I. Meeting Packet

State of Florida
Public Service Commission
INTERNAL AFFAIRS AGENDA
Thursday – January 21, 2021
9:30 AM
Room 148 – Betty Easley Conference Center

1. Public Utility Research Center 2020 Annual Report to the Florida Public Service Commission by Dr. Mark Jamison

2. Draft 2020 Annual Report on Activities Pursuant to the Florida Energy Efficiency and Conservation Act

3. Summary of 10/8/2020 workshop comments regarding secondary standards testing in water distribution systems

4. Legislative Updates

5. General Counsel's Report

6. Executive Director's Report

7. Other Matters

BB/aml

OUTSIDE PERSONS WISHING TO ADDRESS THE COMMISSION ON ANY OF THE AGENDAED ITEMS SHOULD CONTACT THE OFFICE OF THE EXECUTIVE DIRECTOR AT (850) 413-6463.

Attachment 1

UF PUBLIC UTILITY RESEARCH CENTER

WARRINGTON COLLEGE *of* BUSINESS

ANNUAL REPORT

PURC 2020

Update on PURC Research and Outreach

This update on PURC research and outreach is intended to serve as an overview for FPSC commissioners and professional staff. At the end of this summary is a list of recent research papers that are also available through the research papers search engine on the PURC website at www.purc.ufl.edu. We truly appreciate the support of the FPSC and welcome opportunities for continued collaboration.

PURC 2020 Annual Report to the Florida Public Service Commission

UPDATE ON PURC RESEARCH AND OUTREACH

Table of Contents

PURC 2020 Annual Report to the Florida Public Service Commission

UPDATE ON PURC RESEARCH AND OUTREACH

STATISTICS AND HIGHLIGHTS

Statistics

- 55 online events
- 32 blog posts
- 13 working papers and journal articles
- 1 opinion editorial
- 3 research conference presentations

48th Annual PURC Conference (2021)

The 48th Annual PURC Conference, "Resilience and Recovery in Regulation: What is the pandemic teaching us?" will closely examine what has been learned about our regulatory system and its adaptability during the COVID-19 pandemic. The conference will be hosted online, February 17 – 19, 2021 and registration will open in January. We hope you will join us!

47th Annual PURC Conference (2020)

More than 80 key leaders in industry and government attended the 47th Annual PURC Conference, "Rates, Realities & Risks: Ratemaking for the Future" held February 19 – 20, 2020. Conference speakers and attendees examined ratemaking and how it applies to public policy, the electric vehicle industry, energy consumption, and future efficiency innovations.

Next Practices Live series

There are no best practices. All we can decide is what to try next. Starting in March 2020, we hosted 35 Next Practices Live sessions, where we interviewed experts, executives, and regulatory professionals on their next practices, including responses to the COVID-19 pandemic. Participants engaged virtually with experts and each session was also recorded and archived online here: https://warrington.ufl.edu/public-utility-research-center/category/next-practices/.

Digital Markets Initiative (DMI)

DMI examines the business and regulatory implications of the growth of digital markets, through rigorous and relevant research, public engagement, and student mentorship. PURC launched this initiative Fall 2019 and helped set the stage for the business college's new emphasis on data analytics and artificial intelligence. Faculty hires complement new funding that is expanding faculty providing coursework and research on fintech that will incorporate new enabling technologies, new roles and capabilities in the financial sector, and the emerging regulatory issues. In 2020, DMI hosted 17 events featuring 29 expert speakers.

Research Initiatives on Distributed Energy Resources, Incentive Regulation, and Competition

PURC faculty and affiliates are engaged in research on behavioral changes of solar customers, technology innovation, distributed energy resources, deregulation, anticompetitive conduct, and mergers.

PURC/World Bank International Training Program on Utility Regulation and Strategy

Fifty-one utility regulators, policy-makers and infrastructure managers from 22 countries attended this two-week program in January 2020. Since its inception in 1997, this program has educated more than 3600 professionals representing 156 nations.

PRIMARY RESEARCH PROJECTS

ENERGY

Valuing Municipal Utilities – The Case of the Potential Sale of JEA in Jacksonville

PURC examined valuation and other issues related to the potential sale of JEA. According to the assessment, the utility's current value is $7.5 billion, which is not inconsistent with earlier valuations promulgated by JEA. The report addresses considerations when evaluating a possible sale of the JEA, including history, effects on the city's welfare, possible advantages and disadvantages of being a municipal utility, regulatory treatment of investor-owned utilities vs. municipal utilities, and factors, such as timing, that could significantly impact the potential seller and buyer.

Motivating the Optimal Procurement and Deployment of Electric Storage as a Transmission Asset

Examined the optimal choice between two means of relieving congestion in an electricity network: (1) traditional expansion of transmission capacity; and (2) storage as a transmission asset (SATA). Assuming the electric utility has unique knowledge of both the cost of implementing SATA and the likelihood of local network congestion, the optimal policy differs considerably from policies under active consideration, in part by paying the utility relatively little for implementing SATA. Despite the relatively limited compensation, the utility profits from its unique knowledge, particularly its knowledge of SATA implementation costs.

Designing Compensation for Distributed Solar Generation: Is Net Metering Ever Optimal?

Electricity customers who install solar panels often are paid the prevailing retail price for the electricity they generate. This paper demonstrates that this rate of compensation typically is not optimal. A payment for distributed generation that is below the retail price of electricity often will induce the efficient level of distributed generation when the fixed costs of centralized electricity production and the network management costs of accommodating intermittent solar are large, and when centralized generation and distributed generation produce similar (pollution) externalities. The payment for distributed generation can optimally exceed the retail price under alternative conditions. The optimal compensation policy varies considerably as industry conditions change.

Solar Impacts: Does Distributed Production Affect Consumption Choices?

As the role of distributed generation grows in the electricity industry, this growth is accompanied by questions regarding its impact on the rest of the system, chiefly the impact on finances, environmental footprint and reliability. Unfortunately, analyses of these impacts assume, a priori, that generation from distributed resources displaces generation from "somewhere else", usually centralized resources and a 1:1 basis. We examine the behavior of customers who install solar arrays on their homes and find that these customers increase consumption by 8-14%. That is, every 100 kWh generated by residential distributed solar displaces only 86-92 kWh from other sources. This result has profound impacts on the financial compensation of these resources, their role in reducing emissions, and their impact on system reliability.

Five Things Regulators Should Know About Blockchain (and Three Myths to Forget)

With all the excitement about blockchain, it is important that utility regulators separate truth from myth. What should they know? The basic benefits of blockchain technology, its potential regulatory applications, the roles of smart contracts, and the implications for artificial intelligence. What are the myths? That blockchain removes the need for trust, that it uses too much electricity, and that smart contracts are actually smart and contracts.

Employing Simple Cost-Sharing Policies to Motivate the Efficient Implementation of Distributed Energy Resources

This paper considers the optimal design of simple cost-sharing policies to motivate electricity distribution utilities to manage the costs of distributed energy resource projects. The optimal share of realized cost savings that is awarded to the utility takes a particularly simple form in certain settings. More generally, the savings can vary with the prevailing environment in subtle and sometimes counterintuitive ways. For instance, the savings may increase as cost savings become less onerous for the utility to secure and as the utility becomes more averse to risk. Gains from affording the utility a choice among cost-sharing policies typically are minimal.

Vertical Integration and Capacity Investment in the Electricity Sector

This paper examines the incentives for and the effects of vertical integration in the electricity sector. It finds that vertical integration often reduces retail prices and increasess industry capacity investment, consumer surplus, and total welfare. Unilateral vertical integration often is profitable. However, ubiquitous vertical integration can reduce aggregate industry profit.

Designing Performance-Based Regulation to Enhance Industry Performance and Consumer Welfare

This article provides two observations about the design and implementation of performance-based regulation (PBR) in the electric power industry. First, PBR delivers stronger incentives for superior performance when the "ratchet effect" is mitigated. Consequently, utilities should be rewarded (penalized) based on their performance relative to external benchmarks (such as industry productivity growth) rather than internal performance benchmarks (such as the firm's own earnings). Second, even when hindered by limited information, regulators can ensure that consumers benefit from the implementation of PBR by offering utilities a choice among a carefully designed set of regulatory options.

Energy Blogs

Dr. Kury blogs on energy issues for The Conversation. He addresses issues of storm hardening, taxes, and grid security. In 2020, his posts were read over 40,000 times. His blogs are available at https://theconversation.com/profiles/theodore-j-kury-406888/articles.

Market-based Policies for Broadband in Florida

Nearly all Floridians have access to broadband and the percentage with access continues to grow, but a gap remains. Contrary to conventional wisdom, the gap does not appear to be driven by low incomes or low population density. While the counties with low access all have low population density, many comparably populated counties have extensive broadband access. A similar pattern holds for income levels. So any government program to expand access should focus on the peculiarities of particular situations.

Applying Antitrust in Digital Markets

Challenges an emerging school of thought that businesses should be broken up simply if the businesses are large. The so-called neo-Brandeisians hold that large is always anticompetitive and a threat to democracy. This paper demonstrates the economic fallacies and historical errors of this school.

Economic Scholars' Summary of Economic Literature Regarding Title II Regulation of the Internet

Much has been claimed about the economics of the FCC's 2014 decision to classify internet service as a Title II common carrier service, but little of what is said seems to relate to actual economic research. A group of scholars, led by PURC, summarized the economic research and provided this summary to the FCC in its Restoring Internet Freedom proceeding. In general the research shows that some of the activities prohibited by the FCC's decisions can actually be beneficial to customers, but not always.

