
CPS Energy's



CPS Energy Vision 2020 Executive Summary

The challenges of aging infrastructure and growing environmental concerns, including global warming and climate change, are driving record increases in energy costs. We must deal courageously and forthrightly with real and difficult issues. CPS Energy Vision 2020 will be the foundation and reference for our strategic and long-term financial and strategic resource planning; municipal, state and federal legislative policy; critical input to the Mayor's Climate Challenge and Sustainability Plans; motivating and providing clear direction for CPS Energy employees; and development of CEO/GM and senior management accountabilities.

In the first decade of this new millennium, CPS Energy is undergoing significant transformation. Built on the strong foundation of decades of sound financial decisions supported by a dedicated workforce, we are turning the corner and transforming from a good utility that does certain things extremely well to a high-performing company that recognizes our expanded role in our community and in the world. We are transforming from a company focused on providing low-cost power based on traditional generation sources to a company providing competitively priced power from a variety of sustainable sources. Sustainable energy development is development that meets our current needs without compromising the ability of future generations to meet theirs. CPS Energy will uphold commitments to environmental responsibility, social equity and economic viability, while continuing to provide reliable and competitively priced energy to the present and future San Antonio community.

This transformation is based on a strong adherence to our Core Values and Core Purpose. A focus on customer service, the environment, learning, stewardship, and leadership will reinforce living our Core Values. Our Core Purpose - *benefiting our community by improving the quality of life of the people we serve* - drives our strategic planning and improvement efforts that will enable our success. These are the filters through which all decisions must pass. Finally, our Big Audacious Goal of being #1 in Customer Satisfaction and a Great Place to Work by living our Core Values provides a clear target to ensure the work of our company remains focused.

Vision 2020 is a description of CPS Energy as we will look and feel in 2020. It summarizes key accomplishments and addresses the significant challenges we have overcome. It describes how our stakeholders view us and what it feels like to be a part of CPS Energy in 2020. The work of this Vision is based on the strong foundation of efforts that have gone on before – the Raise the Bar, Big Audacious Goal, Strategic Energy Plan, company strategic planning efforts, etc.

The Vision document is divided into two primary categories – an introduction that describes the world as we see it in 2008 and the challenges we must overcome in our journey and then the Vision 2020 itself that describes the company from the perspective of 2020.

The Vision addresses six primary areas which drive success:

1. Customer Relationships;
2. Employee Relationships;
3. External Stakeholder Relationships;
4. Carbon Constraints and the Environment;
5. Technology and Innovation; and
6. Financial Integrity.

Each area of focus contains a description of our future state as well as specific targets. While there are many more targets in Vision 2020, below is a summary of some of the key priorities.

By 2020:

- ❖ For the Benefit of Our Customers
 - We consistently rank in the top 5 nationally in the JD Power and Associates surveys for gas and electric customer-satisfaction.
 - Over 100,000 residential customers actively manage their energy use with
 - 40% of our total customer base participating in optional pricing plans, and
 - 15% using our Windtricity™ and solar offerings.
 - Our fully developed Business Center provides a robust array of packages tailored to the needs of our commercial and industrial customers.
 - Our residential rates remain 10% below the best market prices in the three major competitive markets (Dallas, Houston and Corpus Christi).
- ❖ For Meeting the Energy Needs of our Community with the Environment in Mind
 - Community peak demand is 771 MW lower than 2008 projections due to increased energy efficiency and demand reduction.
 - We have over 1,200 MW of renewable energy capacity in our system.
 - Additional base-load capacity supports the stability of our system providing stable base-load power with low carbon emissions.
- ❖ For the Benefit of Our Employees
 - We are a Great Place to Work with a GPTW index score of 4.20.
 - Our continuous improvement culture has reduced hand-offs and costs.
 - Communications at all levels of the business keep everyone informed.
 - Training for the future has become a core component of corporate culture.

Throughout this challenging era, we commit to communicating the Vision to our employees, our customers and our stakeholders in order to remain **#1 in Customer Satisfaction** and a **Great Place to Work**. Success, however, is not just a series of steps taken by the company. It is a vital element of every interaction we have with our customers and with each other. Each of these occasions is an opportunity to demonstrate commitment to our Core Purpose, our Core Values and the high-quality tradition of CPS Energy. Change is an inevitable feature of our industry's next decade, and our positive response to these changes will create a winning Vision for our customers, our community and each of us.

CPS Energy Vision 2020

Introduction

Whether or not one subscribes to the notion that human activity is contributing to global warming, there are many indicators pointing to the fact that the way America currently lives in the global community is not indefinitely sustainable. Load growth and the American appetite for energy are driving the need for new electricity generation. Yet, concerns over climate change are increasing the obligation of all producers of carbon, including point sources like electric utility generation, to review their plans for mitigating carbon release. An increasingly savvy customer base has great expectations for affordable, reliable and sustainable energy. Yet, utility infrastructure is aging and requires replacement while the costs of raw materials and fuels rise at unprecedented rates. Rising energy costs are significant concerns for customers and policy makers, especially at a time when the U.S. economy is slowing and people are faced with price increases in virtually all their most basic needs. Yet, impending carbon legislation will have a dramatic impact on the cost of producing electricity. These potentially significant costs will be felt throughout the energy value chain, ultimately settling at the bottom line of every customer's utility bill. The sentiment shared in the 2007 US Energy Industry CEO study is correct: "The challenges [facing the electricity industry] require policy makers and industry leaders to move beyond rhetoric and easy action and deal forthrightly with perceived, real and difficult issues." Even more prophetic is the ancient Chinese curse: "May you live in interesting times."

The specter of deregulation appears to be subsiding as an imminent threat for public power utilities in Texas as the retail market matures and new problems emerge and compete for policymakers' attention. Public power is facing a future filled with enormous challenges and heightened ambiguity. More than ever, the capabilities, integrity and values of industry leaders will be continually tested in this uncertain future.

Given the significant challenges our industry must confront, long-term success for CPS Energy will be virtually impossible without a fundamental transformation in our strategy and our operating business model. "Transformation" is a fitting term for what awaits CPS Energy if its goal is to continue its leadership position in the industry. We are transforming from a company focused on providing low-cost energy produced from traditional fuels, technologies and sources into a visionary organization providing competitively priced energy produced from a variety of renewable and traditional fuels and new and renewed technologies. Through sustainable energy development - development that meets our current needs without compromising the ability of future generations to meet theirs - CPS Energy will uphold its commitments to environmental responsibility by way of innovative technological solutions that enhance quality of life, social equity and economic viability. We will expand mutual accountabilities in a creative and supportive manner, while continuing to provide reliable and competitively priced energy to the present and future San Antonio community.

This document is written in two main sections. This first main section titled “Setting the Stage” is written in the present (2008) and serves as an extended introduction to the Vision itself. This section sets the stage including the purpose of the Vision, the challenges as we see them in 2008 and how the Vision 2020 links to the key strategic initiatives of 2008 such as our Core Values, Core Purpose, Raise the Bar strategies and such. The second main section of the document is titled simply “CPS Energy 2020,” and this is the extended Vision Statement. This section begins on page 11 and it describes the company from a future state. The description is written as if the author is in 2020 reflecting on what the company has accomplished, how our stakeholders view us and what it is like to be a part of CPS Energy in 2020.

Setting the Stage

What is Vision 2020?

The emergence of new and changing priorities calls for a fresh look at our long-term future. CPS Energy must deal with these issues while keeping customer expectations in the forefront and maintaining our financial strength. It is time for CPS Energy to paint a new picture of our success as we look out 12 years. We will call this future state “CPS Energy Vision 2020.”

CPS Energy Vision 2020 will be the foundation and reference for:

- Strategic and long-term financial planning,
- Local, state and federal legislative policy,
- Critical input to the Mayor’s Climate Challenge and Sustainability Plans,
- Motivating and providing clear direction for CPS Energy employees, and
- Development of CEO/GM and senior management accountabilities.

How will 2008 ongoing strategic initiatives be affected?

CPS Energy has a legacy of smart financial decisions, a dedicated workforce and an enduring commitment to providing low-cost, reliable service to our customers. In late 1999, Legislation was passed in Texas that made deregulation of the retail electric business a reality for investor-owned utilities and a possibility for municipally owned utilities like CPS Energy. At the time, this was the most significant and radical change faced by the electric utility industry since the 1940s. Coupled with the changes in customer expectations brought on by the Internet revolution, there was no doubt that CPS Energy needed to respond.

In 2003, the CPS Energy Board of Trustees and senior management launched a process to articulate CPS Energy’s Core Values and Core Purpose and to establish our Big Audacious Goal. The key attribute of the process was employee engagement throughout this significant undertaking. In 2005, the Board approved the employee-

driven Core Values, Core Purpose and Big Audacious Goal for 2020. Our Core Values of customer commitment, performance, safety, respect, teamwork and trust continue to undergird all of our work as we prepare for momentous change in our industry.

The era of unprecedented cost pressures on electricity and natural gas will make it more difficult for our customers to maintain the quality of life they have enjoyed for many years. Our Core Purpose - benefiting our community by improving the quality of life of the people we serve - drives our strategic planning and improvement efforts. These deliberate efforts will ensure that we deliver reliable, competitively priced energy and valuable services to our customers, ensuring that our combined labors achieve a desirable quality of life for the community as a whole. Finally, our Big Audacious Goal of being #1 in Customer Satisfaction and a Great Place to Work provides a clear target to make certain our company's work is focused on our customers.

The Board also approved a plan for developing strategies in several key areas. The overarching strategy for evolution of the business to be competition-ready was focused on five crucial areas: wholesale sales, retail sales, wires (distribution and transmission), gas and shared services.

