Questions and Answers

CPS Energy Public Input Session

Date: June 13, 2018

Case: CPS Energy

Q&A from Board Public Input Session

Flexible Path

What is *People First* and what role does it play in the *Flexible Path*?

People First is what we are all about. It serves as a philosophy around our business. Our community, customers and employees are the backbone to our operation. When you *put* **People First**, we are growing and meeting the goals of our community as a whole. The **Flexible Path** is a shining example of our **People First** philosophy, as it ensures that the future blueprint for our generation plan adapts to the needs of people. We want to make sure we have the flexibility to adopt new technologies and offer solutions that will bring the maximum value to both our customers and our community.

Why the Flexible Path, why now?

Simply, this is the right time because we have enough time. We are in a position where we have enough power generation to meet the needs of our community. That means we are producing enough power with our community-owned assets so customers can power their homes and businesses. The *Flexible* Path is not finalized, and we are engaging in a comprehensive public process that includes presentations to our Board, City Council, business leaders and organizations, and our customers. We are gathering important feedback and we are keeping everyone updated via our website, in addition to hosting events across the community. We will take all of this valuable feedback into consideration as the Flexible Path evolves and becomes a reality.

Have you already committed to this plan?

This is the benefit and value of being "flexible." As new advances come to the forefront, balancing reliability & affordability, we will pursue emerging technologies. This strategy is not final and we expect it to shift, evolve and mature. We are committed to achieving the best results for our customers and communities.

Operations

What are CPS Energy's contributions to the City of San Antonio?

Annually, we provide about 14% of our revenue to the City of San Antonio's General Fund. In 2018, we contributed over \$350 million to the General Fund, which goes to supporting vital city services, including first responders.

What are the costs and impacts on customers to close our coal plants early?

We are currently running financial models to determine impacts of closing our coal plants ahead of the current forecasted dates. Like a home mortgage, you can't just simply change a house every year without dealing with the additional expenses and the debt associated with the original house.

What does 'closing' Deely really mean?

This means that Deely 1 & 2 will stop producing power on December 31, 2018. However, there will continue to be 'wind down' activities at the plant for about six months, into mid-2019.

Our *Flexible* Path will deliver significant reductions in coal and gas use and an increase in our renewables. From 2010 – 2018, coal decreased 44% and will decrease another 61% under the *Flexible Path*. Renewables increased 69% from 2010 to 2018, and we expect a 127% increase in renewables by 2040 under the *Flexible Path*.

How does CPS Energy make money to keep operating?

CPS Energy is a not a for-profit organization, which differentiates it from traditional businesses and Investor Owned Utilities in other markets. CPS Energy's costs are included in rates that are reviewed and approved by the San Antonio City Council. All of those costs are passed through without markup or profits as part of the rates that are charged to residents of San Antonio. The costs that make up the total rate includes salaries and benefits for the 3,200+ employees, debt and interest payments, fuel, maintenance and construction of new infrastructure to support our growing city economy.

In addition, CPS Energy also provides wholesale electric sales to customers around San Antonio, such as Seguin, Boerne and Kerrville, as well as sell excess generation to other utilities in Texas. Those business activities do have profits and all of those profits are used to help lower the costs San Antonio CPS Energy customers pay.

Save for Tomorrow Energy Plan (STEP)

What is the Save for Tomorrow Energy Plan (STEP) and what is its purpose?

Our <u>Save for Tomorrow Energy Plan</u> (STEP) aims at reducing the growth in electricity demand in our community's demand by 771 megawatts (MW) by 2020 -- that's equal to the output of a large power plant. We made a conscious decision to not build another power plant in our community, which has resulted in money saved and fewer emissions. Simply put, we opted to invest in our customers and their savings.