Revealing Transactions Data to Third Parties: Implications of Privacy Regimes for Welfare in Online Markets

This paper examines the effects of privacy policies regarding transactions (e.g., price/quantity) data on online shopping platforms. Disclosure of transactions data induces consumer behavior that affects merchant pricing decisions and the welfare of platform participants. A profit-maximizing platform prefers the disclosure policy that maximizes social benefit. Although this policy benefits sophisticated consumers, it harms those who do not understand the implications of their behavior. Consequently, the welfare effects of alternative privacy policies, data breaches, willful violations of stated privacy policies, and opt-in/opt-out requirements differ sharply, depending on the level of consumer sophistication and on other factors such as the prevailing status quo.

Net Neutrality Policies and Regulation in the United States

This paper examines the history of net neutrality in the United States, beginning with Federal Communications Commission decisions the 1960s and 1970s that laid the groundwork for neutrality policies. The paper also summarizes the economics literature on net neutrality to assess the implications of alternative regulatory approaches.

Technology Blogs

Dr. Jamison blogs on technology issues for the American Enterprise Institute. He addresses issues of net neutrality, universal service, privacy, innovation, competition, and regulatory institutions. His blogs are available on the American Enterprise Institute website at http://www.aei.org/scholar/mark-jamison-2/.

WATER

Performance Assessment Using Key Performance Indicators (KPIs) for Water Utilities: A Primer

Key Performance Indicators (KPIs) are widely recognized as a basis for evaluating water utility operations in developing countries and for designing both regulatory and managerial incentives that improve performance. A number of methodologies can be used for assessing performance. However, regulatory oversight requires data analysis of trends, current performance and realistic targets. Quantitative studies can provide clues regarding the extent of economies of scale, scope, and density, but policy-makers need much more detail and specificity than most scholars provide. Here, the focus is on information systems that provide accurate, reliable, and relevant data.

MULTISECTOR

Blockchain

Dr. Jamison has written several blogs on applying blockchain for regulatory issues. He has also launched a Florida Blockchain group that provides educational services, helps people form businesses using the technology, and advises businesses and governments on the application of blockchain. He testified before the Florida Blockchain Task Force.

Access Pricing in Mixed Oligopoly

Characterizes optimal access prices in mixed oligopoly where a private, profit-maximizing firm competes against a public enterprise after purchasing an essential input (e.g., network access). Optimal access prices tend to be lower for the private firm than for the public enterprise, and can be particularly low for a relatively efficient private supplier. The optimal access price for a private firm is the same whether it competes against another private firm or a public enterprise. Failure to tailor the prevailing access pricing policy to the objectives of the competing suppliers can reduce welfare substantially.

Stakeholders and Power Relations in Regulation

Stakeholders play at least two roles in utility regulation: Some receive benefits, such as customers protected from monopoly power. Stakeholders also influence regulation by, for instance, commenting in proceedings. Most studies on stakeholder relations focus on engagement, such as through advisory groups and public hearings. Largely missing are analyses of power relationships. Some stakeholders, such as lawmakers, have formal

authority over regulatory bodies. Others have little formal authority. Stakeholders also vary in how and the degrees to which regulators affect them. This paper examines these relationships and illustrates them with a survey of regulatory agencies in the Caribbean.

OUTREACH

Plans for the 48th Annual PURC Conference – Resilience and Recovery in Regulation: What is the Pandemic Teaching Us?

What a year 2020 was! The pandemic caught us flatfooted and raised issues such as how to conduct business and regulation while keeping people safe, how to serve large numbers of customers that have struggled financially, how to manage supply lines when markets are disrupted, and how to practice leadership when we find ourselves in situations none of us have experienced before.

Perhaps the most remarkable thing about 2020 is how well everyone stepped up and adapted to the situation. Utility service providers offered customers plans for keeping them connected. Utility regulators figured out how to maintain transparency, legitimacy, credibility, and predictability without in-person engagements. Both operators and regulators learned to fully engage with a public whose diverse needs were escalated by the pandemic. And people have monitored carefully the financial consequences and begun planning for recovery.

Please join us for the 48th Annual PURC Conference where speakers and the audience will examine what we have learned and what do we do next.

Intelligent 5G Opens Way for Convergence

The development of 5G opens new sources of revenue for broadband development, according to PURC director Mark Jamison. Speaking at the annual conference of the Organisation of Caribbean Utility Regulators, Dr. Jamison explained that network slicing enables internet service providers to begin capturing value from the content side of their network platforms. But doing so successfully will require regulatory flexibility where regulation allows exploration of alternative business models while continuing to ensure that service remains affordable for the most vulnerable customers. The conference was held online December 1 and 3, 2020.

How Will a Biden Administration Affect Tech Innovation?

That was the question addressed by PURC director Mark Jamison during a tech policy call sponsored by the American Legislative Exchange Council, the State Policy Network, and the Washington Policy Center on November 30, 2020. Dr. Jamison explained that it remains to be seen what the new administration will choose as its policy priorities, but the campaign promises imply that Mr. Biden will reintroduce policies that failed during the Obama administration. These include allowing political influence in broadband spending, encouraging governments to compete with the private sector for broadband, and reintroducing net neutrality regulations. Dr. Jamison also expressed concern for antitrust as the new administration is being encouraged to file lawsuits against companies as a method for testing new antitrust theories. Lawsuits are costly and have cascading impacts, making them poor means for testing ideas.

The Utility Bill for the Pandemic is Coming Due – Who's Going to End Up Paying It?

That was the subject of PURC Director of Energy Studies Ted Kury's presentation at the 2020 OOCUR Virtual Symposium in December. At the annual meeting of Caribbean utility regulators, he talked about the magnitude of the debts accumulated due to moratoria on utility ate fees and disconnection for non-payment and basic

strategies for addressing those debts. He also talked about some of the implementation challenges for these strategies and the role of the utility, regulator, government, and consumer groups for addressing those challenges.

Big Tech and Antitrust: Assessing the House Judiciary Committee Staff Report

Mark Jamison hosted a panel discussion on the House Judiciary Committee's recent staff report, which recommends sweeping antitrust action against Big Tech firms. The panel of antitrust experts examined the implications of the recent staff report and what is at stake for the United States economy moving forward. This event was hosted by the American Enterprise Institute. The panel was hosted on October 25, 2020 and the recording can be viewed on the PURC website here: https://warrington.ufl.edu/digital-markets-initiative/events/.

What is PURC, Its Role in the UF community, and Around the World?

These questions and other were addressed by PURC Director of Energy Studies Ted Kury's presentation at the first Food and Resource Economics faculty seminar of the 2020-21 school year in September. He talked about PURC's mission, programs, and research initiatives and outlined opportunities for interested faculty to contribute to the body of knowledge on the regulated utility sector.

Abuse of Superior Bargaining Position

Panelists discussed the use of Abuse of Superior Bargaining Position (ASBP) in Japanese competition law and particularly for online markets. The panel included insights from law and economics from both academics and practitioners. We were honored to have Commissioner Reiko Aoki of the Japan Fair Trade Commission on our panel. This online event was co-sponsored by the Digital Markets Initiative (DMI) at the University of Florida and the University of Florida Levin College of Law.

How is University Research Addressing Today's Energy Challenges?

That was the subject of PURC Director of Energy Studies Ted Kury's presentation at the 2nd Annual USEA Advanced Energy Technology Forum in September. He first talked about some of the challenges that utilities and regulators are facing due to the economic impacts of the COVID pandemic, and strategies to address them. He also talked about efforts to detect unregistered solar installations – a significant problem internationally – through machine learning algorithms utilizing customer billing data. You can view the recording on YouTube here: https://youtu.be/xyLWEwbUDfY.

Competing with China: by Increasing Innovation, Not Size

PURC director Mark Jamison contributed to The Nonproliferation Policy Education Center's virtual meeting on using antitrust to improve US competitiveness with China. The thesis of the event was that the US would better compete with China if the US were to break up Big Tech. Dr. Jamison explained empirical research has

consistently shown that there is no relationship between firm size and overall innovation, so the event's thesis was false.

How Should Governments Analyze Possible Regulations?

That was the topic for PURC director Mark Jamison when he addressed students at the Centro de Consultoría y Servicios Integrados, Pontifica Universidad Catolica del Peru on July 25, 2020. Speaking online, Dr. Jamison explained the processes of regulatory impact analysis and how to carefully identify the research questions, engage stakeholders, conduct analyses, and objectively evaluate alternative policies.

Antitrust Virtual Workshop series

Over the summer, DMI cohosted a series of 14 workshops on a variety of antitrust topics, including *Keeping Score: Improving the Reporting of Data on Public Antitrust Enforcement*, *The Political Face of Antitrust*, and *The Competitive Process*.

How has COVID-19 Impacted ICT in the United States?

That was the topic of a panel moderated by PURC director Mark Jamison for the Telecommunications Policy Research Conference (TPRC). The panel included Professor Eli Noam of Columbia University, Professor Roslyn Layton of Aalborg University, and Dr. Scott Wallsten of the Technology Policy Institute. The panelists explored universal service, broadband affordability, net neutrality effects, and broadband for education.

Hot Topics in Platform Tech

Academic and PhD students in business schools studying platforms joined us for this interactive event, featuring a panel discussion and virtual small table discussions to discuss research gaps and their application to platform policy debates on competition and privacy. We were honored to have Commissioner Christine S. Wilson of the Federal Trade Commission join us.

The Post-Pandemic Energy Sector: a webinar series with the Energy Bar Association

The Energy Bar Association's Sothern Chapter and the Public Utility Research Center at the University of Florida present a three-panel webinar series taking place each Monday for three weeks starting Monday, June 29, 2020. Each Monday featured a different panel to discuss the lessons and challenges of the post-pandemic energy sector.