Raise the Bar was the name given to the strategic vision guiding this effort. Its primary components were:

- Prepare for increased competition in our local market;
- Build loyalty and be #1 in Customer Satisfaction by understanding the wholesale and retail customers' needs;
- Improve our efficiency and effectiveness to reduce O & M expenditures and construction costs while improving service levels;
- Create the optimum structure and skill sets to effectively compete, becoming a Great Place to Work; and
- Create a stronger working relationship with CoSA, as our owner, to make rate flexibility and city payment consistent with the competitive world.

Throughout the development of the Raise the Bar Ready model, the outward embodiment that the market sees is that of a single company, with the same governance and financial relationships that we have historically enjoyed, as well as a single interface with news media, governments and the community. Internally, five business units were created with their own markets, competitive advantages, differentiation factors, cost structures and financial structures. The four customer-facing entities (wholesale, retail, wires and gas) are supported by the Shared Services and Information Technology entities.

The operating philosophy through all planning efforts was focused on giving our customers the benefits of the competitive market without the disruptions of the accompanying transition. A focus on providing our customers key benefits of the competitive marketplace without directly entering into competition has made it easier to identify and successfully pursue opportunities where our advantages have created significant value for our owners and our customers. With the release of Vision 2020, the Raise the Bar initiatives continue

by way of business unit planning. We will continue to monitor the risks and competitive threats that we could face in the coming years, and develop responses to ensure our continued success. Through these efforts, we will proactively address the coming challenges and implement our long-term Vision.

Some of the challenges we will face in the future include:

Aging Workforce

The ability to manage a more sophisticated and adaptable infrastructure will require a flexible, dedicated and well-prepared work force. Because the vast majority of CPS Energy's employees come from the communities that we serve, the problems that the regional public educational systems face are, quite literally, our problems, too. We must fully understand our role in helping to alleviate these systemic problems as they relate to our business. Acquisition, development and retention of our workforce must be balanced with transition planning and knowledge transfer between employees. Effective succession planning must also be a primary focus to ensure continuity in the rapidly changing environment. Finally, mutual respect and interactions based on integrity and commonality of purpose must prevail throughout the workforce if CPS Energy is to be triumphant in overcoming industry challenges.

Global Warming and Climate Change Concerns

The debate is increasing as policy-makers worldwide grapple with measures to reduce greenhouse gases and carbon dioxide (CO₂). The outcome of these debates could have significant ramifications for the energy industry and for the American lifestyle.

There is no doubt that the expectation of carbon legislation and associated costs are already affecting utility investment decisions and could jeopardize U.S. energy independence in the long run. CPS Energy has been a leader in providing low-cost energy supplies from a diversified fuels mix, including significant coal, natural gas and nuclear generation. While nuclear generation poses no risk associated with carbon as it produces no carbon emissions, our substantial coal-fired generation component poses a disproportionate risk as we enter an increasingly carbon-constrained future. How CPS Energy will react to this reality is a key question and challenge we face.

Rising Energy Costs and Aging Infrastructure

New pressures are emerging in managing energy costs. In addition to future carbon legislation, the utility industry is dealing with the need to replace aging infrastructure, increased siting challenges and a significant rise in basic material costs. These realities are already creating new challenges for the industry and its customers. There are many unanswered questions. Will rising energy costs

spur conservation and permanently curb the American appetite for energy? Will rising costs lead to increased regulatory intervention, putting price caps on the energy commodity and putting utilities at risk of bankruptcy? Will rising costs drive innovations in energy storage or alternative generation technologies that have been long promised but very slow to develop?

Aging infrastructure not only impacts the cost of energy, but also affects reliability. At a time when the focus on customer satisfaction is increasingly important, maintaining and improving reliability performance is critical and costly. Balancing replacement costs with the realities of a slowly deteriorating infrastructure is a concern that CPS Energy and the entire utility industry is facing. Utilities need capital to replace worn-out infrastructure. But competing for the same pool of dollars are the needs to meet growing energy demand; build new facilities; and invest in new and industry-changing technologies. Balancing all of these critical needs is, and will be, a significant challenge for the leadership team.

Attributes for CPS Energy Success in 2020

Recognizing the significant challenges in our industry, long-term success for CPS Energy will be quite difficult without a fundamental transformation in our strategy and our operating business model. “Transformation” is a fitting term for what awaits CPS Energy if our goal is to continue and extend our leadership position in the industry. We are transforming from a company focused on providing low-cost energy produced from traditional fuels, technologies and sources into a visionary organization providing competitively priced energy produced from a variety of renewable and traditional fuels utilizing new and renewable technologies. CPS Energy must evolve into a high-performing utility that acknowledges its role in the larger, global community with a clear focus on enabling a sustainable and desirable quality of life for the people that we serve.

Jack Azagury, in his article “How to Achieve High Performance: Lessons from the Top 40 Utilities” for *Public Utilities Fortnightly*¹, has identified a number of defining attributes of the successful and high-performing “utility of the future:

1. Manufacturing-like Performance Culture
2. Mastering the Basics
3. Simple on the Inside
4. Differentiated on the Outside
5. Proactive Enterprise
6. Shaping the Energy Future
7. Real Time Information Intensive
8. Information Technology Fast Follower

¹ Azagury, Jack, “How to Achieve High Performance: Lessons from the Top 40 Utilities,” *Public Utilities Fortnightly*, September 2007: Volume 145, No. 9: Page 60.

9. Operations Technical Mastery
10. Diversified and Skilled Workforce”

We agree that these are key attributes for success. While we combine some for the purpose of brevity below, we acknowledge the role each plays in crafting Vision 2020.

Manufacturing-like Performance Culture/Mastering the Basics

While there are differences between producing products in a factory setting and building and maintaining infrastructure throughout a major metropolitan area, there is much we can learn from the manufacturing industry, where aggressive cost management is a necessity. The utility world has traditionally churned out a wealth of data related to operations that can be used for benchmarking purposes, and to develop metrics necessary for target-setting and gauging progress. Similar to methods used at Toyota’s San Antonio truck assembly plant, CPS Energy has identified its own horizontal value chain and must seek ways to achieve end-to-end process efficiency and optimization. If we are to mitigate the potentially large and burdensome price impacts on our customers, every employee in every position in the company must learn to drive out all unnecessary costs from our system and to act accordingly. We must do so in a way that considers the entire value stream so that we don’t reduce costs in one area in a way that causes unnecessary increases in other areas.

Simple on the Inside/Differentiated on the Outside

The entire energy industry is becoming increasingly complex. While the basic process of creating and delivering electricity and natural gas to homes and businesses has not changed significantly in over a century, factors such as environmental and climate change concerns, policy-making pressures, technologies that develop sooner than expected or not soon enough and increased customer expectations and sophistication have added immeasurable complexity to utility decision-making. The remainder of the business is all about customer service. “Best in class” companies have found ways to simplify processes and take unnecessary steps out of transactions to drive costs out of the business. At the same time, many stakeholders view the basic delivery of energy as a simple commodity. One way to add value and differentiate our product from those of our competitors is to provide customers a variety of service, price and supply options.

Proactive Enterprise/Shaping the Energy Future

In many ways, CPS Energy has been a proactive enterprise and a leader in innovation. CPS Energy has been a leader in building and maintaining low-cost supply resources and an innovator in financial management. Today, the Greater San Antonio metropolitan area benefits from a diversified fuels mix and among the lowest rates in the country. This is the result of doing the “right things at the right times.”

CPS Energy has another opportunity to be proactive as we enter a future world that will be increasingly carbon-constrained. We have the opportunity to assume a heightened

leadership role in the community as we shape the energy future for the communities that we serve.

Real Time Information Intensive/Information Technology Fast Follower/Operations Technical Mastery

CPS Energy must learn to collect and process data on a much more real-time basis. This means we must have a laser-beam focus on what is most important so that we develop the methods and skills to collect and analyze data, converting it into decision-driving information. This means scanning the horizon for technology solutions and being quick to implement those market-ready solutions that fit our needs, and using these systems and the information they product to improve service quality and cost for our customers.

Diversified and Skilled Workforce

Ever-changing customer expectations, revolutionary technology, burgeoning amounts of available data and a critical need to respond and adapt to change almost immediately are all factors driving an increased focus on a diverse and highly skilled workforce. Assembly-line mentality and rote processes are inadequate for meeting these challenges. While we focus on a manufacturing-like performance culture, it is critical to note that today's successful manufacturing cultures have moved away from the historic assembly line mentality of the early Ford era, when one worker learned one skill and performed that one skill over and over again for his or her entire career. In manufacturing, as well as in successful information and innovation-based entities, it has become critical for employees at all levels to be versatile, skillful at multiple jobs and able to deal effectively with the massive amounts of information and data that are becoming the norm throughout our American culture. As a successful company, CPS Energy must not only identify our needs, but must help our employees succeed at all levels of the company by keeping them informed of the changing needs and having programs in place to transition and train existing employees. We must also make sure our recruiting and hiring efforts focus on bringing into our workforce those with the attributes that lead to success. In turn, employees at all levels, from front line to senior management, must embrace a life-long learning and continuous-improvement culture. Our customers will expect nothing less, and success in our industry will demand nothing less.

The Vision for 2020

With our focus on our customers and our community, an engaged work force and a constant review of the challenges facing us as a business, it is important to preview the outcome of successfully implementing this strategy. We have chosen six particular areas to preview, based on their level of importance to success:

- Customer Relationships
- CPS Energy Employee Relationships

- External Stakeholder Relationships
- Carbon Constraints and the Environment
- Technology and Innovation
- Financial Integrity.

So what does CPS Energy look like in 2020? In some ways it looks a lot like it does today, but in other ways it is significantly different. Let's take a look...

