STRATEGIC UPDATE

PRESENTED BY:
Paula Gold-Williams
President & CEO

February 18, 2019

Informational Update
AGENDA

- GROWTH AND SAVINGS
- COMMUNITY ENGAGEMENT
- GHG BUILDING USAGE
  - MITIGATION STRATEGIES
  - NON LINEAR PATH
  - FLEXIBLE PATH
WE ENABLE ECONOMIC GROWTH & PROSPERITY!

• We run CPS Energy like a business while always thinking about our customers who pay bills every month.

• We will continue to be SA’s Energy Experts, keeping safety & security top priorities.

• We will make improvements every year to help ensure success. We understand our fiduciary role.

• We responsibly operate our community owned assets.
San Antonio continues to be a magnet for economic & population growth.

- San Antonio’s metro growth rate has climbed consistently for the last few years
- The 2017 increase of 24,208 represents an average of 66 people per day
- The San Antonio area is preparing for a 1.1 million population increase by the year 2040
WE HAVE ENABLED GROWTH WITHOUT COMPROMISING SERVICE

We’ve managed growth and continue to meet our customers’ needs. Our customers are more engaged & we offer more tools & resources at the best value.
**WE HAVE FOUND WAYS TO SAVE**

<table>
<thead>
<tr>
<th>Operational Improvements @ the South Texas Project</th>
<th>$73M</th>
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<tbody>
<tr>
<td>Refinancing of Debt</td>
<td>$53M</td>
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<tr>
<td>Health Care Plan Design Changes</td>
<td>$19M</td>
</tr>
<tr>
<td>Health Care Contract Savings</td>
<td>$5M</td>
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<tr>
<td>Grid Modernization</td>
<td>$7M</td>
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We have not had a rate increase for 5 years by finding & implementing operational cost savings.
LOOKING FORWARD TO THE FUTURE

ASPIRATIONAL GOALS
• POLICIES
• PRIORITIES

PATH AND STRATEGY TO GOALS
• AFFORDABILITY
• RELIABILITY
• STRATEGIC DIRECTION
• CUSTOMER SERVICE
• NEW PRODUCTS & SERVICES
WE SUPPLY THE ENERGY TO BUILDINGS
If emissions were measured at the generation source & at the point of usage, emissions would be double-counted! The CAAP inventory baseline report measures CPS Energy’s GHG emissions at the consumption level.
Our power plant emissions are included in the GHG inventory for building energy usage. We will work together & collaboratively with the business community to find ways to reduce emissions.
It’s not a one size fits all. Working together, we will get to a good result.
FLEXIBLE PATH - CAPACITY MIX

We will adjust our plan as new competing technologies provide more benefits.

% of Capacity (MW)

- 32% Traditional: 2010
- 46% Traditional: 2018
- 48% Traditional: 2040
- 50% Possible Flexible Path Scenario: 2040

- Storage/Tech: 16% (2010) to 13% (2018), 6% (2040), 5% (2040)
- Renewables: 39% (2010) to 22% (2018), 21% (2040), 16% (2040)
- Flex Gen: 14% (2010) to 18% (2018), 14% (2040), 13% (2040)
- Gas: 7% (2010) to 14% (2018), 11% (2040), 7% (2040)
- Coal: 9% (2010) to 14% (2018), 11% (2040), 9% (2040)
- Nuclear: 100% (2010) to 0% (2018), 0% (2040), 0% (2040)

RENEWABLES / NEW TECH & NON-EMITTING

70%+!
80%!!