Towards a Theory of Market Power at the Western Economics Association International Conference

Today's antitrust practices are based on simplistic notions about market power, according to Mark Jamison. Presenting his paper "Towards a Theory of Market Power" at the Western Economics Association International

Conference on June 27, Dr. Jamison explained that longstanding definitions and analytical tools are inadequate to today's markets because they conflate market control with market success. Market power is the ability to exercise control over a market to the harm of customers. Often antitrust practitioners think that large firms possess such power. But a successful firm becomes large by providing superior products. This is especially true in today's fast-changing digital markets. Dr. Jamison offered a more rigorous definition of market power that is often used and proposed new tests for market power.

Applying Antitrust in Digital Markets: Foundations and Approaches at the Western Economics Association International Conference

The rise of digital markets is creating a need to change how governments think about antitrust, according to Mark Jamison. Presenting his paper "Applying Antitrust in Digital Markets: Foundations and Approaches" at the Western Economics Association International Conference on June 27, Dr. Jamison described the foundations of antitrust and ways it should be adapted. Antitrust has both political and economic foundations. The political approach emphasizes populist themes that ultimately harm economic development, while economic approaches focus on characterizations of, and remedies for market power. Digitization of markets thwarts current antitrust tools by adding complexity and rapid change. A number of authors suggest populist approaches for antitrust in digital markets, but these lack rigor and fail to address central challenges. Dr. Jamison suggests that antitrust should return to its earliest roots and directly address features in the economy that create market power.

How Platform Components Impact Ecosystem Value: The Case of Smartphones and Mobile Broadband at the Western Economics Association International Conference

The introduction of the iPhone in 2007, followed quickly by its imitators, triggered a significant jump in the growth of mobile broadband around the world, according to a paper by Peter Wang and Mark Jamison. Peter presented their paper, titled "How Platform Components Impact Ecosystem Value: The case of Smartphones and Mobile Broadband" at the Western Economics Association International Conference on June 27th. The presentation highlighted the importance of modern smartphones in the digital markets ecosystem and its role in facilitating the subsequent proliferation of mobile broadband across the world. He also presented evidence that country mobile broadband penetration rates rose sharply after exposure to the most iconic of early modern mobile devices, the iPhone. Specifically, for OECD countries, growth rate of mobile broadband penetration prior to the official iPhone introduction was 14.4 per 100 residents per year and 18.1 per 100 residents after iPhone is introduced, representing a 25% increase in the rate of growth. The picture is even more stark for developing countries, which have low mobile broadband penetration and nearly zero growth prior to official iPhone introduction and grows at a rate of 7.7 per 100 residents per year after iPhone is introduced. These results confirm the momentousness of a single mobile device innovation in facilitating the drastic rise in the value of the entire digital ecosystem.

How Should Competition Policy Apply to Internet Giants, like Facebook and Google?

That was the topic of Mark Jamison's webinar for the Pontifica Univesidad Colica del Peru on June 11, 2020. Speaking before invited guests and students in the university's masters programs on regulation, Dr. Jamison described how competition policy evolved from people who worried about anything big - including both big companies and big government - to a concern for the effects of market power on consumers. This was an important evolution because it meant that competition policy had to adopt specific metrics and limit its discretion.

Today's internet companies have gotten so large that there is a movement to go back to the days of antibigness. Dr. Jamison believes this idea is misplaced. He agrees that today's antitrust practices are misaligned with the dynamics of today's internet markets, but the answer isn't to lose objectivity, but to return to the roots of the true meaning of market power. Dr. Jamison explained that today's markets change so fast that it is no longer appropriate to infer market power from market outcomes, like market shares and high profits, and instead look for and address underlying factors that make it possible to have market power.

Antitrust Populism and the Rule of Law

Antitrust would become more arbitrary and used to attack political opponents if antitrust in the United States were to follow the recent populist ideas. That's the message Dr. Mark Jamison conveyed at an event sponsored by The Committee for Justice on June 11, 2020. Dr. Jamison explained that the leaders of the populist movement falsely identify themselves with Luis Brandeis, except to the extent that they would use antitrust to attack people and companies they do not like. The populists have built their ideas on false premises, such as Amazon does not pursue profits, and unsubstantiated biases, such as fears of big companies. It is important that the country continue to use objective metrics for antitrust, such as the consumer welfare standard. Dr. Jamison's fellow panelists were Professor Richard Epstein of the Hoover Institution, and Kristian Stout of the International Center for Law & Economics.

Internet Giants and Competition Policy

How should governments consider antitrust issues for Big Tech companies? That was the topic for PURC director Mark Jamison when he addressed students at the Centro de Consultoría y Servicios Integrados, Pontifica Universidad Catolica del Peru on June 11, 2020. Speaking online, Dr. Jamison explained that regulators should not be fooled by the sizes of the Big Tech companies. They face competition from each other, from other companies, and from startups. He described the dynamics of competition and how to identify market power.

How Will 5G Affect Regulation?

The rollout of 5G across the world will raise some new issues and resurrect some old issues, according to PURC director Mark Jamison. Speaking to a staff meeting of the International Finance Corporation, Dr. Jamison explained that new issues include primarily how to speed deployment by streamlining siting, permitting, security, and radio spectrum issues. Often these are handled by separate governmental entities, which can be known to take much time in completing the necessary paperwork. Regulators may need to press for consolidating and streamlining these processes. Old issues are primarily about competition and market structure. There is some belief that 5G will lead to more infrastructure sharing. If this is true, it will change competitive dynamics, so regulators might need to monitor collusive activity. But the primary challenge will involve rethinking vertical market issues. Many countries have adopted net neutrality regulations that seek to make networks homogenous for users. Network slicing, which is now inherent in 5G, allows massive customization, which violates net neutrality. Countries that do not loosen their net neutrality restrictions risk falling behind because the restrictions decrease the financial viability of 5G deployment.

Annual PURC Award for Best Paper in Regulatory Economics

The 2020 Public Utility Research Center Prize for the best paper in regulatory economics was awarded to Jason Allen (Bank of Canada), Robert Clark (Queen's University), Brent Hickman (Washington University in St. Louis) and Eric Richert (Queen's University) for their paper *Resolving Failed Banks: Uncertainty, Multiple Bidding, and Market Design*.

Results of the 47th Annual PURC Conference – Rates, Realities & Risks: Ratemaking for the Future

More than 80 key leaders in industry and government attended the 47th Annual PURC Conference, "Rates, Realities & Risks: Ratemaking for the Future" held February 19 – 20, 2020. Conference speakers and attendees examined ratemaking and how it applies to public policy, the electric vehicle industry, energy consumption, and future efficiency innovations.

Body of Knowledge on Infrastructure Regulation (BoKIR) Web site

PURC continues to manage this valuable online resource to include more recent information in its sections. Currently, the web site provides tutorials, literature surveys, self-paced tests, and more than 500 downloadable references on utility regulation, as well as a regulatory glossary translated into several different languages. As of 2020, the glossary of terms is available in 11 languages including Bulgarian and Arabic.

TRAINING AND DEVELOPMENT

PURC Training on Telecommunications and ICT Regulation for the Communications and Information Technology Commission of Saudi Arabia (CITC)

PURC provided an extensive overview of ICT economic regulation for the CITC of Saudi Arabia. Topics included the design of regulatory systems, technology convergence and its implications for business reform, economics and pricing of ICT platforms, assessing competition and anticompetitive conduct, privacy regulation, cyber security, radio spectrum management, universal service, wholesale pricing, retail price regulation, and regulatory sandboxes. The course was provided online over a 15-day period in November 2020.

PURC Virtual Course in Advanced Topics for World Bank Staff

PURC delivered a customized course for the staff of the World Bank encompassing the use of benchmarking and impact analysis to improve regulation and sector performance. Participants studied the technical tools and procedures in benchmarking and impact analysis and discussed the manner in which they can be applied in the countries they serve. Participants engaged in large and small group discussions in virtual breakout rooms, as well as hands on exercises in learning and applying technical tools to conduct and critique these types of analyses, and apply them to performance improvement in the utility sector around the world.

PURC Virtual Course in Pricing and Analysis for World Bank Staff

PURC engaged in two deliveries of a customized course for the World Bank staff on the process and mechanics of utility pricing. Participants based in the Washington DC office, as well as participants from Africa and the Pacific Rim engaged in discussions related to objectives of pricing systems, the determination of the costs necessary to provide service, and how to allocate to and recover those costs from customers. Participants engaged in group and small group discussions as well as hands-on exercises in virtual breakout rooms on a customized model to derive pricing systems and test their sustainability over time.

Comprehensive Regulatory Impact Analysis for the Liberian Electricity Regulation Commission

Members from the Liberian Electricity Regulation Commission (LERC) learned how to effectively and rigorously analyze and communicate the impacts of regulation. The course provided tools and approaches for regulatory impact analysis, a systematic appraisal of the potential impact of a regulatory decision to assess whether the decision is likely to achieve the desired objectives and at what costs. The customized program was hosted online in September 2020.

Analyzing Utility Finances in Times of Crisis

This virtual-live course gave participants the opportunity to take a deep dive into case studies and fundamentals that are necessary to understand utility finances in times of crisis. Participants engaged in a series of topics and exercises, which included crisis analysis, critical accounting frameworks, components and determination of the revenues necessary to provide service, and fundamentals of financial analysis. They also solidified the knowledge they gained through a scenario analysis, where they were asked to identify primary risk factors and use quantitative tools to assess the risk.