CPS Energy 2020

Customer Relationships

CPS Energy has taken a leadership role in meeting the changing expectations of our customers as major, community-wide transformations have occurred over the past decade. Successful economic development endeavors have moved San Antonio from a low-tech, services and recreation market to a high-tech, manufacturing and research hub. Drivers of the technology movement such as Microsoft, the military and Homeland Security are evidence of this substantial progress. The military, always a major consumer of energy services in San Antonio, has added new facilities with more high-tech reliability and demand characteristics. By virtue of its reliable and competitively priced energy products and services, CPS Energy has been a major catalyst for our City's economic development efforts. Enrollment in technical programs at local colleges has more than doubled in response to cross-industry engagement in the public and private educational systems as well as the growing number of jobs requiring highly skilled employees. Texas A&M University has a new campus in San Antonio, providing engineering and other degree programs to meet the growing demands of the high-tech market. The opportunities offered by the industrial presence and the growth of local higher education also have reduced the percentage of the population below the poverty line, allowing more people to participate in the technology expansion across our region.

While the demographics of business have shifted, so has the lifestyle of the average consumer. More than 70% of all homes have at least one personal computer because PC costs are so reasonable, and the average home has a network with nearly three access devices. Home electronics are also becoming more sophisticated with highly energy-efficient plasma and next-generation high-definition television (HDTV) systems dominating the entertainment marketplace. While the more sophisticated needs and desires of the population demand greater dependence on energy and increase our system-wide power factor, the population has also become more sensitive to the environment. A wider range of highly energy-efficient appliances and building techniques is available in the market. Natural gas service is available in more than half of the homes in San Antonio, allowing customers to maximize the efficiencies available to those who use the right forms of energy for the appropriate applications. As customers have become more technologically advanced, they have also embraced the tenets of a sustainable lifestyle and demand innovative services from CPS Energy that support their environmental consciousness. Plug-in hybrid and natural gas-powered vehicles have captured a significant share of the transportation market. While beneficial in reducing emissions, the cumulative effect of technology and the transition from gasoline-powered devices to electric and natural gas-powered transportation results in a significant increase in energy requirements.

Over this past decade, CPS Energy has worked to provide our retail customers the benefits of choice through an evolving set of options for their individual energy needs. Market segmentation analysis helped us identify the particular needs of a diverse customer base. An accelerated product-development process, combined with price

flexibility, allows the customer service teams to develop and roll out bundles of services designed for the particular needs of each segment. In 2020, over 40% of our customer base takes advantage of these packages. The strength of our portfolio, including gas and electric energy alternatives, contributes to the robust nature of the option programs.

In this environment, timely and information-rich communications with our diverse customer base has been a critical success factor. Keeping our customers informed of the new plans and options available to them, as well as information on the partnerships formed to offer value-added services, has increased customer loyalty. Process improvements that reduce customer downtime, increased efficiencies that make it easier for customers to communicate with us and Web portals that allow customers to conduct transactions all contribute to customer loyalty and satisfaction. For our commercial and industrial customers, the fully developed Business Center and knowledgeable account representatives provide professional support and two-way communications to help these important customers maximize the value of the energy they receive.

As a result of all of these enhancements, today's CPS Energy customers have much more control over their energy use and the price they pay for the conveniences and comforts that electricity and natural gas afford. Our commercial customers constantly use data we provide to understand the energy costs of various parts of their operations. Many have purchased our Energy Management Services to perform energy use analysis that they can use to lower their costs. Generally, smaller businesses do not have the time or expertise to understand their energy use, nor to devise ways to manage their consumption and lower their costs. CPS Energy stands in the expertise gap and provides this valuable help on a consulting basis. Fees for this service are rendered on a monthly basis to participating clients, but are clearly offset by the expertise and savings CPS Energy can deliver. Still other commercial customers are the recipients of our Energy Management Services via assigned Energy Solutions Managers.

Some 100,000 residential customers now actively manage their own energy use and the price they pay for it. Wireless technology has combined with our advanced metering (AMI) capability, making it possible for homeowners to use our advanced Home Area Network (HAN) to manage the energy use of major appliances and energy-consuming systems in their homes. Customers may do this manually, use programs that CPS Energy offers or use applications of their own design. Since energy is priced on a time-of-day basis, customers have full control of when they use the power and the resultant prices for energy. CPS Energy offers products to each market segment to help customers take control of their energy costs. At least from the energy perspective, a sustainable lifestyle is not limited to the affluent. For example, low-income customers can purchase set amounts of energy, and use technology to find out how much energy they have remaining at any given time. All customers can see how much their current consumption is costing them, giving them even more control of their costs. Additionally, time-of-use pricing signals and information about measures that customers may choose to use to shift energy consumption to less costly times, are available for all of our customers. CPS Energy provides a smart phone-sized communication device that

serves as an information portal for home use. This technology uses the same Zigbee-based wireless backbone that our HAN does, and allows customers who are uncomfortable with technology to benefit from time-of-use energy pricing.

The company's investment in AMI-enabled technology has also facilitated product offerings around prepaid energy concepts. Customers that choose such offerings can purchase their energy cards at any H-E-B, Wal-Mart or Target store. It has been interesting to observe that energy cards are given as gifts throughout the year. CPS Energy also has realized an estimated 10% reduction in average energy consumption for those clients participating in prepaid product offerings.

There have always been clients who desire simplicity and the ability to purchase their power in the traditional ways prevalent in the mid-2000s. They want a blended price per kilowatt-hour (KWH) with options around locking in the price annually or over multiple years. CPS Energy offers an array of pricing products to meet this need.

All customers have the ability to purchase the output of power produced by wind and solar central plants in order to attain or maintain a smaller environmental footprint. CPS Energy's Windtricity™ and various solar products routinely come up in local community conversations about the great progress that has been made in the fight against global warming. Our clients appreciate the fact they can buy these sources of green power without the need to install their own home systems. Indeed, 15% of the overall customer base have availed themselves of these services.

The consistent theme that has guided our company's relationship with customers is "options." Customers have so many options that, frankly, it can be overwhelming. For our technologically savvy customer base, our robust interactive Web site allows quick and easy access to choose appealing options. In fact, through CPS Energy's ongoing market segmentation work, bundles of price and service options are presented to clients when they enter their Zip Codes while logging on to CPSEnergy.com. Customers are free to choose from the bundles presented, or they may create their own set of options by answering a few simple questions with the representative, available via online chat.

Finally, a more important theme arises when we discuss customer relationships. Stakeholders view CPS Energy as a purveyor of information about all manner of energy topics just as much as they view us as their provider of choice for electricity and gas services. The technology capabilities of our company, combined with greater access and new communication modes, have enabled this fundamental shift in our business and throughout the energy industry. Retail customers are informed, in control and very knowledgeable of energy, its efficient use and cost management – key elements in remaining #1 in Customer Satisfaction, according to J.D. Power and Associates national customer satisfaction surveys for both gas and electric customers. Locally based customer satisfaction surveys confirm this national rating and permit us to continue focusing on the issues our customers consider most important.

The wholesale electric market has been equally active over the past decade. The market has been changed from four regions to several thousand nodes during implementation of the Nodal market. Clearing price changes and the decreasing reserve margin in ERCOT have also helped redefine this market. While energy efficiency and conservation efforts have mitigated some of the impact of customer growth in Texas and the increasing energy dependency of home and office, base-load and peak-load requirements have continued to rise.

With our diverse fuels mix, incorporating significant contributions from renewable resources and the “5th fuel” bundle of efficiency and demand response, and availability of peaking-unit support, CPS Energy continues to offset local costs through sales of excess power to the ERCOT wholesale market. Partnerships with other municipally owned utilities have established opportunities to use all our available power efficiently and grow our wholesale margins. Our increasingly sophisticated market management capabilities identify peak-load opportunities across the grid and, where possible, create market opportunities across ERCOT. Through this approach, we have been able to offset some of the cost pressures to maintain the lowest rates in Texas for our local retail customers while our city has increased in size over 14%.

CPS Energy Employee Relationships

The CPS Energy workforce has undergone incredible change over the past 12 years leading to the creation of a learning organization, developing a labor force that possesses broad technical skills, is flexible and culturally and experientially diverse. The CPS Energy family in year 2020 has become an organization that is accountable for not only running the business but how they contribute to the sustainable nature of our environment and environmental health of our community and society. As a company, we continue to encounter challenges such as increased energy costs, the demands of new technologies, changing markets and an aging workforce. Organizational development strategies have helped CPS Energy meet the challenges of increased energy costs, new technologies, changing markets and an aging workforce, and the results are seen in our culture of continuous improvement, our ability to attract and retain skilled employees, the alignment around shared goals and the quality and speed of decisions.

The redesign of the organizational structure, which began in 2007, provided the framework for our current workforce model, based on requisite design. This design provided for resource allocation and utilization at the appropriate levels, delegated authorizations according to work levels and reduced handoffs in horizontal processes that traverse the enterprise. This evolutionary change in structure and process was facilitated by moving the organization through a series of change initiatives that not only addressed an outdated bureaucratic model of work and associated workforce practices, but embraced the change necessary in all facets of the energy industry.

Through a successful workforce-development process, CPS Energy has ensured there are employees prepared to fill critical positions when incumbents leave the organization or move into other areas within the organization. Developing the existing talent of our workforce has been paramount to our success. We improved our employee assessments and competency standards to hone in on our workforce deficiencies. Then, we provided formal training, mentoring and coaching programs to facilitate knowledge-sharing among employees. CPS Energy also developed job sharing, job shadowing and other apprenticeship programs to ensure that skills and intellectual capital are cultivated and preserved.

