial and municipal fleet vehicles in service today.

By providing a 25-50 percent fuel economy improvement without disrupting operations, hybrid (HEV) and plug-in hybrid (PHEV) electric vehicles represent an enormous opportunity to provide a strong financial return while putting us on a path to meet our longer-term carbon reduction goals.

As examples:

- Electric utilities such as CPS Energy in San Antonio, Texas, named one of America's Top 100 Fleets, are investing heavily in plug-in hybrid electric work trucks. CPS [cites an anticipated reduction](#) of 7.75 tons in nitrogen oxide (NOx) emissions and 58.7 tons of carbon dioxide emissions from their electrified vehicles over their lifecycles.

This is another strategy that is highly dependent on the speed of technology and innovation. Even so, at this time, the technology to allow for the complete transition to electric vehicles for all of our fleet is not available.

In addition to doing our part to promote EV and carbon-free technologies, we also have to consider the impact of these new technologies on our current infrastructure and generation load forecasts. The CAAP calls for a transition to 100% penetration of carbon-free vehicles, trucks, transit and freight by 2050.

No current industry source of modeling or projections reflects 100% EV / carbon-free adoption - even in the most aggressive forecast. There is uncertainty over the velocity of vehicle electrification, which is driven by several factors, including population growth, EV introduction, and vehicle turnover rates.

Many industry stakeholders will factor into this evolution beyond cities and utilities. We will need the involvement of automobile manufacturers, for passenger, industrial and mobility companies. We will also need the involvement of fueling companies, as well as skilled technologists. There is much work to do.

MITIGATION STRATEGIES 14- 21: INCREASE CIRCULARITY & PROMOTE BIODIVERSITY AND HEALTHY ECOSYSTEMS

We are supportive of the strategies to reduce waste that goes to landfills. We have prudently managed our waste streams over the years, remaining consistently committed to recycling along the way. As we decarbonize the grid, we at CPS Energy will continue to lower our environmental footprint in regards to implications to air, waste and water sources increasing over time.

However, other future technologies that will replace traditional generation sources could still have some environmental risks, and result in corresponding environmental regulations. **For example, there are no options yet defined for disposing of used solar panels or exhausted batteries.**

MITIGATION STRATEGIES 22-28: EDUCATE AND ENABLE

Mitigation Strategy 24 proposes working with partner organizations to develop workforce training programs. This is a critical strategy going forward, since we will need to consider the implications of early retirement of assets and plant closures on our workforce. We are already beginning to prepare our employees to take on new roles in our industry. There will need to be a community-wide effort as the significant shift in infrastructure will require not only the hiring of new skilled labor, but the re-skilling of current employees.

Mitigation Strategy 25 specifically asks to evaluate the electric and water rate structures to support Green House Gas (GHG) reduction. CPS Energy's rate structure includes many factors and policies that will need to be carefully considered.

While achieving the objectives of reducing GHGs, rates structures must also:

- Align with common rate structure principles such as being fair and equitable to all customers;
- Allow for adequate recovery of costs;
- Be competitive;
- Be easily understood; and
- Enable appropriate regulatory and legislative compliance.

ADAPTATION STRATEGIES

The CAAP also has strategies for adapting to a changing climate. CPS Energy has processes in place to regularly assess the impacts and changes in weather. Emergency and restoration plans are routinely updated and are part of our normal business model utility preparedness plans.

With regard to the resilience of San Antonio's electric grid, CPS Energy plans for adequate resources over a 25-year outlook, and plans for the security and reliability of the transmission and distribution systems over a 10-year outlook. Seasonal preparedness plans are also created and executed annually. CPS Energy ensures infrastructure can remain operable in extreme temperatures and weather conditions by evaluating effective system responsiveness to both typical and extreme events. Real-time monitoring of system conditions ensures infrastructure is not operated beyond system limits, especially during extended exposure to very high or low temperatures. CPS Energy has established processes to replace aging infrastructure and minimize equipment failures.

Health and wellness implications to the public and our employees resulting from more extreme weather conditions could cause more complexities and changes to the scopes of work.

FUNDING CHALLENGE

Everything costs money. Accordingly, the most significant challenge that we have locally, as well as across our state, nation, and globe is how to fund new environmental goals, while ensuring we continue to securely and safely keep the power flowing, 24/7/365. While some funding will come from passionate individuals and organizations, there is no comprehensive existing pool of financial resources that is waiting to be utilized. To keep from causing rate shock, we at CPS Energy are committed to rational increases that are affordable throughout our broad community. We will focus on ways going forward, to

cover our normal operating costs while managing through new environmental objectives that will understandably develop over time.