Comprehensive Regulatory Impact Analysis – a PURC online course

The online course Comprehensive Regulatory Impact Analysis provides tools and approaches for regulatory impact analysis (RIA), a systematic appraisal of the potential impacts of a regulatory decision to assess whether the decision is likely to achieve the desired objectives and at what cost. This spring, nine participants from six countries learned how to identify key questions, identify stakeholders and engage them in the analysis, use appropriate analytical techniques, and communicate their findings.

What Should Government Stakeholders, the Media, and Utilities Know About Utility Regulation?

That was the subject of a workshop that PURC provided for officials in the Bahamas. Leaders from several government ministries and departments, including those for disaster recovery, health, education, security, finance, immigration, standards, and the disabled, discussed numerous topics on the how and why of utility regulation. The participants examined why utility regulation exists and the essential features of a regulatory agency. They also studied the political context of regulation, how regulators engage in disaster preparation and recovery, and various current regulatory topics, such as renewable energy and non-revenue water. The program concluded with a discussion of leadership challenges in times of constant change, including next practices, how to ensure learning, and how to properly engage in stirring and steering. PURC director Mark Jamison and PURC director of leadership studies Araceli Castaneda conducted the workshop, which was held in Nassau in February 2020.

47th PURC/World Bank International Training Programs on Utility Regulation and Strategy

Fifty-one (51) utility regulators, policy-makers and infrastructure managers from 22 countries learned from each other and from leading experts during the January delivery of this two-week program at the University of Florida. The international training program is an intensive, two-week course specifically tailored to the professional requirements of utility regulators and regulatory staff. The course is designed to enhance the economic, technical, and policy skills required for implementing policies and managing sustainable regulatory systems for infrastructure sectors.

Practicing Leadership in a Political Environment: A One-Day Intensive Training Workshop for Emerging Leaders in Utility Policy

Sixteen (16) utility regulators and infrastructure professionals from 11 countries participated in PURC's Leadership Workshop: Practicing Leadership in a Political Environment. PURC's leadership development programs examine the activities, behaviors, mindsets and skills of a successful leader. Participants in this leadership workshop learned how to identify and build a leadership style that encourages collaboration and team cohesiveness. The workshop also examined the personal practices of successful leaders in the areas of time management, conflict resolution and priority-setting.

FACULTY RESEARCH FOCUS

Mark A. Jamison, Director

Dr. Jamison conducts studies on regulation and strategy in telecommunications, information technologies, and energy. In recent years, his research has been presented at meetings of the American Economic Association, Industrial Organization Society, Western Economic Association, Australian Competition and Consumer Commission, Telecommunications Policy Research Conference, the Caribbean Electric Utility Services Corporation, the Organisation of Caribbean Utility Regulators, and the National Association of Regulatory Utility Commissioners. He is the director of the university's Digital Markets Initiative and was a co-principal investigator on a National Science Foundation grant to examine barriers to adoption of solar technologies in developing countries. His current research examines market competition, innovation, antitrust, and institutional change. He has conducted training programs for regulatory organizations in Africa, Asia, Australia, the Caribbean, Central America, Europe, North America, and South America.

Ted Kury, Director of Energy Studies

Dr. Ted Kury's research has focused on three current issues confronting energy markets: the efficacy of relocating power lines, the complexity in determining optimal levels of carbon dioxide abatement, and the effects of restructured electricity markets. The relocation of power lines is a complicated question because relocation is very expensive and does not necessarily reduce the damage associated with storm events. In areas more susceptible to storm surge and flooding, the relocation may even increase damages, leading to a waste of valuable consumer and utility resources. Understanding how the efficacy of undergrounding changes with location is critical to ensuring that customers are receiving safe, reliable electricity service at just and reasonable rates. In addition to his academic work, Dr. Kury has published a number of essays in the popular press on the topic. His work on carbon abatement includes insight into the marginal cost curves for abatement. Theoretically, we can equate the marginal cost with the marginal benefits of abatement to determine optimal levels of emmissions. Economic theory provides clear guidelines on what constitutes optimal levels of production for any good – the point at which the marginal cost is equal to the marginal benefit. However, in practice, these curves are not always well-behaved, and this can lead to different characterizations of the optimum. So while an understanding of these costs and benefits is necessary to determine optimal levels, it is not sufficient, and public policy should take this into account. In addition, the sensitivity of these marginal abatement curves to the price of natural gas means that consumers suffer twice as natural gas prices increase. This question is critical as states decide how to comply with the EPA's Clean Power Plant Rule. Restructured electricity markets have led to more opportunities, but it is not clear how these opportunities are distributed. Dr. Kury's research has shown that the benefits of increased trade in transparent wholesale markets are not uniformly distributed, with larger and privately-owned utilities more apt to participate. He is also studying whether growth in distributed generation resources have an effect on consumption for consumers, impacting system planning and reliability. In 2018 he led the PURC team that performed a study for the Jessie Ball duPont Fund on the Value of Municipal Utilities, utilizing JEA in Jacksonville as a case study.

Araceli Castaneda, Director of Leadership Studies

Ms. Araceli Castaneda's leadership work in 2020 has mostly focused on the topic of change and the difficulties of its implementation. The same values that have made individuals and organizations effective over time may be holding them back from moving into a successful future. Surfacing those values and exploring the loss to be experienced will be key to accept and implement change. Of note in 2020, Ms. Castaneda also co-presented with PURC director, Mark Jamison the *Senior Policy Makers Regulatory Forum: What Should Government, Stakeholders, The Media and Utilities Know About Utility Regulation?* This workshop was designed for leaders from several government ministries and departments, including those for disaster recovery, health, education, security, finance, immigration, standards, and the disabled in February in The Bahamas. Participants examined why utility regulation exists and the essential features of a regulatory agency. They also studied the political context of regulation, how regulators engage in disaster preparation and recovery, and various current regulatory topics, such as renewable energy and non-revenue water. The program concluded with a discussion of leadership challenges in times of constant change, including next practices, how to ensure learning, and how to properly engage in "stirring and steering".

Sanford V. Berg, Senior Fellow

Dr. Sanford (Sandy) Berg, PURC Senior Fellow, continues to examine internal and external governance mechanisms in the context of infrastructure reform. After the December 2018 Conference in Manila (sponsored by the Bill and Melinda Gates Foundation), he assisted the Eastern and Southern Africa Water and Sanitation Regulators Association by reviewing their Gates-sponsored report on sanitation initiatives in the region. PURC is exploring a now has a funded project to assist in training and the development of resource materials. Berg also conducted a study for Jamaica's Office of Utility Regulation on reducing Non-Revenue Water. In addition, Berg continues to assist in the delivery of PURC eLearning and training programs for international participants.

David Sappington, Lanzillotti-McKethan Eminent Scholar

Professor Sappington's ongoing research focuses on the design of regulatory policies to: (i) limit peak electricity consumption by providing incentives for demand response; and (ii) promote efficient distributed generation of electricity via net metering and related policies.

APPENDIX

Public Utility Research Center

Recent Publications and Working Papers

Alvarado de Córdoba, Sylvia, and Juan A.B. Belt. 2018. "Central American Power Markets: Lessons Learned and Policy Recommendations with Particular Emphasis on Competitive Procurement" University of Florida, Warrington College of Business, PURC Working Paper.

Ajit, Tejaswi Channagiri, and Mark Jamison. 2020. "A Tale of Two Platform Ecosystems," University of Florida, Warrington College of Business, DMI Working Paper.

Baye, Michael R., and David E. M. Sappington. 2018. "Revealing Transactions Data to Third Parties: Implications of Privacy Regimes for Welfare in Online Markets." University of Florida, Department of Economics, PURC Working Paper.

Belt, Juan, and Nicolas Allien, Jay Mackinnon, and Bahman Kashi. 2017. "Cost Benefit Analysis of Power Sector Reform in Haiti" University of Florida, Warrington College of Business, PURC Working Paper.

Berg, Sanford V. 2017. "Three Lessons for Improving Infrastructure Performance" University of Florida, Warrington College of Business, PURC Working Paper.

Berg, Sanford V. 2020. "Performance Assessment Using Key Performance Indicators (KPIs) for Water Utilities: A Primer" In *Water Economics and Policy*. 6(2).

Berg, Sanford V., and David Richardson. 2019. "NWC K-Factor Enhancement Study" University of Florida, Warrington College of Business, PURC Working Paper.

Berg, Sanford V., and Michelle Phillips. 2018. "Networks in Infrastructure with Applications to Latin America and the Caribbean" Competition and Regulation in Network Industries Journal, forthcoming.

Bet, Germán, Roger D. Blair, and David E. M. Sappington. 2019. "The Impact of Vertical Integration on Losses from Collusion." University of Florida, Department of Economics, PURC Working Paper.

Brown, David P., and David E. M. Sappington. 2016. "Designing Compensation for Distributed Solar Generation: Is Net Metering Ever Optimal?" University of Florida, Warrington College of Business, PURC Working Paper.

Brown, David P., and David E. M. Sappington. 2016. "On the optimal design of demand response policies" Journal of Regulatory Economics, 49(3):265-291.

Brown, David P., and David E. M. Sappington. 2016. "On the Role of Maximum Demand Charges in the Presence of Distributed Generation Resources" University of Florida, Department of Economics, PURC Working Paper.

Brown, David P., and David E. M. Sappington. 2018. "Employing Simple Cost-Sharing Policies to Motivate the Efficient Implementation of Distributed Energy Resources." University of Florida, Department of Economics, PURC Working Paper.