CPS Energy continues to collaborate with its university, community college, high school and workforce investment board partners in the community to build a network that supports training for utility careers. There have been institutional alliances at the junior college and university to support technology development and to ensure an emerging workforce that retains the best and brightest talent right here close to home in our community and region. We continue to work with educators to develop model curricula for utility training programs and address basic academic and employability skill gaps in K-12 students, especially in math, science and communication skills. CPS Energy has also taken a proactive approach in partnering with our community to address the crisis of soaring school dropout rates and to support educational systems and organizations in the area in providing improved skills and capabilities of our high school students.

With the explosive cross-industry growth in technology, the value of high-tech professionals is at an all-time high, and competition for these potential employees is fierce. CPS Energy has risen to the challenge by improving our recruiting efforts, offering incentives to attract job candidates and ensuring that our compensation is competitive with the programs of other employers. We attract and retain our employees by providing benefits that are meaningful to our employees, including educational opportunities, career planning and attractive financial incentive structures. In turn, employees at all levels embrace a continuous learning and improvement culture. The frequency and effectiveness of performance measurement activities and the dialogue between employee and manager have provided a solid foundation for employees in understanding their role and accountabilities in concert with others in the company.

The results of the leadership team's deliberate attention to open and relevant communication with employees are increased understanding and respect. Because supervision at all levels has made effective communications a priority, employees better understand the challenges the company faces and the decisions the leadership team must make. Thanks to supervisory involvement and multiple communications tools, employees throughout the company know what our corporate strategies are and how their work contributes to implementing those strategies. This knowledge and understanding has contributed to the rise of a motivated workforce that is empowered to make their own contributions in support of corporate goals. Every person in the company understands how what they do fits into the mission of the organization and sees the link between the work they do and the value we provide our customers. Mutual trust is at an all-time high.

Effective two-way communication and shared accountability for triumphing over the challenges we face are key contributing factors to achieving our Big Audacious Goal. We continue to assess how well we live our Core Values and use the findings to ensure that management and employees at all levels are aware of those areas needing attention. The utilization of employee job satisfaction surveys along with the historical Great Place to Work survey has created a sense of empowerment where all employees feel involved and accountable to our Core Values.

Our strong relationships with hourly and salaried employees in all areas of the company contribute to the belief that CPS Energy lives its Core Values everyday. Our employee leaders – both those on the organizational chart (management and supervision) and those who lead union or employee associations - work in partnership with each other to ensure the success of both employees and the company.

A process-centered focus has helped enhance workforce safety and training, improve efficiency and contribute to the life-long learning emphasis that we identified as a key challenge in 2007. The company continues to drive administrative efficiency through clearly defined processes and tools to ensure that employee activity is aligned with our strategies. These processes are designed to provide indirect control over independent decisions, creating an environment where people with the most relevant, direct

knowledge make decisions that are truly customer-focused. Leadership delivers tangible results. In turn, the workforce sees the accomplishments and progress and gains confidence from the successes, not just the words. Our employees have become more self-motivated and empowered by being part of a team that is expected to produce great results.

We continue to be a diverse workforce both ethnically and with regard to background and experience. Our ethnic diversity mirrors our community as it did in 2008. Today, our reputation for integrity, quality and innovation depends on our ability to transform the diverse experiences, perspectives and ideas of our employees into outstanding products and services for our customers. We truly function in a dynamic environment where inclusion is encouraged and differences are respected.

CPS Energy has incorporated our Big Audacious Goal and our Core Values into daily action, and that has helped us navigate through challenging times. We can proudly say our diverse and agile workforce is able to meet the demanding changes in an industry that is replete with new and emerging challenges. The current workforce is poised to address the mounting complexity of the energy business. As a successful company in 2020 and beyond, CPS Energy has not only identified the needs of the business, but also has provided the necessary tools that help our employees at all levels of the company succeed. Because we are working together towards common goals, with steady and consistent leadership and open communication throughout all work levels in an environment where people listen as well as inspire each other, CPS Energy has truly become a Great Place to Work.

External Stakeholder Relationships

In 2020, the relationship between CPS Energy and City Hall remains one of cooperation, mutual respect and understanding of the benefits of responsible stewardship. The relaxation of term limits has created greater continuity and allows City Council members to apply their experience and learning regarding the energy industry to better address the issues facing CPS Energy while maintaining stronger, more-trusting relationships with our senior leadership.

In reaching out to the City Council and other local stakeholders, company management improved our understanding of the issues facing policymakers and identified how we could help the community resolve these situations. This process also permitted an exchange of ideas on the complex issues facing our industry during the past decade, including the development of effective energy efficiency and conservation plans, participation in the City's Sustainability Council, access to capital in a constrained environment and the means to satisfy the growing energy needs of San Antonio. Through this process, our ongoing relationship with the Council enabled the company to develop and gain approval for the myriad of plans and proposals required to implement our strategies.

More continuity and stability at City Council was critical in revising the City transfer payment to reflect a competition-ready state for CPS Energy. Our contributions to City revenues continue to form a substantial portion of the City's operating budget. The former general funds transfer methodology was based primarily on revenues and was counter to our need to meet ever-changing market conditions with pricing flexibility. Working closely with City staff, we developed an alternative means of calculating City payment, based on return on equity (ROE). This approach has created a mutually beneficial means to grow CPS Energy revenue potential for the long term and has provided the City with more revenue stability and opportunity as we grow the economic basis of our business.

As a result of stronger communications and improved trust between the City and CPS Energy leadership, the day-to-day interaction between the City and CPS Energy has decreased. While the City Council retains regulatory authority over rates and bond issues, Council members also understand the criticality of CPS Energy's need to move fast in the increasingly competitive energy market. In 2011, the City Council formalized a process to delegate more authority to the CPS Energy Board of Trustees with regard to flexible pricing programs. This is another example of the Council's willingness to recognize the utility's need to be competition-ready.

The City, CPS Energy and SAWS continue to evaluate pilot programs in shared services. Efficiencies and cost savings have already been realized in the areas of fleet, communications systems purchase and maintenance, data center operation and facilities management. Plans are being made to expand interagency shared services to include human resources, legal, governmental relations, supply chain and information

technology services. Although challenging to achieve, the cost savings look promising, and the community has reacted positively to these efforts.

Communications with the public have also expanded. Our news media relations, customer communications, community outreach collateral material and customer training programs have increased our visibility, along with our leadership role in sustainable energy practices. As new pricing packages are developed for gas or electric services, an efficient communications program with community leaders, target markets, major customers and interest groups takes the lead in demonstrating the advantages of these programs. Our timely communications with the public about new technologies, renewables and other generation alternatives have led to a renewed understanding of CPS Energy's value to the entire community.

One of the most sensitive areas our customers have told us about is outage notification. Communications media available in 2020, the self-healing intelligent grid infrastructure being deployed, and the information gathered from our advanced metering systems have all combined to give customers the data they want to receive about outages and restoration efforts.

In addition, recognizing the value in the feedback we receive from customers that are well-educated on our business and the input from our community at-large we continue to solicit input and encourage dialog in our planning efforts. As an example of our commitment to work together with the community, we established the Green Ribbon Committee in 2008. This committee initially focused on providing essential input to our aggressive energy-efficiency efforts. Over the past 12 years, this committee's role continued to evolve, and due to the value they provide, the committee now plays a key role as the "Sustainable Energy for San Antonio Committee." They advise CPS Energy staff on integrated resource planning as it pertains to energy-efficiency for the future energy needs of the community from a customer/stakeholder perspective. This committee continues its robust advisory role into 2020, and includes members from academia, government, business, developers, environmental groups and CPS Energy's own Citizens Advisory Committee.

The Texas Legislature has reviewed the status of retail competition in each legislative session since the enactment of Senate Bill 7. The larger municipal and co-op systems continue to provide services at or below the retail market prices where competition has been introduced. While challenged by the impact of carbon constraints and other financial pressures, our successful strategy of giving customers the benefits of an open market by delivering competitively priced products and services has mitigated legislative attention on our market.

ERCOT continues to be the independent system operator (ISO) for the Texas region. We actively participate in the ERCOT wholesale market, using our fuels diversity and our peaking plants to help meet the energy needs for companies throughout South Texas. Through our membership on the ERCOT Board, we have worked to implement

processes that maintain the integrity of the wholesale market, and to develop the business structures that hedge risks inherent in a volatile fuel environment.

The Public Utility Commission of Texas (PUCT) retains the regulatory jurisdiction over transmission rates across the state. Over the past decade, the growth of Texas has almost eclipsed California as the most populous state. This rapid increase has strained the ability of the transmission grid to get power from points of generation to customers. The significant renewable resources in West Texas and along the coast are far from the centers of population, further underscoring the need for transmission lines. Together with the industry, the PUCT has developed processes that accelerate the approval and implementation of new transmission facilities.

Meeting the energy needs of the Greater San Antonio population, which has been one of the top five growth markets in the country each of the past nine years, has been a significant challenge. The transmission needs for increasing reliability in our market, linking new substations built in response to the growth, and working in concert with the industry to link smaller (but rapidly growing) rural communities to the grid have increased our investment requirements. Recovery of these costs in a timely and manageable way continues to enable CPS Energy to provide benchmark-quality service to the communities we serve. As the largest municipally owned utility in Texas, we have worked with other municipal utilities and co-ops to further improve our strong relationships through joint initiatives that have led to improved service for all our customers and to wholesale power and retail agreements that are mutually beneficial.

In Washington D.C., this country's leaders are enacting elements of a comprehensive energy plan. Since 2007, we have provided information to lawmakers and evidence to regulatory officials to create a balance between environmental needs and the ability of the customer base to afford the changes. Our diverse fuels mix continues to offer CPS Energy customers a portfolio of competitive energy products and services. Our environmental performance is also a benchmark leader, increasing our credibility in public policy development. Together with other public power companies, our commitment to our communities is reflected in new legislation and regulations.