We're investing to meet this goal by:

- Encouraging residents to purchase energy-efficient appliances
- Increasing the use of energy efficient lighting and programmable thermostats
- Improving the amount of residential insulation
- Installing energy efficient heating, ventilation and air conditioning (HVAC) systems
- Increasing commercial lighting retrofits
- Encouraging installation of energy-efficient, commercial HVAC systems
- Offering energy-saving commercial programs

We invest in our customers and their savings through STEP by offering rebates on energy efficiency programs, solar and weatherization. This allows customers to do their part to save energy, while at the same time, saving money.

How does coupling the Flexible Path with STEP create more generation creativity?

In essence, STEP is the first move in our *Flexible Path* because the demand for electricity saved to date by our customers has eliminated the need to build another large, traditional power plant. STEP will reduce our community's demand for electricity by 771 megawatts (MW) – the output of a large power plant – by 2020.

When a customer takes the opportunity to purchase an energy-efficient appliance, installs energy efficient lighting or takes advantage of a programmable thermostat for example—over time there is behavioral change around their energy usage. This significant change reduces the demand to generate more power to meet our customers' usage needs. Energy conservation helps to meet and reduce our energy usage as a community.

Are these programs better than building another power plant?

Yes, building a power plant is a huge financial undertaking, with years of maintenance that can get more expensive over time. Most power generation plants have lifecycles of 30-40 years so you can imagine the added expenses as the plants operate in their final years. Energy conservation and one time investments into our rebate programs shift that financial responsibility to one that is manageable and beneficial for everyone.

Environment

What is the Climate Action and Adaptation Plan?

The Climate Action and Adaptation Plan, also known as CAAP, resulted from the City of San Antonio adopting the SA Tomorrow Sustainability Plan in 2016. With Mayor Ron Nirenberg's leadership, the San Antonio City Council passed a resolution to support the goals of the Paris Climate Accord on June 22, 2017. To demonstrate its support of our owners, the City of San Antonio, CPS Energy made a commitment to provide funding to UTSA to assist with the development of a Climate Action and Adaptation Plan for the City of San Antonio. This commitment is part of a larger strategic alliance between CPS Energy and the UTSA Texas Sustainable Energy Research Institute (TSERI.)

Why did CPS Energy get involved in CAAP?

As the nation's largest municipally owned utility, we clearly have a big impact on the air we breathe. Only by working together, can we make a positive effect on the environment. We want to build resiliency and help the Alamo City area adapt to the shifting environment by targeting carbon emissions in the years ahead. This is why we co-launched the SA Climate Ready Initiative.

What is the SA Climate Ready Initiative?

The <u>SA Climate Ready Initiative</u> is all about teamwork and collaboration. We've partnered with the City of San Antonio's Office of Sustainability and the University of Texas at San Antonio for this effort. The SA Climate Ready team wants to hear from our San Antonio community because getting you involved is critical to the planning process. Throughout this process, our

community will be asked for help in setting Greenhouse Gas (GHG) reduction targets, in addition to figuring out how we are going to get there and what steps we need to take to meet our goals. We are presenting plenty of opportunities in the form of community events to hear from people living in all parts of the city. These efforts will continue throughout our plan development.

The discussions we're having now with the community and partner groups are just the beginning of the ongoing dialogue about the *Flexible Path*. We've been active partners in the City's <u>CAAP</u>—the inspiration behind the SA Climate Ready Initiative—which is still being discussed and developed. The final draft of the CAAP is set to be presented to the City of San Antonio City Council in April 2019. The first phase of the CAAP is nearing completion, as the project releases its <u>draft of the GHG Inventory</u> and climate projections.

Are CPS Energy plants significant sources of Greenhouse Gas and pollution?

Of course, mobile sources such as cars and trucks are the source of the most Greenhouse Gas and pollution. CPS Energy's plants, like all manufacturing facilities, are large single-source creators of Greenhouse Gas and other air emissions. In other words, cars and trucks collectively generate more emissions than CPS Energy plants but a single generation unit creates more emissions than a single car.