Brown, David P., and David E. M. Sappington. 2018. "Optimal Procurement of Distributed Energy Resources," The Energy Journal, Vol. 39(5), September 2018, pp. 131-155.

Brown, David P., and David E. M. Sappington. 2018. "Optimal Policies to Promote Efficient Distributed Generation of Electricity," The Journal of Regulatory Economics, forthcoming.

Brown, David P., and David E. M. Sappington. 2018. "Self-Sabotage in the Procurement of Distributed Energy Resources," University of Florida, Department of Economics, PURC Working Paper.

Brown, David P., and David E. M. Sappington. 2019. "Motivating the Optimal Procurement and Deployment of Electric Storage as a Transmission Asset," University of Florida, Department of Economics, PURC Working Paper.

Brown, David P., and David E. M. Sappington. 2019. "On the Profitability of Self-Sabotage," University of Florida, Department of Economics, PURC Working Paper.

Brown, David P., and David E. M. Sappington. 2020. "Vertical Integration and Capacity Investment in the Electricity Sector," University of Florida, Department of Economics, PURC Working Paper.

Brown, David P., and David E. M. Sappington. 2020. "The Impacts of Load-Following Forward Contracts," University of Florida, Department of Economics, PURC Working Paper.

Castaneda, Araceli, and Mark A. Jamison. 2017. "Stakeholders and Power Relations in Regulation" University of Florida, Warrington College of Business, PURC Working Paper.

Cui, Shana, and David E. M. Sappington. 2019. "Access Pricing in Mixed Oligopoly," University of Florida, Department of Economics, PURC Working Paper.

Corton, Maria Luisa, Michelle Phillips, and Aneliese Zimmermann. 2020. "Aligning Quality Incentives and Tariff Adjustments: The Case of the Brazilian Electricity Distribution Sector" Review of Network Economics, forthcoming.

Costello, Kenneth. 2019. "A Cautionary Tale About Energy Efficiency Initiatives" Regulation, 42(1): 26-29.

Costello, Kenneth. 2019. "Rent-Seeking under Public Utility Regulation: Who Protects Ratepayers?" University of Florida, Warrington College of Business, PURC Working Paper.

Dippon, Christian, et al. 2020. "Adding a Warning Label to Rewheel's International Price Comparison and Competitiveness Rankings," University of Florida, Warrington College of Business, DMI Working Paper.

Hauge, Janice A., Mark A. Jamison, and Laura Jamison. 2018. "X-efficiency vs Adaptive Efficiency: An Analysis of Firm Survival" University of Florida, Warrington College of Business, PURC Working Paper.

Hauge, Janice A., Mark A. Jamison, James E. Prieger, Michelle P. Connolly, and Gerald Faulhaber. 2017. "Economic Scholars' Summary of Economic Literature Regarding Title II Regulation of the Internet" University of Florida, Warrington College of Business, PURC Working Paper.

Holt, Lynne, and Mary Galligan. 2017. "Utility-Led Community Solar – A "Win-Win" for Customers & Electric Utilities?" University of Florida, Warrington College of Business, PURC Working Paper.

Holt, Lynne, and Mary Galligan. 2017. "State Public Utility Commissions' Role in Cybersecurity and Physical Security Issues: Trade-Offs and Challenges" University of Florida, Warrington College of Business, PURC Working Paper.

Jamison, Mark A. 2018. "Politics and Business in Social Media Regulatory Responses to the Cambridge Analytica Revelations" University of Florida, Warrington College of Business, PURC Working Paper.

Jamison, Mark A. 2018. "Responses for the Record from Dr. Mark Jamison, Responding to Questions from Sen. Charles E. Grassley (R-IA) US Senate Committee on the Judiciary "Cambridge Analytica and the Future of Data Privacy"" University of Florida, Warrington College of Business, PURC Working Paper.

Jamison, Mark A. 2018. "Comments of Mark Jamison to the Federal Trade Commission on Competition and Consumer Protection in the 21st Century" University of Florida, Warrington College of Business, PURC Working Paper.

Jamison, Mark A. 2018. "Net Neutrality Policies and Regulation in the United States" University of Florida, Warrington College of Business, PURC Working Paper.

Jamison, Mark A. 2018. "Comments Filed with the FTC: Competition and Consumer Protection Issues in Communication, Information and Media Technology Networks" University of Florida, Warrington College of Business, PURC Working Paper.

Jamison, Mark A. 2019. "Net Neutrality Policies and Regulation in the United States" Review of Network Economics, 17(3): 151-173.

Jamison, Mark A. 2019. "Statement before the Senate Committee on Commerce, Science, and Transportation Subcommittee on Communications, Technology, Innovation, and the Internet on 'The Impact of Broadband Investment in Rural America'" University of Florida, Warrington College of Business, PURC Working Paper.

Jamison, Mark A. 2019. "Market-based Policies for Broadband in Florida," *The Journal* 62: 12-17.

Jamison, Mark A. 2019. "Letter to the FCC RE: Silos" University of Florida, Warrington College of Business, PURC Working Paper.

Jamison, Mark. 2020. "Applying Antitrust in Digital Markets: Foundations and Approaches," American Enterprise Institute working paper; Intellectual Property & Technology Forum Journal at Boston College Law School, http://bciptf. org/2020/04/applying-antitrust-in-digital-markets.

Jamison, Mark A. 2020. "How Politicians Use Your Social Media Data & How to Combat False or Misleading Information Before the Election" University of Florida, Warrington College of Business, PURC White Paper.

Jamison, Mark A. 2020. "Less Would Be More for Tech Antitrust" University of Florida, Warrington College of Business, DMI Working Paper.

Jamison, Mark A. 2020. "The Regulatory Labyrinth that Inhibits Federal Deregulation" University of Florida, Warrington College of Business, DMI Working Paper.

Jamison, Mark. 2020. "Towards a Theory of Market Power," Arizona State University Corporate and Business Law Journal 1(2): 1-22 http://cablj.org/wp-content/uploads/2020/06/Ready-Jamison.pdf.

Jamison, Mark A., and Araceli Castaneda. 2017. "Stakeholders and Power Relations in Regulation" University of Florida, Warrington College of Business, PURC Working Paper.

Jamison, Mark A., and Palveshey Tariq. 2018. "Five Things Regulators Should Know About Blockchain (and Three Myths to Forget)," Electricity Journal.

Jamison, Mark A., and Peter Wang. 2020. "Valuation of Digital Goods During the Coronavirus Outbreak in the United States" University of Florida, Warrington College of Business, DMI Working Paper.

Jamison, Mark A., Theodore Kury, and Michelle Phillips. 2019. "Solar Impacts: Does Distributed Production Affect Consumption Choice?" University of Florida, Warrington College of Business, PURC Working Paper.

Kury, Theodore. 2020. "Who Will Pay the Pandemic Utility Bill - and How?" University of Florida, Warrington College of Business, PURC White Paper.

Kury, Theodore. 2020. "Do Your Solar Panels Affect Your Electricity Consumption? Implications of a Study Challenging a Flawed Fundamental Assumption of Efficiency" University of Florida, Warrington College of Business, PURC White Paper.

Kury, Theodore, Cindy Miller, David Richardson, and Mark A. Jamison. 2018. "Valuing Municipal Utilities – The Case of the Potential Sale of JEA in Jacksonville" University of Florida, Warrington College of Business, PURC Working Paper.

Li, Gloria. 2020. "Potential Impacts of European AI Regulation on the American Energy Sector" University of Florida, Warrington College of Business, DMI Working Paper.

McNealy, Jasmine. 2018. "Twitter Reactions to Hurricane Irma: Mining Social Media for Inferences" University of Florida, Warrington College of Business, PURC Working Paper.

Pereira, Gabriel, and Jacquelyn Gillette. 2020. "Grammatical Violations and Financial Reporting Quality," Warrington College of Business, DMI Working Paper.

Rhee, Kyung Sun, et al. 2019. "Value of Information Sharing and Information-Technology enabled Operations via Transportation Network Company Apps: An Empirical Analysis," Warrington College of Business, DMI Working Paper.

Rhee, Kyung Sun, Eliina Hwang, and Yong Tan. 2019. "Employee Referral Dynamics in Social Hiring," Warrington College of Business, DMI Working Paper.

Sappington, David E. M., K. Viscusi and J. Harrington. 2018. Economics of Regulation and Antitrust, Fifth Edition, Cambridge, MA: The MIT Press.

Sappington, David E. M., and Dennis L. Weisman. 2020. "Designing Performance-Based Regulation to Enhance Industry Performance and Consumer Welfare," Electricity Journal.

Sappington, David E. M., and Dennis L. Weisman. 2020. "Vertical Merger Guidelines for Regulated Industries," University of Florida, Department of Economics, PURC Working Paper.

Attachment 2

State of Florida

Public Service Commission

CAPITAL CIRCLE OFFICE CENTER • 2540 SHUMARD OAK BOULEVARD
TALLAHASSEE, FLORIDA 32399-0850

-M-E-M-O-R-A-N-D-U-M-

DATE: January 11, 2021

TO: Braulio Baez, Executive Director

FROM: Division of Economics (Barrett)

RE: Draft Report on Activities Pursuant to the Florida Energy Efficiency and Conservation Act (FEECA). Due March 1, 2021 to the Governor and Legislature.

Critical Information: Please place on the January 21, 2021 Internal Affairs agenda. Commission approval is sought.

Section 366.82(10), Florida Statutes (F.S.), requires the Florida Public Service Commission (Commission) to submit an annual report to the Governor and Legislature on the utilities' progress towards meeting goals established by the Commission pursuant to the Florida Energy Efficiency and Conservation Act. The report is due March 1, 2021. Furthermore, Section 377.703(2)(f), F.S., requires the Commission to file information on electricity and natural gas energy conservation programs with the Department of Agriculture and Consumer Services.