Communicating with our stakeholders is not just a local, state or national issue. International partners and resource pricing require CPS Energy to actively exchange service bundle ideas, negotiate purchasing agreements and learn from best-in-class experiences across the globe. CPS Energy finds itself an active and successful member of a global energy market.

Carbon Constraints and the Environment

No challenge has placed as much pressure on our financial resources as carbon constraints. The linkage of carbon dioxide and other greenhouse gases to global warming, and their designation as pollutants, made the mitigation of climate change a key component of national policy. As a result, a wave of legislation and regulations has altered the face of the entire energy industry. The implementation of cap-and-trade processes during the past few years, and the passage of other legislation at the state and national levels, has nearly doubled wholesale electric rates. In response to escalating wholesale rates, retail rates are rising in many areas of Texas. Until technological solutions are generally available in the market, rates can be expected to continue increasing into the next decade.

In addition to challenges posed by carbon regulation, additional constraints are affecting our community. For example, in 2010, San Antonio was declared non-attainment for ozone by the Environmental Protection Agency (EPA), resulting in additional emissions-reduction requirements in the future. State Implementation Plans that included proposed controls to reduce emissions were submitted in 2013.

CPS Energy has been a leader in providing competitively-priced energy to our customers, strongly supported by a diverse fuels mix. On balance, that strategy successfully overcame resource pressures on individual fuel types and served as a hedge against rising prices elsewhere in the state. Carbon legislation enacted by Congress has impacted our fossil fuel fleet, but is mitigated by the nuclear, renewables and energy efficiency portions of our diversified fuels portfolio. Our rates remain competitive statewide. However, energy costs throughout the state continue to rise and some studies project that the full impact of carbon legislation in the coming years could result in significant energy price increases throughout the state.

Through our integrated resource planning and environmental studies, we realized that reducing CPS Energy's carbon footprint would require a multilevel focus on energy efficiency, new generation technologies, renewable energy sources, gas peaking units and nuclear energy. We also acknowledged the need to demonstrate our leadership in reducing our own corporate footprint through a comprehensive sustainability plan and aggressive efforts in a variety of initiatives. CPS Energy's senior leadership team was so committed to ensuring a sustainable future for the company and enabling a sustainable quality of life for customers that they created and filled the position of Chief Sustainability Officer in 2008.

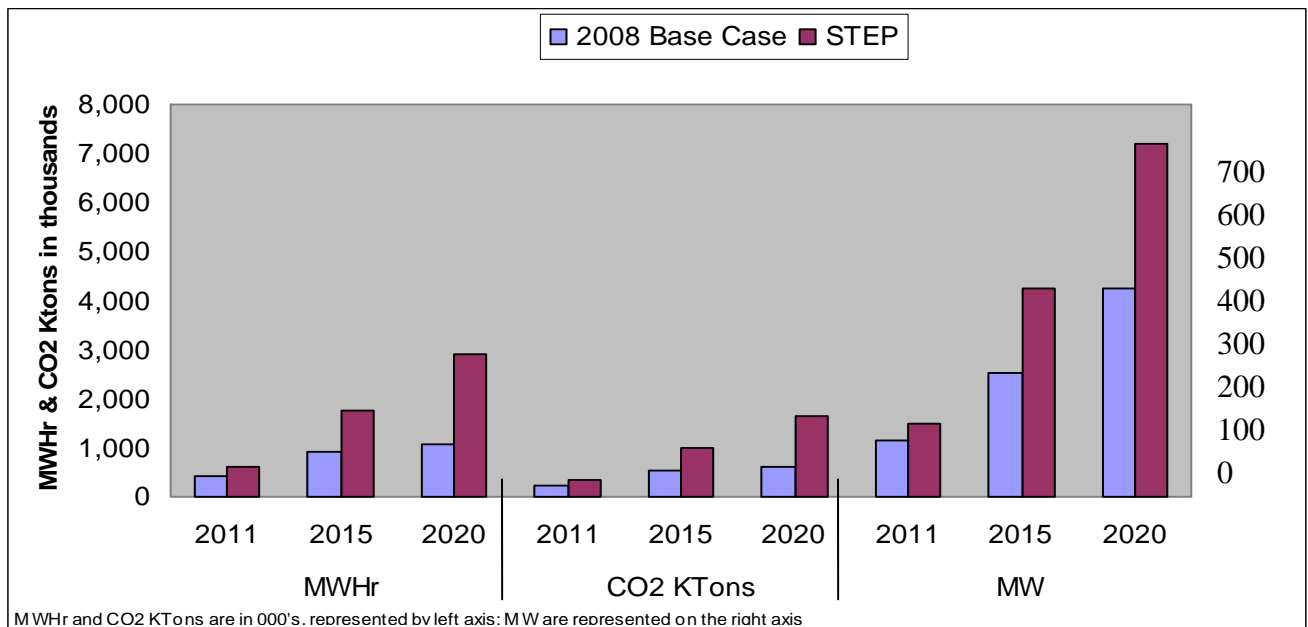
Energy-efficiency and demand-response programs have had a significant effect on both the reduction of overall load and the leveling of our load across the day. A full array of incentive programs, joint-agency efficient-facility upgrades and technology pilot and demonstration projects has set the tone for helping customers avoid wasteful energy-consumption patterns. A cumulative load reduction of 426 MWs in our native load was achieved in 2015, and thanks to the company's aggressive efforts in 2008, our Save for

Tomorrow Energy Plan (STEP) has resulted in a total cumulative savings of 771 MW by 2020.

Vision 2020

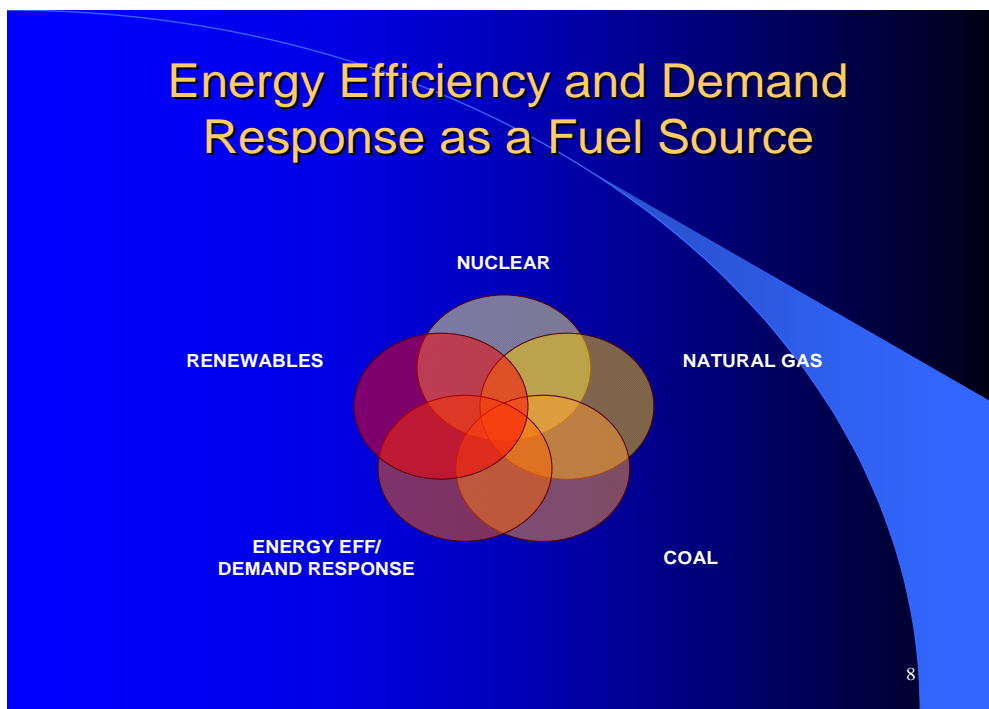
Energy Efficiency, Conservation and Carbon Reduction Goals

	2011			2015			2020		
	MW	MWhr	CO ₂ Tons	MW	MWhr	CO ₂ Tons	MW	MWhr	CO ₂ Tons
STEP	150	627,173	356,861	426	1,742,964	991,747	771	2,891,712	1,645,384
2008 Base Case	115	424,968	241,807	253	919,930	523,440	425	1,083,513	616,519



As shown above, a major shift in the strategic direction of energy-efficiency and demand-response programs in 2008 focused on pursuit of the STEP program scenario. This directional change has proven to be extremely beneficial to the company, resulting in a reduction of 1,645,384 tons of CO₂ in 2020. In conjunction with this aggressive path, a breakthrough decision was made by CPS Energy Staff, the Board of Trustees and City of San Antonio regarding cost-recovery mechanisms for these programs. Aligned with the view CPS Energy adopted in 2007, energy-efficiency and demand-response initiatives were considered the fifth generation fuel source. Thus, cost recovery for the programs was allowed in the rate structure in much the same way fuel costs for power plants were dealt with in ratemaking. This landmark regulatory decision allowed the company to aggressively partner with our clients in pursuing those

investments in energy-efficient technologies and robust demand-response programs with a pay-for-performance cost-recovery philosophy. Additionally, collaborative efforts between CPS Energy and the City of San Antonio to implement energy-efficient building codes for commercial and residential structures have greatly enhanced the achievement of “negawatts” for the energy-efficiency power plant. The robust application of demand-response programs for commercial and residential customers alike has also contributed significantly to the reduction of peak demand for the company. As noted in the Customer Relationships section of the Vision, product bundles built around time-of-use pricing that encourage customers to shift their energy use across the day have been the cornerstone of our demand-response initiatives. By offering lower rates for off-peak energy use and providing information to customers to allow them to take control of their energy costs, we have successfully reduced our peak demand. Today, we strive to reduce 60% of CPS Energy’s peak demand growth annually via aggressive energy-efficiency and demand-response programs.