CONCLUSION

CPS Energy is honored to serve our San Antonio metropolitan community. We continue to consult with and listen to our customers, partners and stakeholders on their energy requests and needs. Our goals and objectives will continue to be reflective of what our council, community and customers value.

We look forward to this open dialogue continuing. We understand that the CAAP work is part of a lengthy and inclusive community engagement effort. As such, CPS Energy has not come to any conclusions as to the exact future mix of solar, wind, and/or energy storage capacity available to and afforded by our customers.

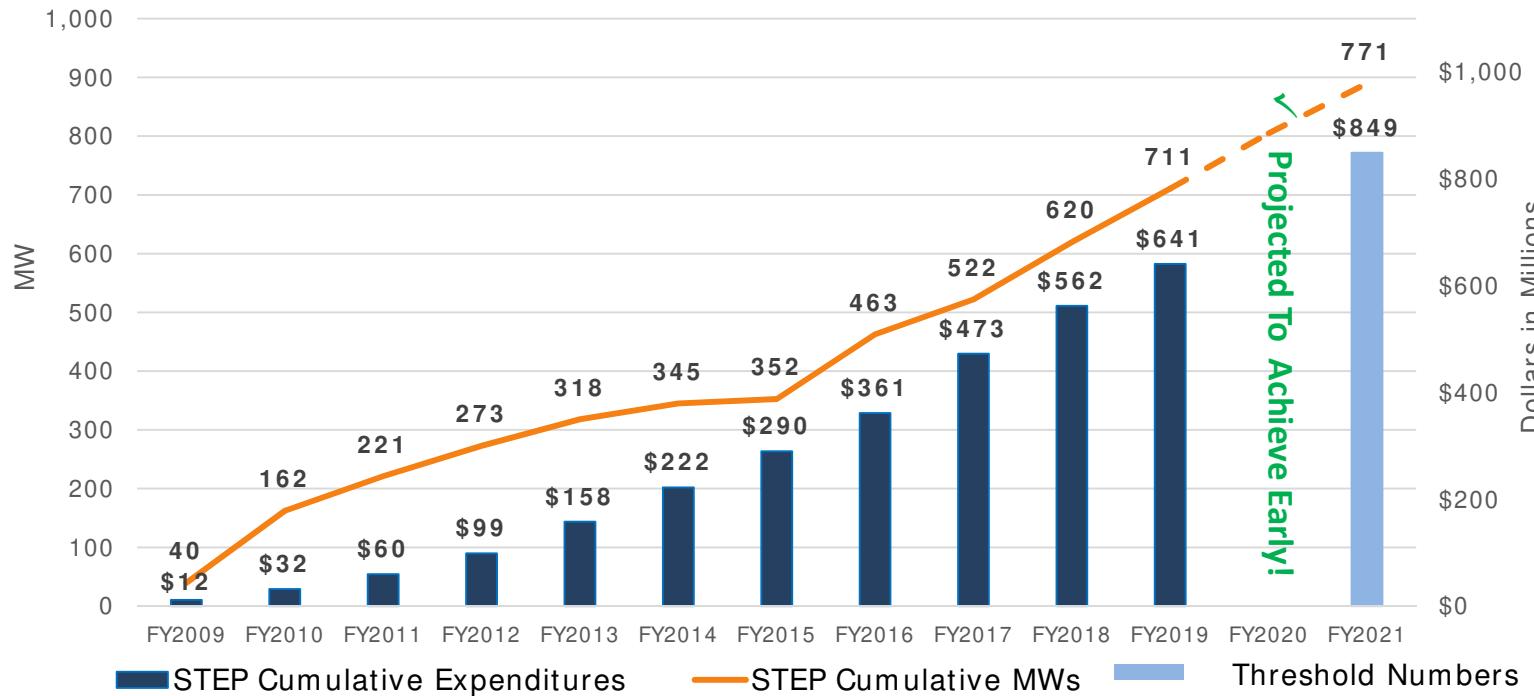
We have strategically contemplated that our path forward will need to be flexible to accommodate technology and new solutions as they emerge. Our **Flexible Path** Strategy positions us with the ability to embrace the changing landscape that will develop over time. This said, should you have any questions about the comments in this or our preceding letter, please do not hesitate to contact Angela Rodriguez, Cris Eugster, or me, at your convenience.

Most appreciatively submitted,

A handwritten signature in black ink, appearing to read "Paula Goldwasser".

Copy: Erick Walsh, City Manager
Senior Chiefs, CPS Energy

STEP: ON PATH TO SUCCESS



STEP has so far delivered 711 MW without debt / major capital spend for 13 years!

\$'s Supporting Conservation: STEP



\$1 B Capital for Coal Plant + O&M for 30-40 years

* Note: FY2019 MW number is preliminary, subject to final Measurement & Verification.