Staff is seeking Commission approval of the attached draft report. The draft report was deferred from the November 2020 Internal Affairs Conference. Changes are highlighted on pages 2-4, 13, and 17. Upon approval, the report will be submitted to the Governor, President of the Senate, Speaker of the House, the Commissioner of Agriculture and Consumer Services, and to the Florida Documents Librarian.

cc: Keith Hetrick, General Counsel
Mark Futrell, Deputy Executive Director, Technical
Apryl Lynn, Deputy Executive Director, Administrative

FLORIDA
PUBLIC
SERVICE
COMMISSION

FEECA

Annual Report on Activities Pursuant to the Florida Energy Efficiency and Conservation Act

As Required by Sections 366.82(10) and 377.703(2)(f), Florida Statutes

JANUARY 2021

Florida Public Service Commission

Annual Report on

Activities Pursuant to the Florida Energy Efficiency and Conservation Act

As Required by Sections 366.82(10) and 377.703(2)(f), Florida Statutes

January 2021

Table of Contents

Tables and Figures

Tables

Figures

List of Acronyms

C/I	Commercial and Industrial (Customers)
Commission or FPSC	Florida Public Service Commission
COVID-19	Coronavirus Disease 2019
DEF	Duke Energy Florida, LLC
DOE	U.S. Department of Energy
DSM	Demand-Side Management
ECCR	Energy Conservation Cost Recovery
EV	Electric Vehicle
F.A.C.	Florida Administrative Code
FEECA	Florida Energy Efficiency and Conservation Act
FLBC	Florida Building Code
FPL	Florida Power & Light Company
FPUC	Florida Public Utilities Company
F.S.	Florida Statutes
GPR	Gross Power Rating
GRIM	Gas Rate Impact Measure Test
Gulf	Gulf Power Company
GWh	Gigawatt-Hour
HVAC	Heating, Ventilation, and Air Conditioning
IOU	Investor-Owned Utility
JEA	Formerly known as Jacksonville Electric Authority
kWh	Kilowatt-Hour
LDC	Natural Gas Local Distribution Company
Load	Demand for Electricity
MMBtu	One Million British Thermal Units
MW	Megawatt
MWh	Megawatt-Hour
NGCCR	Natural Gas Conservation Cost Recovery
OUC	Orlando Utilities Commission
O&M	Operations and Maintenance
PV	Photovoltaic
PGS	Peoples Gas System
RIM	Rate Impact Measure Test
TECO	Tampa Electric Company
TRC	Total Resource Cost Test

Executive Summary

Purpose

Reducing the growth of Florida's peak electric demand and energy consumption became a statutory objective in 1980, with the enactment of the Florida Energy Efficiency and Conservation Act (FEECA). FEECA emphasizes four key areas: reducing the growth rates of weather-sensitive peak demand and electricity usage, increasing the efficiency of the production and use of electricity and natural gas, encouraging demand-side renewable energy systems, and conserving expensive resources, particularly petroleum fuels. Sections 366.82(2) and 366.82(6), Florida Statutes (F.S.), require the Florida Public Service Commission (FPSC or Commission) to establish goals for the FEECA utilities and review the goals every five years, at minimum. The utilities are required to develop cost-effective demand-side management (DSM) plans that meet those goals and submit them to the Commission for approval.

Energy conservation and DSM in Florida is accomplished through a multi-pronged approach that includes energy efficiency requirements in building codes for new construction, federal appliance efficiency standards, utility programs, and energy education efforts. Utility programs, which are paid for by all customers, are aimed at increasing efficiency levels above building codes and appliance efficiency standards.

The Commission is required by Section 366.82(10), F.S., to provide an annual report to the Florida Legislature and the Governor summarizing the adopted goals and the progress made toward achieving those goals. Similarly, Section 377.703(2)(f), F.S., requires the Commission to file information on electricity and natural gas energy conservation programs with the Department of Agriculture and Consumer Services. Pursuant to Section 366.82(10), F.S., this report on conservation results achieved by the FEECA utilities is due to the Florida Legislature and Governor by March 1, 2021. This report reviews the 2019 annual goal results for each of the FEECA utilities and fulfills these statutory obligations.

The seven electric utilities and single natural gas utility currently subject to FEECA are:

- Five electric investor-owned utilities (IOUs), listed in order of sales
    - Florida Power & Light Company (FPL)
    - Duke Energy Florida, LLC (DEF)
    - Tampa Electric Company (TECO)
    - Gulf Power Company (Gulf)
    - Florida Public Utilities Company (FPUC)

- Two municipal electric utilities, listed in order of sales
    - JEA
    - Orlando Utilities Commission (OUC)

- One investor-owned natural gas local distribution company (LDC)
    - Peoples Gas System (PGS)

The Commission regulates the rates and conservation cost recovery of the five electric IOUs and the single FEECA LDC. In contrast, the Commission does not regulate the rates or conservation program costs of the two municipal electric utilities for which it sets DSM goals.

Report Layout

This report presents the FEECA utilities' progress towards achieving the Commission-established goals and the Commission's efforts in overseeing these conservation initiatives. This report details these efforts through the following five sections and appendices:

Section 1 provides a brief history of FEECA and a description of existing tools for increasing conservation throughout the State of Florida.

Section 2 discusses the DSM goalsetting process and the most recent Commission-established goals set for the FEECA utilities.

Section 3 reviews the utilities' goal achievements and progress within low-income programs and research and development programs.

Section 4 provides an overview of the associated 2019 DSM program costs recovered through the Energy Conservation Cost Recovery (ECCR) Clause (as applies to the five electric IOUs subject to FEECA) and Natural Gas Conservation Cost Recovery (NGCCR) Clause (as applies to a single FEECA LDC).

Section 5 discusses methods the Commission has used to educate consumers about conservation during the prior period, including a list of related web sites.

Appendices A and B provide a list of the currently-offered conservation programs and a description of each program's purpose.

Appendix C provides an overview of the audit programs sponsored by FEECA Utilities and information regarding how electric IOUs are adjusting energy audit program offerings in 2020 as a result of the COVID-19 pandemic.

2019 Goalsetting Proceeding

In April 2019, the electric FEECA utilities filed proposed conservation goals, including numeric goals for summer demand, winter demand, and annual energy savings, for the 2020-2029 period. On November 5, 2019, the Commission chose to reject the goals proposed by the electric FEECA utilities. Instead, the Commission opted to continue with the goals that were established in the 2014 goalsetting proceeding for the period 2020-2024, and directed its staff to review the FEECA process for potential updates and revisions as may be appropriate.[1] In July 2020, a docket was established to consider proposed amendments to Rule 25-17.0021, F.A.C. A rule development workshop for this docket is scheduled for January 14, 2021.[2]

[1]Order No. PSC-2019-0509-FOF-EG, issued November 26, 2019, in Docket Nos. 20190015-EG through 20190021-EG, *In re: Commission review of numeric conservation goals.*

[2]See Docket No. 20200181-EU, Proposed amendment of Rule 25-17.0021, F.A.C., Goals for Electric Utilities.

In May and June 2020, the Commission approved as filed the DSM Plans the municipal electric FEECA utilities submitted to meet the approved goals.[3] In August 2020, the Commission approved as filed the DSM Plans the investor-owned electric FEECA utilities submitted.[4]

The 2014 approved goals were based on estimated energy and demand savings from measures that passed the Rate Impact Measure (RIM) and Participants cost-effectiveness tests.[5] These tests were used to ensure that all ratepayers benefit from energy efficiency programs due to downward pressure on electric rates. Compared to its review in 2009, the Commission identified fewer cost-effective energy efficiency measures in 2014 as a result of more stringent building codes and appliance efficiency standards. Higher appliance efficiency standards and building codes contribute to conservation outside of utility-sponsored DSM programs. Additionally, reduced utility avoided costs, caused by relatively low natural gas prices, resulted in fewer cost-effective measures.

Section 366.82(2), F.S., also requires that the Commission adopt goals for increasing the development of demand-side renewable energy systems. In 2014, the Commission acknowledged that the solar pilot programs that were initiated in 2009 to satisfy this statutory requirement did not ultimately prove to be a cost-effective and equitable method for encouraging demand-side renewable energy as required by Section 366.82, F.S.[6] However, the Commission recognized at that time, as it did again in its 2019 review, that the Commission's customer-owned renewable generation rule (Rule 25-6.065, F.A.C.) adopted in 2008 offered an effective means to encourage the development of demand-side renewable energy in the state, allowing customers a method for offsetting their energy usage. In addition, in 2020, the Commission initiated a fact-finding workshop to explore various topics regarding demand-side renewable energy system development.

The Commission also established numeric therm savings goals for a natural gas utility for the first time in 2019. ~~The Commission approved goals for PGS, that became effective in 2020~~, In August 2019, the Commission approved 2019-2028 goals for PGS, based upon programs it

---

[3]Order No. PSC-2020-0140-PAA-EG, issued May 12, 2020, in Docket No. 20200058-EG, *In re: Petition for approval of 2020 demand-side management plan, by Orlando Utilities Commission*; Order No. PSC-2020-0200-PAA-EG, issued June 24, 2020, in Docket No. 20200057-EG, *In re: Petition for approval of 2020 demand-side management plan, by JEA*.

[4]Order No. PSC-2020-0274-PAA-EG, issued August 3, 2020, in Docket Nos. 20200053-EG (TECO), 20200054-EG (DEF), 20200055-EG (FPL), 20200056-EG (Gulf), and 20200060-EG (FPUC), *In re: Petition for approval of 2020 demand-side management plans.*.