Efficiency is not just a service offered externally to the market; it is also a benchmark of our internal efforts in energy development. In 2007, CPS Energy completed a turbine upgrade that yielded a 10.8% improvement in performance. As carbon costs have been identified, we have targeted other upgrades that are economically viable. These efficiency programs have allowed us to get better fuel economy from our generation units, thereby reducing greenhouse-gas emissions.

Technical innovation has long been one of CPS Energy’s strengths. As members of local, state and federal industry groups, we have actively participated in and funded pilots for a number of alternative solutions to fossil fuels. Projects studied by our technical staffs have been as wide ranging as:

- more efficient transmission technologies to reduce line losses between the plants and users;
- pilots for advanced coal generation options; and
- pilots for carbon capture and sequestration (CCS).

Whether through initiatives within the industry, such as the Electric Power Research Institute (EPRI), or locally funded research at Southwest Research Institute, UTSA and Texas A&M San Antonio, we continue to explore means to reduce our carbon footprint.

Renewable energy sources are a prime means to reduce our dependency on fossil fuels. We have exceeded our previous goal of 15% of our peak demand by 2020 by achieving 15% of our 2015 peak demand with over 800 MWs of renewable capacity, and this year we celebrate the achievement of renewable capacity equivalent to 20% of peak demand. Twenty percent is roughly equivalent to 1,200 MW of renewable energy based on projections of peak demand in 2020 and is double the capacity we had in our portfolio in 2008. As an added benefit, use of renewables reduced CO₂ emissions by over 991,000 tons in 2015, and over 1,645,000 tons in 2020.² Of this total, over 100 MWs are from non-wind resources such as solar and biomass resources.

Technical developments have brought costs for certain solar technologies to within double the cost of the lowest-cost alternative, making technologies such as solar thermal an economic choice for deployment in our generation fleet. We have successfully reached this level due to new transmission construction, completion of the Competitive Renewable Energy Zones (CREZ) transmission program to resolve most of the remaining transmission congestion from the West Texas wind farms, continued development of wind sources along the Texas coast, and the continuation of Federal production tax credits. Today, wind energy remains our primary renewable source. Larger and taller units are now available, taking full advantage of higher elevation wind currents and improving the output of individual units. Increased manufacturing capacity and efficiency are helping to moderate capital and production costs.

Bulk power storage technologies, primarily compressed air energy storage (CAES), are showing great promise for removing much of the variability from wind energy. CPS Energy has participated in industry trials of the maturing CAES technology and is evaluating the technology's role in future deployments. While the economies of scale have reached a plateau, more distributed wind-generation technologies are in the laboratories under development.

Solar alternatives have become the next wave of economically viable renewable technologies. Increased sales volumes and investments, driven by high energy costs, have reached the critical mass to reduce costs for individual homes and businesses. Progressing from demonstration projects at Pearl Brewery and our Northside Customer

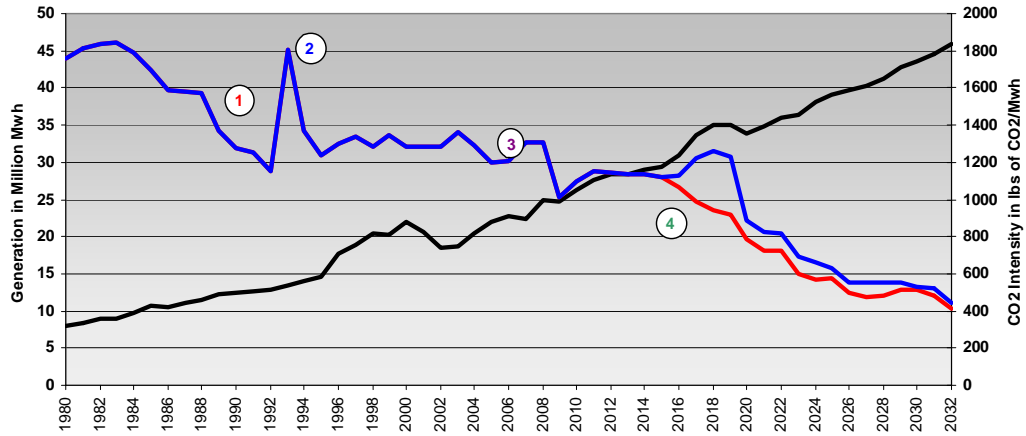
² Reductions based on MW of renewable energy x 8760 hours per year x 36.29% power factor x 0.59 tons of CO₂ per MWhr

Service Center, we have taken the lead in building solar systems for our own sites, for CoSA and customer facilities. CPS Energy successfully developed and deployed a 1 MW solar photovoltaic (PV) project in 2009 and leveraged what we learned to develop a robust mix of training programs for home and business owners, developers and building managers; improved financing plans to enable the growth of this technology; and creation of training and certification programs for installation and maintenance vendors to maintain the product's reputation.

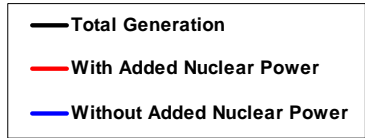
Although the distributed generation model continues to gain ground within certain niche markets across the regions that CPS Energy serves, the traditional central plant model remains the most economical for the majority of our customers. Solar thermal generation technology fits the central plant model in much the same way as coal, natural gas and nuclear did in 2009. CPS Energy entered into a partnership with other public and private entities to pilot a large-scale (100 MW) solar plant in West Texas. Our partnership has required that the developer meet a certain busbar price and plant capacity factors to make this pilot viable. This project proved the value of solar thermal as a production resource in Texas. Additionally, we continue to work with our partners to gain improvements in guaranteed capacity from PV sources and reductions in cost to create a market for this technology as a reliable, cost-effective energy source for the long term. In addition to these commercially available alternatives, we are continuing to test biomass, run-of-river hydro, wave/tidal, geothermal and genetically engineered bio-process alternatives to remain at the forefront in shaping the energy future of our community.

Gas peaking units are a highly efficient means for responding to spikes in our load or in the ERCOT market. In comparison to the processes of a decade ago, when utilities had to run baseload plants all day to ensure we could meet possible usage spikes, the peaking units can be available quickly and then turned off when the load drops. Gas peaking units, which have fewer emissions than coal plants, operate only when their output is needed, further reducing emissions. In addition to servicing our native load, the peaking units are available to respond to spikes in load across ERCOT, mitigating potential impacts across the statewide grid and reducing the need to dispatch for far-less-efficient plants.

Historical and Future Modeled CPS Energy CO₂ Intensity and Total Generation (includes gas, oil, coal, wind and nuclear generation)

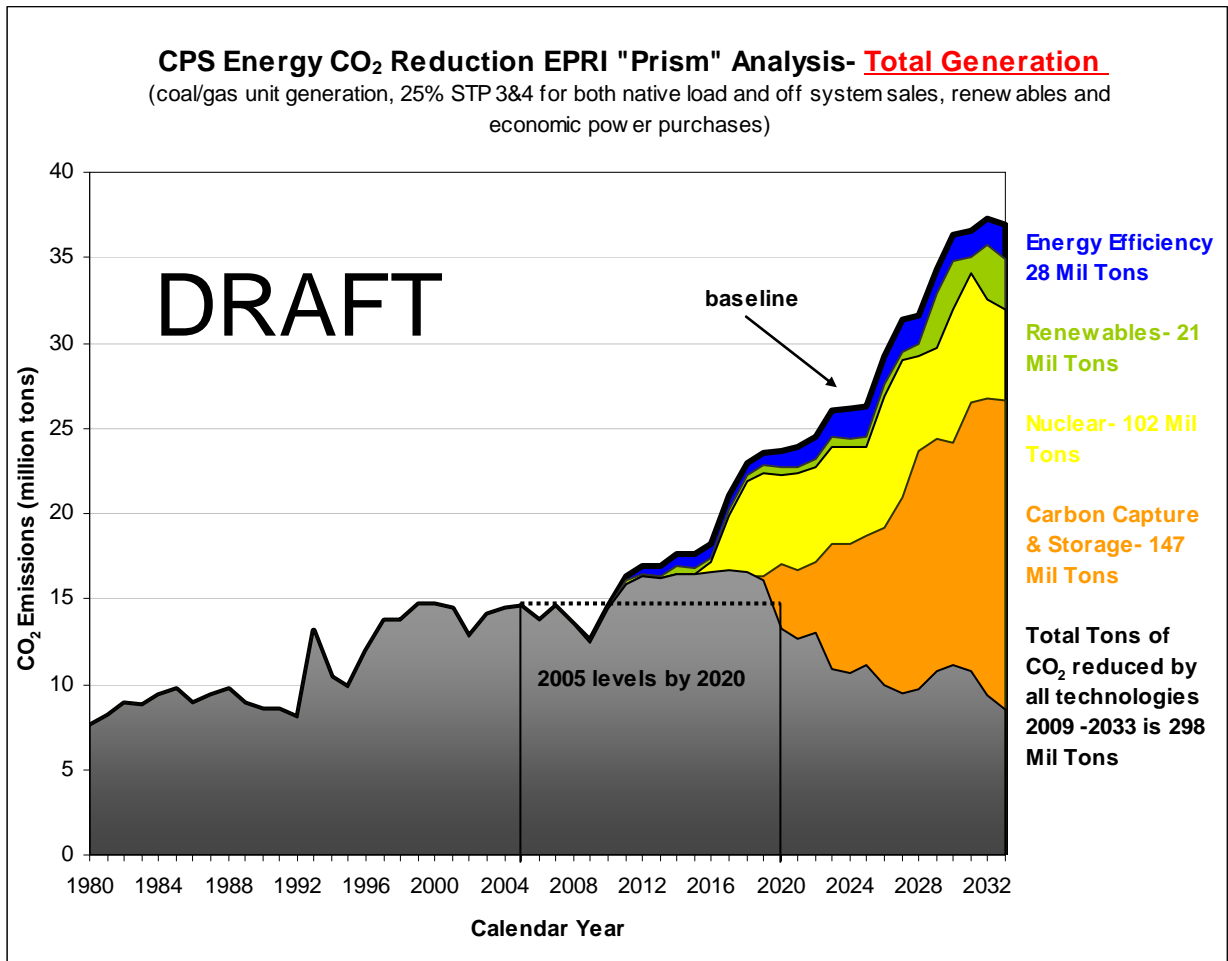


- 1. 1988- STP 1 & 2 first added to Generation mix
- 2. 1993- STP 1 & 2 shutdown for year
- 3. 2005- Increased STP 1 & 2 from 28% to 40% ownership; purchased additional wind power
- 4. 2015 & 2016 - STP 3 & 4 start up



Note: Input parameters change frequently which will vary results.