Flexible Path - 2040 Possible Scenario
Our Flexible Path
BALANCING THE TRIED & TRUE WITH THE NEW

Energy-storage units to meet customer demand

Updated grid allows for quicker response and power restoration

Simply Solar broadens access and interest in renewable energy solutions

Our poles and wires are the backbone to support enhanced high-speed connectivity

Communication devices allow for real-time delivery of information across the network

Advanced technology for natural gas detection is safe and effective

New solutions: such as powering electric vehicles

EPicenter: A historic and closed power plant will become a venue and think tank for new and emerging technologies

App-enabled electric vehicle charging is also able to supply power

Enhanced Data Center expertise

Energy storage batteries support industrial, governmental, commercial and residential customers

Smart parking meters transmit downtown open parking availability

Cameras enable better security

Existing assets: gas, nuclear, solar and wind generation provide flexibility

Quick-cycle peaking units help meet excess demand

Street lights automatically adjust by dimming or brightening, based on traffic, maximizing energy efficiency

We enable public Wi-Fi hub and city service kiosks

wwwcpsenergy.com/flexiblepath
Thank You
FINANCIAL IMPACT

• CAAP utilized 3rd party analysis on future impacts.

• Since the goals outlined in the CAAP may have very interesting and far-reaching impacts on our community and customers, in the spring of 2019, CPS Energy will review the draft report’s information more extensively and will also develop additional information and context aligned to specific applicable energy scenarios.

Modeling and Investment requirements are complicated. We have to make the best decisions for our community that maximize value.
Back up Slides
Total 17,350,376 tCO2e

Building Energy Usage (47%) and Transportation (38%) are the two largest sectors, so Mitigation Strategies will focus on reductions in those sectors.
CITY’S TIMELINE

Phase One
Sept. - Dec. 2017
- Best Practices Research
- Methodology Documents
- Kick-Off Public Event

Phase Two
Jan. - July 2018
- Greenhouse Gas (GHG) Inventory
- Climate Projections
- Mitigation Strategies
- Identify Co-Benefits
- Identify GHG Reduction
- Vision & Priorities Survey
- Community & Stakeholder Meetings

Phase Three
Aug. - Dec. 2018
- Adaptation Strategies
- Cost-Benefit/Cost Avoidance Analysis
- Mitigation & Adaptation Survey
- Community & Stakeholder Meetings
- Targeted Equity Engagement
- Draft Climate Plan

Phase Four
Jan. - Apr. 2019
- District Open Houses Jan. - Feb.
- Final Climate Plan

Key Meeting Dates 2019:
- Jan. 25 Public Release DRAFT CAAP
- 30-day comment period opens
- Feb. 27 Planning Commission #1
- Mar. 13 Planning Commission #2
- Mar. 26 Community Health & Equity Committee Briefing
- Apr. 3 City Council B-Session
- Apr. 11 City Council A-Session

Source: www.saclimateready.org
Number of days over 100°F is increasing

Very hot days (over 110 degrees F) will begin to occur in the future and will increase in frequency over time.

Source: Historic weather: National Oceanic and Atmospheric Administration
Source: Predicted weather: Climate Projections for the City of San Antonio, 2018
Photo credits, From left to right: Jerry Lara, San Antonio Express-News; SA Office of Sustainability; Shutterstock

By 2040, we expect +24 additional days over 100°F
By 2100, we expect +48-94 additional days over 100°F
## HOW WE COMPARE

### Per Capita GHG Emissions of U.S. Cities

<table>
<thead>
<tr>
<th>City</th>
<th>Emissions</th>
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<tbody>
<tr>
<td>San Francisco, CA</td>
<td>5.4</td>
</tr>
<tr>
<td>New York, NY</td>
<td>5.8</td>
</tr>
<tr>
<td>San Jose, CA</td>
<td>7.4</td>
</tr>
<tr>
<td>Los Angeles, CA</td>
<td>8.3</td>
</tr>
<tr>
<td>New Orleans, LA</td>
<td>9.4</td>
</tr>
<tr>
<td>Seattle, WA</td>
<td>9.4</td>
</tr>
<tr>
<td>San Antonio, TX</td>
<td>11.6</td>
</tr>
<tr>
<td>Chicago, IL</td>
<td>12.3</td>
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<tr>
<td>Portland, OR</td>
<td>12.5</td>
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<tr>
<td>Cambridge, MA</td>
<td>13.8</td>
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<tr>
<td>Austin, TX</td>
<td>14.2</td>
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<tr>
<td>Dallas, TX</td>
<td>14.3</td>
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<tr>
<td>Houston, TX</td>
<td>15.2</td>
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CARBON INTENSITY