[5]Order No. PSC-2014-0696-FOF-EU, issued December 16, 2014 (2014 Goalsetting Order), in Docket Nos. 20130199EI through 20130205-EI, *In re: Commission review of numeric conservation goals.*

[6]Although Section 366.82, F.S., requires the Commission to adopt goals for increasing the development of demand-side renewable energy systems, the Commission must also take into account the benefits and costs to participants and to the general body of ratepayers. In the 2014 Goalsetting Order, the Commission found that the FEECA utilities' continued implementation and compliance with Rule 25-6.065, F.A.C., Interconnection and Net Metering of Customer-Owned Renewable Generation ("Net Metering Rule"), was an appropriate goal for promoting the development of small customer-owned renewable generation.

found were cost-effective ~~in August 2019~~.[7] PGS also developed audit programs for its residential and commercial customers as part of the proceedings.

The 2019 goalsetting processes for all FEECA utilities are further discussed in Section 2.

2019 Achievements and Related Program Costs

Since FEECA's inception, it is estimated that DSM programs offered by electric FEECA utilities have reduced summer peak demand by 8,046 megawatts (MW) and winter peak demand by 7,373 MW. During 2019, the Florida electric FEECA utilities offered 110 residential and commercial programs focused on demand reduction and energy conservation. In addition, FEECA electric utilities performed over 240,000 residential and commercial energy audits. Each FEECA utility's achievements toward the 2019 Commission-approved goals are detailed in Section 3.

The Commission has authority, by statute, to allow investor-owned utilities to recover costs related to conservation.[8] The Commission has implemented this authority for electric IOUs through the ECCR clause since 1980. For 2019, Florida's investor-owned electric utilities recovered approximately $330 million in conservation program expenditures.

Conclusion

Conservation in Florida is prompted by customer actions to conserve energy, federal appliance efficiency standards and state building codes for new construction, and utility-sponsored DSM programs. Customers can save energy and reduce their bills through behavioral changes and by investing in energy efficient homes, appliances, and equipment. Federal appliance efficiency standards have become more stringent over time, thus increasing the baseline energy efficiency of new appliances and heating, ventilation, and air conditioning (HVAC) equipment available to Florida's consumers. Likewise, changes in the Florida State Building Code (FLBC) have resulted in more energy efficient new and renovated homes. Florida's electric and natural gas utilities also encourage conservation by offering energy audits, customer education, rebates on energy efficient equipment and building envelope improvements, and demand response programs.

Utilities design DSM programs to encourage conservation that exceeds levels set by current building codes and minimum efficiency standards. More stringent efficiency standards and building codes, as well as customer actions to implement efficiency outside of utility programs, reduce the potential incremental demand and energy savings available from utility-sponsored DSM programs. The level of realized savings from utility programs is uncertain because it requires voluntary participation and, in some cases, changes in customer behavior.

Because all customers pay for the utility conservation programs as a portion of their monthly utility bills, the Commission focuses on ensuring that all customers benefit from utility-sponsored DSM programs. The Commission also encourages customers to use energy efficiently

[7]Order No. PSC-2019-0361-PAA-GU, issued August 26, 2019, in Docket No. 20180186-GU, *In re: Petition for approval of demand-side management goals and residential customer assisted and commercial walk-through energy audit programs, by Peoples Gas System.*
[8]Section 366.05(1), F.S.

through its customer education efforts. Overall, reducing Florida's electric demand and energy usage relies on customer education and participation in utility DSM programs, along with each individual's efforts to save electricity.

Conservation and renewable energy will continue to play an important role in Florida's energy future. The Commission is continuing its efforts to encourage cost-effective conservation that defers the need for new electric-generating capacity and reduces the use of fossil fuels. These initiatives support a balanced mix of resources that reliably and cost-effectively meet the needs of Florida's ratepayers.

Section 1. Florida Energy Efficiency and Conservation Act

1.1 FEECA History and Implementation

FEECA emphasizes four key areas: reducing the growth rates of weather-sensitive peak demand and electricity usage, increasing the efficiency of electricity and natural gas production and use, encouraging demand-side renewable energy systems, and conserving expensive resources, particularly petroleum fuels. Pursuant to FEECA, the Commission is required to establish conservation goals and the FEECA utilities must develop DSM programs to meet those goals.

Originally, all electric utilities in Florida were subject to FEECA. In 1989, changes were made to the law limiting the requirement to electric utilities with more than 500 Gigawatt-Hour (GWh) of annual retail sales. At that time, 12 Florida utilities met this threshold requirement and their combined sales accounted for 94 percent of Florida's retail electricity sales. An additional change to the law encouraged cogeneration projects.

In 1996, the Florida Legislature raised the minimum retail sales threshold for municipal and cooperative electric utilities to 2,000 GWh. Retail sales for these utilities were measured as of July 1, 1993, and two municipal utilities met the threshold of the new law: JEA and OUC. In addition to these two utilities, all five Florida investor-owned electric utilities must comply with FEECA regardless of sales levels. No rural electric cooperatives are currently subject to FEECA.

FEECA also includes natural gas utilities whose annual retail sales volume is equal to or greater than 100 million therms. PGS is the only natural gas utility that meets the therm sales threshold for conservation goals under FEECA, and thus has its own Commission-approved DSM goals.

The FEECA statute also allows the Commission to provide appropriate financial rewards and penalties to the utilities over which it has rate-setting authority. The Commission also has the authority to allow an IOU to receive an additional return on equity of up to 50 basis points for exceeding 20 percent of its annual load growth through energy efficiency and conservation measures. To date, the Commission has not awarded financial rewards or assessed penalties for any of the IOUs through FEECA. The Commission does not have rate-setting authority over JEA and OUC and therefore cannot assess financial penalties or provide financial rewards under FEECA.

Table 1 lists the seven electric FEECA utilities and shows their 2019 retail electricity sales and the percentage of total statewide electricity sales by each utility. The table also includes the total energy sales for all non-FEECA utilities. Currently, the seven electric utilities that are subject to FEECA account for approximately 83.9 percent of all Florida energy sales.

Table 1
Energy Sales by Florida's Electric FEECA Utilities in 2019

Florida's Electric FEECA Utilities	Energy Sales (GWh)	Percent of Total Energy Sales
Florida Power & Light Company	111,929	46.5%
Duke Energy Florida, LLC	39,187	16.3%
Tampa Electric Company	19,784	8.2%
JEA	12,322	5.1%
Gulf Power Company	11,079	4.6%
Orlando Utilities Commission	6,826	2.8%
Florida Public Utilities Company	652	0.3%
Electric FEECA Utilities' Total	**201,779**	**83.9%**
Non-FEECA Utilities' Total	38,797	16.1%
Total Statewide Energy Sales	**240,576**	**100.0%**

Source: Commission's "Statistics of the Florida Electric Utility Industry" (Table 26) published in October 2020.

Sections 366.82(2) and 366.82(6), F.S., require the Commission to set demand-side management goals at least every five years for the utilities subject to FEECA. The Commission sets electric goals with respect to summer and winter electric-peak demand and annual energy savings over a ten-year period, with a re-evaluation every five years. Once goals are established, the electric FEECA utilities must submit DSM plans containing cost-effective programs intended to meet the goals for Commission approval.

In 2008, the Florida Legislature amended the FEECA statute, placing upon the Commission additional responsibilities when adopting conservation goals. These responsibilities included the consideration of the benefits and costs to program participants and ratepayers as a whole, as well as the need for energy efficiency incentives for customers and utilities. The Commission must also consider any costs imposed by state and federal regulations on greenhouse gas emissions.

1.2 FEECA's Influence on the Florida Energy Market

FEECA's mission is important to Florida's overall energy market. Florida's total electric consumption ranks among the highest in the country due to its sizeable population and climate-induced demand for cooling. When compared to the rest of the country, Florida's energy market is unique. The distinction is largely due to the state's climate, the high proportion of residential customers to total customers, and the reliance on electricity for heating and cooling.

Florida is typically a summer-peaking state. On a typical summer day, the statewide demand for electricity can increase from approximately 18,000 MW to 34,000 MW over the span of hours.[9] Additionally, 87.6 percent of Florida's electricity customers are residential, consuming approximately 52.4 percent of the electrical energy produced. In contrast, nationally, residential

[9]Electric IOU responses to Staff's First Data Request, re: 2019 Ten-Year Site Plan.

customers account for only 38.1 percent of total electric sales, while commercial customers represent 36 percent of electric consumption and industrial customers represent 26 percent.[10] Table 2 shows the makeup of Florida's electric customers by class and consumption.