It is important to know that CPS Energy plants are some of the cleanest in Texas and our fleet is one of the cleanest in the state. But we're not satisfied. CPS Energy plants have cut by half the rate of emissions even while quadrupling total generation. Also, CPS Energy is reducing mobile sources by having the largest fleet of electric trucks in the state and reducing truck rolls by utilizing technology to restore power or resolve problems. All this adds up to cleaner air in San Antonio.

NOTE: Fossil-fueled plants, including coal plants, emissions are measured in the areas of Nitrogen Oxide (NOx), Sulpher Dioxide (SO2), and Carbon Dioxide (CO2).

How "clean" is CPS Energy's overall energy portfolio?

We are among the cleanest in Texas and the nation and committed to providing electrical power and gas services to our customers in an environmentally responsible manner. For example, nationally, Spruce Unit 2 ranks among the top 3 units in the nation with one of the lowest combined NOx and SO2 rate when compared to 615 units and CPS Energy coal plants have lower than average emissions, with an average emission rate of 0.35 vs. a national average of 0.41 per MMBtu of energy produced.

Providing power to the City of San Antonio in a thoughtful way is important to us. When all of the NOx reductions are combined, we have lowered NOx emissions since 1997 by over

75%. There will be an additional 30% reduction from the year 2014 after the Deely coal units stop running at the end of this year.

Does CPS Energy use sensor technology? How and where?

Keeping an eye on the environment is important to us. In order to ensure better air quality, we own and operate two comprehensive, continuous air-monitoring stations. These stations continually monitor ozone, a molecule that is harmful to air quality, outside of the ozone layer. We record the presence of ozone, as well as data on wind speed, wind direction and temperature to gauge how all these elements impact the quality of the air we breathe.

Renewables

Aren't solar and wind free? Why should we have to pay for these resources?

While we don't pay for the sun to shine or the wind to blow, the infrastructure to harvest, store, and transmit that energy to our customers isn't free. We use the latest technology to bring our customers renewable energy and as this technology improves and becomes more affordable, we will grow our renewable offerings. As early advocates for renewable energy, it's no surprise that we are #1 in solar power production in Texas and we are a top wind power producer in Texas.

What is CPS Energy's portfolio of renewables?

Our portfolio of renewables includes wind power, solar power, and landfill gas.

What's CPS Energy's role in assuring the City of San Antonio's renewable goals?

The path to our goals will be reflective of what the City of San Antonio – our owners – and our customers decide once the $\underline{\mathsf{CAAP}}$ is finalized. We are committed to delivering on those aspirational goals.

Why is CPS Energy taking so long to bring in more renewables?

We have had a strategy of generation diversification for some time now. It is in our community's best interest that we don't overleverage one particular fuel source for power generation. This strong and successful strategy includes the adding of renewables to our mix. We are among the top public power wind energy buyers in the nation and number one in Texas for solar generation. The *Flexible Path* continues this pattern of diversification and by 2040, our renewable portfolio will be 50% of our generation total.

In April 2018, Environment Texas named San Antonio as a "Shining City" due to the amount of solar capacity. San Antonio went from 117 megawatts (MW) in 2016 to 161 MW in 2017, a 37% increase that led San Antonio to jump ahead from 8th place in the U.S. to 6th for total solar capacity.

Are renewable resources more expensive?

They are more expensive, for now. The cost of renewable power is decreasing every day as technology improves and becomes more cost effective. It's similar to what consumers experience for the cost of a computer or new televisions. As the technology becomes more

advanced and more adopted, it significantly lowers the cost of the technology. In addition, the technology becomes more advanced, making the generation sources more effective.

That's part of the reason that CPS Energy has embraced the concept of the *Flexible Path* moving forward. While we don't know for sure how the pricing and technology will advance in the years ahead, we do know that they are becoming more affordable every day. With our success in reducing demand by our customers, we have the flexibility to wait for technological and prices advances before we have to build new generations sources. For most utilities, they have to plan three or four decades into the future, limiting their options today. CPS Energy's progressive outlook several years ago has opened up new opportunities for us today and enabled us to be flexible in planning our future generation needs — one with less emissions and lower costs.