Historical CO₂ Intensity for CPS Energy (lbs of CO₂ emissions per net mwh of generation from all sources of power including gas, coal, wind, solar and nuclear)

- 1988 - STP 1 & 2 added to Generation mix
- 1993 - STP shutdown for year
- 2005 - Increase STP from 28% to 40% ownership
- 2009 - Increase due to Spruce 2
BUILDING ENERGY USE

GHG emissions reduction opportunities

Potential Mitigation Strategies

• Increasing Renewable Generation
• Energy Efficiency
• Adding Solar
• Building Codes
• White & Reflective Roofs
CITY’S GOAL

**Total GHG Emissions (metric tonnes CO2e)**

**2° Pathway**
70-80% reduction against 2015

**1.5° Pathway**
90-100% reduction against 2015
The community can visit www.saclimateready.org to submit feedback on the DRAFT CAAP for the City of San Antonio.
ACCOMMODATING GROWTH, PROMOTING EFFICIENCY & CUTTING COSTS

This is how we save our customers money & add value.
PARIS AGREEMENT

• In Paris, France on Dec. 12, 2015 the United Nations Framework Convention on Climate Change (UNFCCC) reached an agreement to combat climate change.

• That agreement is referred to as the Paris Agreement.

• The Paris Agreement central aim is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees.
PUBLIC OUTREACH

- Monthly Environmental Stakeholder Meetings
- Monthly Business Stakeholder Meetings
- Customer Care Fairs
- Open Houses
- Neighborhood Associations
- Chambers of Commerce
- Community Events

- Over 6,000 community members at about 150 meetings/events

CAAP Open House at John Igo Library October 29, 2018
Climate Action & Adaptation Plan (CAAP)

A strategy document that outlines the policies and steps to reduce Greenhouse Gas (GHG) emissions based on a reduction target that aligns with the Paris Climate Accord Agreement. In addition it will identify strategies to build resilience and adapt. San Antonio’s plan has a focus on equity throughout.
CLIMATE ACTION & ADAPTATION PLAN (CAAP) PARTNERS

*University of Texas at San Antonio
CAAP TEAMS

- Steering Committee
- Climate Equity Technical Working Group (TWG)
- Energy & Buildings TWG
- Waste & Consumption TWG
- Transportation & Land Use TWG
- Water & Natural Resources TWG

CAAP Steering Committee Meeting
July 11, 2018
Via our **People First** focus, we have driven significant improvements for our customers in access, tools, programs, staffing, quality & service.
COST RECOVERY MODEL

Where does the money come from?

Retail Electric Revenue $2,247.5M (86%)
Wholesale Electric Revenue $144.6M (6%)
Distribution Gas Revenue $171.9M (7%)

Where does the money get spent?

Operating Expenses - Non-Fuel O&M $673.7M (26%)
Operating Expenses - (Fuel, Reg. Fees) $927.0M (36%)
Debt Requirements from Revenue $399.1M (15%)
City Payment $343.9M (13%)
R&R Remaining Deposit $99.4M (4%)

Per Flow of Funds, Uses of Revenue must equal Sources of Revenue.
THE COMMUNITY WILL INFORM OUR PATH

<table>
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<th>PARTNERS INPUT</th>
<th>Flexible Path</th>
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<tr>
<td>CUSTOMERS</td>
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<tr>
<td>ENVIRONMENTAL</td>
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<td>BUSINESSES</td>
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<th>PATH TO THE GOALS</th>
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<tr>
<td>TRADITIONAL GENERATION</td>
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<tr>
<td>TECHNOLOGY &amp; INNOVATION</td>
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<tr>
<td>MANAGE PLAN &amp; STRATEGY</td>
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THIS IS OUR BUSINESS MODEL: “COST RECOVERY”

Customer Usage $2.6B = Reliability Growth Operations (Including Customer Service) City Payment Fuel $2.6B

Everything our community needs us to do costs money!

Operating Expenses $1,600.7M (62%)

PAID BY CUSTOMERS

PAID FOR CUSTOMERS