As shown in the CPS Energy CO₂ Intensity graph above, even though our generation load increases over time, our CO₂ intensity will decrease during that same period. This is particularly apparent when noting the increase in carbon emissions when Spruce Unit 2 is brought on line. (This chart also shows the corresponding reduction in emissions if additional nuclear capacity is added to the generation fleet.)



The CPS Energy CO₂ Reduction Prism shows that to slow, stop and then reverse CO₂ emissions, a variety of technologies will need to be implemented in our energy portfolio, including energy efficiency, renewables, carbon capture and storage, and additional nuclear capacity. {Note that because nuclear generation has zero carbon emissions, the inclusion of nuclear in our portfolio aids in achieving the goal to slow, stop and reverse the level of carbon emissions from CPS Energy's generation fleet. While this chart was developed prior to any final decisions on additional nuclear capacity, it is instructive in showing how the addition of such resources would support our carbon strategy.} The reduction of carbon emissions seen after 2030 is due to the retirement of our first coal-generation unit.

For the past decade, CPS Energy has been actively monitoring our carbon emissions. Our plans closely tracked the EPRI Prism that helped set our targets for reduction. The EPRI portfolio was national in scope, and needed to be customized to our operating environment, customer market and fuels diversity program. In 2020, the wide variety of initiatives initiated within CPS Energy has succeeded in slowing the growth in CO₂

emissions. By 2030, the carbon-reduction strategies from the full portfolio of alternatives will result in emissions nearly 40% less than the Baseline scenario. Beyond 2030, the retirement of additional coal units will continue to reduce our carbon footprint, moving toward a 2050 goal of reducing our emissions to 1990 levels.

Internally, CPS Energy's Sustainability Council has produced a variety of initiatives that have not only reduced our carbon footprint but also provided leadership within the San Antonio community to drive compliance with air quality requirements. It is the cumulative impact of the many initiatives started since 2007 that have set the standards for our state. Working with the City of San Antonio, we have converted all the street lights to more-efficient lighting, as well as converting all external lighting at our power plants and work centers. Cumulatively, the impact has been a reduction of 9,000 tons of CO₂ despite the significant growth of the city. In 2007, CPS Energy planted 5,000 trees. Over the next several years, we planted and gave away thousands of trees. By 2015, this single initiative represented over 16,000 tons of CO₂ sequestered by trees, and we have continued to improve on this figure. With the completion of Spruce Unit 2 in 2010, our fly ash recycling has reduced the CO₂ equivalents by 42%.

We also have successfully implemented telework programs, eliminating the need for many employees to travel to the office each day, establishing the leadership that has driven vehicle-emissions reductions by 10% across Greater San Antonio for those who must travel, staggered work times have reduced traffic congestion and contributed additional reductions to vehicle emissions. Incentive programs motivating employee use of mass transit for commuting have also been successful. With the economic development of hybrid and electric vehicles, CPS Energy has achieved a 25% reduction in annual gasoline usage, resulting in a cumulative 15% CO₂ reduction since 2002. We have also converted our sedan and light truck fleet to these more energy-efficient vehicles.

CPS Energy has been a leader in environmental stewardship and our commitment to the San Antonio community. We have exceeded our obligations in complying with air, water and waste regulations since the 1970s. The utility industry is heavily regulated by the Environmental Protection Agency at the federal level and by the Texas Commission on Environmental Quality (TCEQ) at the state level. CPS Energy has been managing and recycling its waste materials since the 1940s. CPS Energy has reduced its waste streams and has diverted more material than ever from landfills by recycling.

CPS Energy has managed its water resources well over the years by reducing our reliance of Edwards Aquifer water, first in the 1960s by building Braunig and Calaveras lakes for use as power plant cooling, relying on treated sewage effluent from the San Antonio River for lake makeup water. Additional reductions in water use have been made in recent years for process water at the Tuttle, Leon Creek, Braunig and Calaveras plants and for cooling water at the Tuttle and Leon Creek plants. Water supply for the South Texas Project was acquired under contract over the last several years.

The Clean Air Act Amendments of 1990 established the first significant regulations to control the acid-rain problem. The amendments focused on improving air quality by reducing sulfur dioxide (SO₂) and nitrogen oxide (NO_x) emissions from electric utilities through a phased-in approach. This was achieved through a market-based system whereby power plants were allocated emission allowances that required emission reductions or the purchase of allowances. In many cases, CPS Energy committed to reductions earlier than required. Investing millions in our environmental commitments, our significant accomplishments since 1999 have included:

- Technologies to achieve system-wide NO_x reductions;
- Additional ambient air monitors and a coal yard dust-suppression sprinkler system;
- Gas start-up controls, baghouses and scrubbers installed on both Deely Plant units;
- Scrubber upgrade at Spruce Plant Unit 1;
- Adding a Selective Catalytic Reduction (SCR) system to Deely Unit 2;
- Completing the installation of a Selective Catalytic Reduction (SCR) system at Spruce Unit 1 and Deely Unit 1.

In March 2008, the EPA lowered the 8-hour ozone standard to 0.075 ppm from 0.08 parts per million. Bexar County, along with over 300 other counties, received final non-attainment designation by EPA in 2010. From 2009-2013, CPS Energy participated in the development of the State Implementation Plan (SIP) with the Alamo Area Council of Governments (AACOG) Air Technical Committee. In addition to the initiatives noted above, we have agreed to study modifying the dispatch of units to help San Antonio reduce ozone levels.

By a wide range of initiatives in technology deployments and customer programs, our commitment is visible to the public and is having a positive impact on our carbon footprint and our overall environmental impact.

Technology and Innovation

Information Technology (IT) continues to be an enabler in achieving the company's strategic goals and maintaining our competitive advantage. By leveraging emerging technologies and enterprise applications that exploit open standards, CPS Energy has been able to integrate all business systems and make information available on demand to business owners and customers. Additionally, the adoption and utilization of open standards in 2008 resulted in an enterprise architecture that accelerated the deployment of and reduced the overall investment requirement for new corporate information systems.

CPS Energy management now has real-time access to operational and financial data as it changes due to market and regulatory adjustments. Powerful and easy-to-use business intelligence systems help empower CPS Energy employees at all levels to make informed tactical and strategic decisions based on current information. Robust business intelligence systems allow users to forecast costs and spending levels based on readily available historical information.

CPS Energy customers and employees have around-the-clock access to CPS Energy systems via the Internet and wireless devices, allowing them to execute tasks when it's most convenient. These same systems and devices power CPS Energy's corporate telework initiative, a cornerstone of the enterprise's sustainability focus. Enabling Web self-service for customers has allowed customer service representatives and account managers to direct their attention to truly complex service situations requiring high-touch interaction. Customers and employees are able to view and update both their account and personal information and make service requests online. In order to address the myriad needs of the company's diverse customer base, CPS Energy continues to provide a variety of contact media including telephony, Web and on-site representatives. The CPS Energy Web site is multi-lingual, including Spanish localization. Customer and employee information is secured through industry-leading user authentication and Secure Sockets Layer (SSL) practices.

CPS Energy has effectively connected its back office IT systems with those of its suppliers to: reduce order cycle time; reduce inventory levels; reduce administrative costs for CPS Energy and suppliers; improve material availability; and improve supplier satisfaction. Business-to-business (B2B) electronic relationships with suppliers and business partners enable CPS Energy to respond quickly to demand changes. The resulting cost savings are shared by CPS Energy and its customers.

In the September/October 2007 edition of *Electric Perspectives*, Robert Robinson and James Henderson wrote: "In one form or the other, the (intelligent) grid represents the next generation of the electric network. Digitization of the delivery business is one of the last remaining fundamental technology revolutions across major industries, and a confluence of external events and innovations are making it a real possibility. The issues are no longer whether and why, but when and how." CPS Energy began its work

on establishing a truly intelligent grid in 2008 with the deployment of advanced metering infrastructure (AMI) to support its electric and gas metering services.

AMI includes the metering and two-way communications network needed to bring back data in a near real-time environment. The AMI network also serves as a backbone for other intelligent electronic devices (IED) on the distribution system to support distribution automation. IED's such as re-closers, switches and fault-circuit indicators are able to communicate with each other, make decisions and act as part of a selfhealing grid. The data gathered from IEDs is managed in a meter data management (MDM) system and a distribution management system (DMS) and is used by engineers and technicians to design and operate an ever-more-reliable, efficient and responsive energy delivery system.