Does CPS Energy have any programs where they buy excess electricity from customers?

Yes, we buy excess energy delivered from rooftop solar systems. There are also numerous ways you can benefit by participating in one of our solar programs. <u>Learn more</u> about how you can participate in expanding solar in our community.

What happened to the WindTricity® program?

The WindTricity program is still an active program. When you sign up for Windtricity®, you join thousands of customers who care about their environment and want to support renewable energy. Residential or business customers can enroll in Windtricity by choosing a percentage level or a monthly set rate for participation. You can choose to participate anywhere from 10% to 100% of your monthly bill, or pay the same about every month: \$5, \$10, \$20 or \$40. If you'd like to learn more about Windtricity or enroll your home or your business, send an email to productsandservices@cpsenergy.com. Include your CPS Energy account number, name, address and the percentage or set amount you would like to elect to Windtricity.

Technology

How will the energy future look different?

The energy industry is going through rapid change. Technology brings new products and solutions that give customers the opportunity to take more control of their energy usage. Our smart grid initiative is enabling this change. In the last four years we have installed a new communication network that allows for two-way communication between the electric grid and the meter at your home or business. This results in faster restoration time and provides customers with frequent real-time energy usage. The future of energy and the system that operates it will continue to evolve and build upon the rapid growth of new technological solutions.

Is CPS Energy thinking about creating smart neighborhoods?

Yes. We are in a dedicated partnership with our owner, the City of San Antonio, and other partners in the community working together on a Smart City solution. This means different

types of digital equipment will supply information to help manage assets and resources efficiently. For example, we have already implemented new LED street lighting and are currently testing new sensor technology that will improve public safety. This is all part of what we call our "smart grid," which will help enable future solutions that will bring efficiencies and improved quality of life for our community.

What new technologies is CPS Energy using and for what?

There is always something new around the corner when it comes to technology. We are currently evaluating drone technology and it has already proven to provide a better inspection vantage point, which is safer for our employees when inspecting hard to reach areas. We have been able to inspect our transmission lines and our overhead electric distribution system with the help of drones. This technology has proven to have multiple opportunities to impact our business and we will continue to evaluate how this technology can be implemented across the business with our *People First* philosophy.

Additionally, and to complement our *Flexible Path*, we recently solidified a partnership with the renowned Southwest Research Institute for a solar and battery storage project to research future ways to improve energy storage. Ground breaking for this project will take place in the fall of 2018 with implementation in the spring of 2019. The 5-megawatt solar and 10 megawatts of battery project will serve to provide energy to our community <u>and</u> to build on the research conducted to determine how battery storage can be improved and used in the future.

What is CPS Energy's electric vehicle strategy?

We both support our customers' use of electric vehicles and lead by example. Besides having the largest fleet of electric trucks in the state of Texas, we led our industry in the scope and speed of our charging port implementation in 2012. We currently have a low flat rate charging program for \$60 annually at any of our 150+ charging ports. We will develop programs in the future to help speed the adoption of electric vehicles. We aim to be a trusted source of information about the growing adoption of electric vehicles and will provide resources to help our customers as they evaluate their electric transportation options. For questions, you can reach the EV Hotline: 210-353-2SAV (Option 7). You can see a map of our charging ports here.

Rebate programs

Does CPS Energy have any programs where they control appliances, pool pumps, HVAC, etc. to conserve during times of peak consumption?

Yes, but only with the customer's explicit acceptance. We do not have a program that does not have active opt-in by customers.

Energy conservation is very important to us and it should be very important to our customers because it simply saves them money. We have several programs aimed at conserving energy for both residential and commercial customers through our Demand Response (DR) programs. The demand response is a program where customers can help conserve electricity during periods of peak usage, such as on a hot summer day. By lowering demand during peak times, customers help utilities manage their resources better, which will improve the way electricity is delivered

and used. This makes our grid more reliable and efficient for everyone. By grid, we are referring to the current power grid that covers most of the state of Texas. Our statewide grid is managed by the Electric Reliability Council of Texas (ERCOT). During a conservation event — we will make adjustments to your thermostat — your thermostat will turn on and off at a slightly higher thermostat setting, but in a way that keeps your home comfortable. You will always have the choice to opt out of a Peak Energy event.

Being part of the demand response program makes participants eligible for financial incentives and <u>free or reduced-cost equipment</u> that can help you manage energy use and lower your bill. Similar programs are available to commercial customers. The program is also voluntary and our customers can opt out at any time.

Demand Response is an integral part of our overall strategy to save 771 megawatts by the year 2020. Customers can see which program works best for them. Click below for more info.

Residential Energy Efficiency Programs

Commercial Demand Response Programs

Partnerships and Community

How do CPS Energy and SAWS work together?

Our partnership with SAWS was recently highlighted in a case study by the Environmental
Defense Fund
and was showcased as a model of how municipally owned utilities should work together. CPS Energy and SAWS have a longstanding partnership and work together on joint rebate programs and conservation opportunities. There are also joint efforts on the auditing or inspecting of our customer facilities and systems to enhance efficiencies. Water plays a large role in our power generation and recycled water goes into our cooling lakes which to date, has saved about 359 billion gallons of water.

We are committed to executing more partnerships with SAWS to help improve value for our community and mutual customers.

When is CPS Energy going to offer more Public Input Sessions?

This is the beginning of dialogue with our community and we are finalizing a day and time for another Board Public Input Session in fall 2018.

Why aren't CPS Energy's Board Meetings, CAC, etc. open to the public and for public comments?

Monthly board meetings are open to the public. The Board of Trustees meet on the last Monday of each month at 1 p.m. at our Main Office Building located at 145 Navarro. We have also updated our website to include all the presentations that are presented to our board. These board presentations will be updated the day after each board meeting. You can review previous board presentations here. Comments for our Board of Trustees can be emailed using trustees@cpsenergy.com.

Our Citizens Advisory Committee (CAC) is truly the bridge between our customers and CPS Energy. This 15-member committee provides a channel for two-way communication between the community and the utility. City of San Antonio council members nominate 10 of the 15 members, one representing each district. The other five members are at-large candidates interviewed and nominated by the CAC from those submitting applications and resumes. The CPS Energy Board of Trustees appoints all members to the committee. The CAC meets monthly with the primary goal of providing judicious advice from a customer perspective on utility-related projects and programs.

Are there opportunities and/or forums for customer and business to bring new ideas to CPS Energy?

We not only power our community with electricity, we power the ideas and dreams of our customers. We welcome new ideas and partnerships and support a collaborative environment for economic development and to better serve our customers. If you have an idea you'd like to share, please email communicate@cpsenergy.com. Your idea will be shared with our leadership team in a timely manner.

Additionally, we depend on a variety of parts, materials, and services to provide affordable and reliable energy. Our Supply Chain department is responsible for procuring these items and services. It encompasses three functional business areas:

- Contract Services
- Warehouse Operations
- •Fleet Services

We seek to maximize the bidding opportunities to vendors and invite all businesses to participate in our bidding process. You can check out the latest bid opportunities here.

What is the NEE and how does it work in tandem with the Flexible Path?

Our <u>New Energy Economy</u> (NEE) has been built through partnerships with businesses who share our vision for clean energy, innovation, and energy efficiency. Our NEE partners have committed more than \$23 million in support of local educational programs, over 900 new jobs, and over \$200 million in investments to fuel our local economy.

Collectively, once our partners reach all of their commitments, the annual economic impact of our NEE is projected to be over \$1.4 billion. As we move forward, CPS Energy remains dedicated to fostering job growth, economic development, and educational opportunities with a long-term goal of establishing San Antonio as a hub for clean energy and innovation.

Through NEE partnerships, we are leveraging low-carbon and renewable energy resources to stimulate economic and educational development within our community. This coincides with our *Flexible Path* goals of increasing our renewables.