For CPS Energy, the AMI component of the intelligent grid has been pivotal to slowing the growth of energy consumption and power demand. It enabled the implementation of time-based pricing rates and demand-response programs, empowering customers to manage their energy costs. Furthermore, AMI serves as the pathway for delivering new services to our customers and returning increasing revenue to the company. AMI also looks to utilize open standards to leverage the investment in technology. Open standards allow CPS Energy to "plug-and-play" future technologies as older technologies become obsolete. This strengthens CPS Energy's position to increase customer satisfaction and bring value-added services to its customers.

As a forward-looking utility, CPS Energy saw in 2007 that the virtual certainty of climate change regulation, combined with our Core Purpose to benefit our community by improving the quality of life of the people we serve, demanded a change in the way we delivered sustainable stakeholder value and maintained our enviable customer satisfaction ratings. The consolidation of research accountabilities for energy delivery, small-scale renewable and distributed energy, and customer solutions brought CPS Energy recognition as a savvy industry leader in successful technology integrations. CPS Energy was one of the first utilities in Texas to demonstrate and subsequently deploy advanced energy-storage devices across its distribution system. Utility-side storage systems now enable improved system reliability and power quality for costs that are competitive with more conventional methods. Advanced battery systems have been used to delay or defer new substations, thus allowing capital dollars to be used for other distribution system infrastructure improvements. Customer-side storage systems are leased by CPS Energy to commercial customers, providing a sustainable and growing revenue stream for the company and competitively-priced, environmentally-friendly power quality support for the customers. Customer-side energy storage allows certain commercial customer segments to participate in demand-response programs, renewable energy programs or both. For instance, some customer battery systems are "charged" with renewable energy when the energy price signals are lowest and discharged when energy prices are peaking. In this way, customers reduce their energy costs while shrinking their carbon footprints, and CPS Energy reaps the benefits of lower peak demand.

Residential customers have benefited from CPS Energy's innovation and technology implementation expertise as well. In 2009, CPS Energy piloted cutting-edge home area network (HAN) systems that allowed homeowners to remotely monitor the energy usage of their homes, adjust their thermostats, turn appliances on and off and communicate with and through the utility company. CPS Energy used the feedback from this pilot to improve the communications system and is now deploying in-home devices in areas where the AMI architecture is stable.

Building on research it began to conduct in the early 2000s, CPS Energy now has an active distributed energy resources (DER) program. These small-scale power generation systems (typically 3kW to 10 MW) are used to provide an alternative to or an enhancement of the traditional electric power system. Rising energy prices have made these types of systems more cost-effective than they have been historically. The desire to capture and use as much waste energy as possible, while reducing their carbon footprint, has fueled growing DER popularity within certain customer segments. Within both the residential and commercial customer groups, there has been a growing desire to power some subdivisions and commercial business parks in a way that allows them to disconnect from the electric grid. Although these microgrids are small relative to the traditional electric grid, CPS Energy has embraced the technologies, innovative design and operating practices necessary to make them a reality. CPS Energy now collaborates with customers, DER providers and other stakeholders to install combined heat and power (CHP) systems, reciprocating engines, fuel cells and photovoltaic systems. Customers find it easy to do business with us because of plug-and-play interconnection and real-time information exchanges enabled by AMI.

The Smart Energy program, marketed by the Gas Business Unit, was launched in 2000. Over time, enhancements to the program resulted in consistent growth in gas market penetration across the CPS Energy service area. Beginning in 2009, the Smart Energy program began to incorporate many of the outcomes from the Peak Performance Home pilot project launched in 2007. The Smart Energy concept is now a key component of the corporate energy-efficiency and demand-reduction initiative, delivering the double benefit of sustained gas-load growth and slowing electric demand growth. Additional gas-load growth and electric demand-reduction opportunities are on the horizon as CPS Energy evaluates the next generation of gas-fired fuel cell technologies, super boilers and other commercial, industrial and residential end-use applications as possible additions to the Gas Business Unit's marketing portfolio.

CPS Energy's aggressive energy-efficiency, conservation and renewable-energy goals gained momentum within the communities it serves because customers and stakeholders saw that the company practiced what it was preaching. To achieve our targets, the company looked to both traditional and innovative methods. In 2009, CPS Energy collaborated with EPRI and other utilities to field test a unique plug-in hybrid electric vehicle (PHEV) – a heavy-duty trouble truck. The partners in the project gained knowledge and experience with the technology that helped accelerate the development of some of the first market-ready, commercial-grade vehicles available. CPS Energy

now has a small-but-growing fleet of PHEVs that include both passenger vehicles as well as commercial vehicles.

Because CPS Energy knows the utility industry will need to rely on technology to help solve the critical energy and environmental problems facing this country, the company continues to invest its R&D and technology-transfer resources wisely, routinely releasing “plug-and-play” technologies for utility-side improvements and enhanced customer satisfaction and loyalty.

Financial Integrity

The utility industry has taken on unprecedented financial investments since 2008 and that trend will continue into the decade of 2020. In 2008, the industry predicted that capital expenditures for the next 10 years would be nearly double the total capital assets on company balance sheets in that year. That projection was right on target. The main drivers for the expenditures have been the construction of baseload generation plants, replacement and modernization of the grid, and the additions and modifications to existing coal plants to reduce emissions. Additionally, carbon taxes have helped speed the development of clean-coal-generation technologies that are much more costly to build than traditional plants.

CPS Energy is a microcosm of an industry bearing significant financial risks. The cost of additional baseload generation since 2008 was significant. In addition, the cost of the AMI deployment topped \$100 million, along with a number of plant emissions upgrades and grid-refurbishment projects that have been completed since 2008. In fact, our capital assets doubled in value by 2017 relative to 2008 assets on the balance sheet.

It takes abundant cash to finance such massive capital expansion, and CPS Energy has been able to raise funds from traditional sources (internally generated funds and long-term tax-exempt debt financing) and from more-innovative sources. Utilization of taxable debt funding, bond proceeds from CPS Energy-owned public facility corporations, and asset-backed vendor financing arrangements, have allowed us to raise capital and maintain one of the highest bond ratings in the industry despite market pressures. Through periods of economic uncertainty, this rating has enabled CPS Energy to fund the capital program without an undue burden being passed on to our customers. As a result, our ability to attract economical forms of debt financing has continued to be a competitive advantage for CPS Energy. With new technologies emerging to offer customers additional options, we have used our skills to develop creative new financing partnerships with customers and vendors to minimize the impact on the entire customer base.

Robust financial planning, cascading from corporate-level strategy and fiscal preparation through all CPS Energy business units, has also been a key reason for our success in these extraordinary times. Today, each business unit has its own set of financial statements and systems that produce real-time financial-performance data. Managers use this information to effectively direct the business of the unit. Senior management monitors summary data included in the corporate dashboard. As stand-alone profit or cost centers, each unit evaluates major potential capital and O&M expenditures utilizing business-specific weighted average costs of capital and appropriate return targets. A tremendous evolution occurred in the last decade in our ability to charge the costs expended by shared service groups on a “cost driver” basis to their business unit clients. Knowledge and control of the shared expenditures at the business-unit level have given senior management full accountability for business unit financials and greater control over administrative and general expenses.

While much accountability for CPS Energy's financial performance is vested in the business units, the company has a culture of continuous improvement. This culture is visible in the numerous Value Stream Mapping Projects that have occurred over the past decade and continue today. Value Stream Mapping ignores the business unit boundaries, modeling and improving the major processes CPS Energy utilizes to deliver the value of electric and gas energy and related products and services to our ultimate clients. This is cross-unit, enterprise-wide work that constantly eliminates wasteful activities and finds less-expensive ways to execute the indirect and direct tasks necessary to deliver ever-increasing value to the client. This evolution of our company has been key in extracting valuable O&M cost reductions as of 2020, further enhancing CPS Energy's ability to obtain financial leverage instruments while maintaining excellent credit ratings.

Finally, the financial integrity of any company also involves management of the top-line or, in our case, revenues generated from the sale of energy and related services. CPS Energy implemented a series of bi-annual electric base rate adjustments beginning in 2008. These increases were necessary to support our \$12 billion capital program (2008-2020) to serve the growing San Antonio region. Despite these challenges, CPS Energy's average retail rates remain competitive.

We once spoke of rates, rate strategy and ratepayers. Today, we speak of pricing products and service bundles that represent additional value to our clients. Market segmentation has allowed CPS Energy to offer tailored pricing products for energy that are more aligned with creating the value that customer segments desire from their energy provider. Instead of a "rate tariff" portfolio that is composed of average rates across broad rate classes of customers, we have a diverse portfolio of pricing products that provide the return on equity (ROE) required by our owner. Our customers correctly perceive that CPS Energy is differentiated among other energy providers due to the many product and service options that are available to meet their needs.

The innovative approaches implemented through our financial and rate strategies continue to position CPS Energy as a competitive energy provider in Texas. In fact CPS Energy prices remain among the lowest of the major metropolitan areas in the United States.

Conclusion

This Vision of our future unifies our commitment to the community and our commitment to our broader role in society as a part of providing highly valued energy services. It imagines the success that comes from making the changes that lead the industry and add value for our customers and San Antonio. There are many variables that will arise between now and 2020 as our community and our industry evolve. Our analysis of these competitive threats in the individual business units, on the Value Stream Team and within the Raise the Bar initiative will help keep us on course for success. Throughout this challenging era, we commit to communicating the Vision with our employees, our customers and our other stakeholders. Success, however, is not just a series of steps taken by the company. It is a vital element of every transaction we have with our customers and with each other. Each of these occasions is an opportunity to demonstrate commitment to our Core Purpose, our Core Values and the high-quality tradition of CPS Energy. Change is an inevitable feature of our industry's next decade, and our positive response to these changes will create a winning Vision for our customers, our community and for each of us.