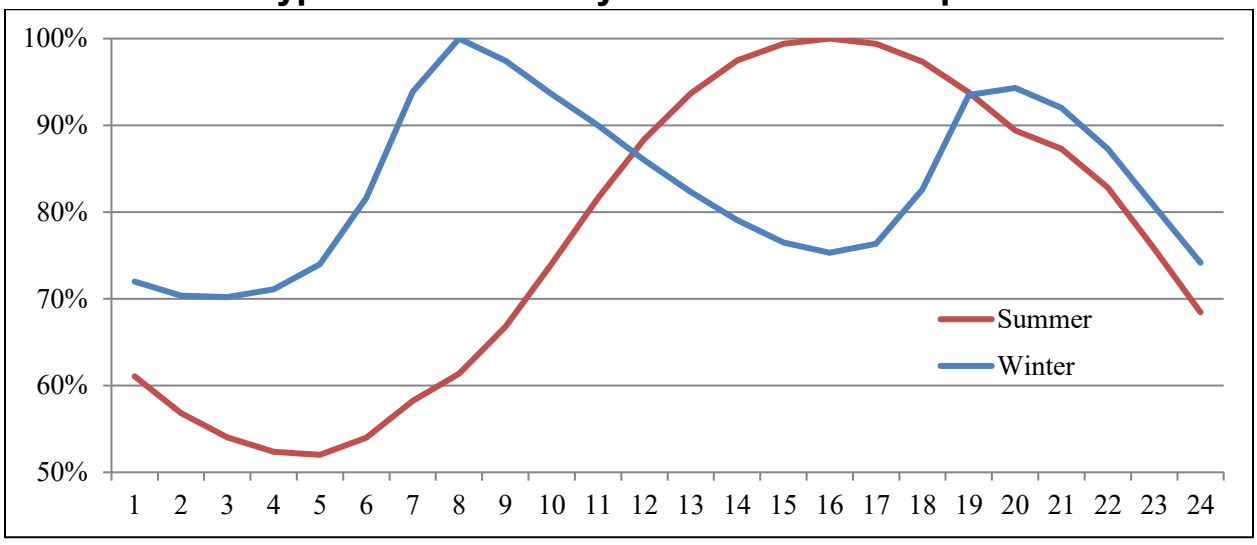
Table 2
Florida's Electric Customers by Class and Consumption in 2019

Customer Class	Number of Customers	Percent of Customers	Energy Sales (GWh)	Percent of Sales
Residential	9,583,632	87.6%	127,155	52.9%
Commercial	1,176,166	10.8%	86,831	36.1%
Industrial	25,245	0.2%	19,418	8.1%
Other*	153,454	1.4%	7,171	3.0%
Total	10,938,497	100.0%	240,576	100.0%

*Street and highway lighting, sales to public authorities, and interdepartmental sales.
Source: Commission's "Statistics of the Florida Electric Utility Industry" (Tables 26 and 33) published in October 2020.

Figure 1 shows the daily electric load curves for a typical Florida summer and winter day. In the summer, air conditioning demand starts to increase in the morning and peaks in the early evening; a pattern which aligns with the sun's heating of buildings. In comparison, the winter load curve has two peaks—the largest in mid-morning, followed by a smaller peak in the late evening—which correspond to heating loads.

Figure 1
Typical Florida Daily Electric Load Shapes



Source: Electric IOU responses to Staff's Data Request, re: 2020 Ten-Year Site Plan.

[10] Annual data for 2019. http://www.eia.gov/electricity/data.cfm#sales Retail sales of electricity to ultimate consumers, annual, by sector by provider.

Residential load patterns are rapidly shifting and have high peak-to-trough variation. In contrast, commercial or industrial loads demonstrate more consistency throughout the 24-hour day and experience fewer spikes in demand.

Utilities dispatch additional generating capacity throughout the day to follow the customer load patterns. Peaking generating units, which are dispatched during high peak demand periods of the day, are less fuel-efficient than baseload or intermediate generating units. Utility DSM programs play a role in reducing energy usage and shifting peak demand. Therefore, they reduce the need to dispatch relatively fuel-inefficient generating units.[11] Over time, the need for additional generating capacity has grown in Florida, in large part due to population growth. In addition to providing fuel savings at existing generating units, utility-sponsored DSM programs and conservation efforts by individual consumers can avoid or defer the need for new electric generating capacity.

Utility-sponsored DSM programs are funded by all ratepayers. Therefore, in order to meet FEECA requirements, the Commission and utilities must ensure that the DSM programs created to reap the benefits of reduced fuel usage and deferred generating capacity are cost-effective, i.e. less costly than generation. The Commission's methodologies to determine the cost-effectiveness of demand-side management programs are explained in detail in Section 2.1.

FEECA has been successful in reducing the growth rates of weather-sensitive peak electric demand and conserving expensive fuel resources. Since its inception, FEECA utility-sponsored electric DSM programs have cumulatively saved 8,046 MW of summer peak demand and 7,373 MW of winter peak demand, referenced in Table 3. This reduction in peak demand has deferred the need for new generating capacity. In 2019, FEECA DSM programs saved 231 GWh, enough electricity to power approximately 17,373 homes for a year.[12] These energy savings have offset the use of existing generating units, resulting in fuel and variable operations and maintenance (O&M) cost savings.

Table 3
Estimated Cumulative DSM Savings Since 1980

Type	Savings
Summer Peak Demand	8,046 MW
Winter Peak Demand	7,373 MW
Annual Energy Reduction	11,348 GWh

Source: Florida Reliability Coordinating Council Load and Resource Plan 2020, S-3, S-4, S-5.

[11]Electric generating units typically are categorized as baseload, intermediate, or peaking. Aside from planned and forced outages, baseload units are scheduled to operate continuously. Intermediate units generate power to follow load for periods of time, but are not planned to operate nonstop. Peaking units supplement baseload and intermediate power, operating during high-demand, or peak, periods.

[12]Average Florida annual household kWh use is 13,296 kWh. Data from Forms EIA-861-schedules 4A-D, EIA-861S and EIA-861U. https://www.eia.gov/tools/faqs/faq.php?id=97&t=3

Currently, the electric FEECA utilities provide 110 programs for residential, commercial, and industrial customers. Programs focus on either reducing energy use at a given moment, which shifts/reduces demand, or toward reducing overall energy consumption over a period of time. Utility-sponsored DSM programs are an important means of achieving demand and energy savings and these programs are designed to encourage customer conservation efforts.

Additionally, residential energy audits, required by Section 366.82(11), F.S., serve as an avenue to identify and evaluate conservation opportunities for customers, including the potential participation in utility-sponsored DSM and conservation programs. Energy audits also educate customers on behavioral changes and energy efficiency investments they can make outside of utility-sponsored DSM programs. During 2019, FEECA electric utilities performed 241,025 residential audits. Though FEECA does not require commercial energy audits, FEECA electric utilities also performed 8,506 commercial energy audits in 2019. Additional information about these results is presented in Appendix C.

1.3 Recovery of Conservation Expenditures

The IOUs are allowed by Commission Rule 25-17.015, F.A.C., to recover reasonable expenses for DSM programs through the ECCR clause. Such expenses may include administrative costs, equipment, and incentive payments. Before attempting to recover costs through the ECCR clause, a utility must prove that its DSM programs are cost-effective. Utilities must have Commission approval for any new programs or program modifications prior to seeking cost recovery.

Commission Rule 25-17.015, F.A.C., also permits natural gas LDCs to seek recovery for costs related to Commission-approved conservation programs. While PGS is the only natural gas utility subject to FEECA, the other Florida LDCs offer Commission-approved DSM programs without a specific therm savings goal. Natural gas conservation programs have historically focused on providing rebates to residential customers that support the replacement of less efficient appliances with new, energy-efficient gas appliances. However, many LDCs have expanded their rebate programs to commercial customers.[13]

On an annual basis, the Commission conducts financial audits of DSM program expenses that are included in the electric IOUs' and LDCs' ECCR cost recovery requests. A full evidentiary hearing is held to determine the cost recovery factors to be applied to customer bills in the following year. The Commission-approved 2021 conservation cost recovery factors are discussed further in Section 4.

[13]Order No. PSC-14-0039-PAA-EG, issued January 14, 2014, in Docket No. 20130167-EG, *In re: Petition for approval of natural gas energy conservation programs for commercial customers, by Associated Gas Distributors of Florida.*

Section 2. DSM Goalsetting

2.1 DSM Program Cost-Effectiveness and Energy Savings

Section 366.81, F.S., requires utility conservation programs to be cost-effective. This statutory requirement is codified in Rule 25-17.008, F.A.C., for electric utilities and Rule 25-17.009, F.A.C., for natural gas LDCs. The rules identify the cost-effectiveness methodologies to be used and require that utilities provide cost and benefit information to the Commission when requesting to add a program or make changes or additions to an existing program.

The Commission requires that electric utilities measure cost-effectiveness from three perspectives, at a minimum - the program participant, the utility's ratepayers, and society's overall cost for energy services. The Participants test, the Rate Impact Measure (RIM) test, and the Total Resource Cost (TRC) test capture these viewpoints. The electric FEECA utilities are required to provide the results of all three tests when seeking to add a new program or make changes to an existing program.

Similarly, Rule 25-17.009, F.A.C., requires natural gas LDCs to prove that their conservation programs are cost-effective by passing the Participants test and Gas Rate Impact Measure Test (GRIM). The GRIM test is a modified version of the RIM test, specific to gas utilities. Natural gas LDCs are also required to provide the results of these tests when seeking to add a new program or modify an existing program.

Table 4 summarizes the costs and benefits considered in the three Commission-approved electric cost-effectiveness methodologies for electric utilities.

Table 4
Summary of Electric Cost-Effectiveness Methodologies

	Participants	RIM	TRC
Benefits			
Bill Reduction	**X**		
Incentives Received	**X**		
Avoided Generation (Capital and O&M)		**X**	**X**
Avoided Transmission (Capital and O&M)		**X**	**X**
Fuel savings		**X**	**X**
Costs			
Program Costs		**X**	**X**
Incentives Paid		**X**	
Lost Revenues		**X**	
Participant's Costs (Capital and O&M)	**X**		**X**

Participants Test

The Participants test analyzes costs and benefits from a program participant's point of view, rather than the impact on the utility and other ratepayers not participating in the program. The Participants test includes the up-front costs customers pay for equipment and costs to maintain this equipment. Benefits considered in the test include the incentives paid by utilities to the customers and the reduction in customer bills. Failure to demonstrate cost-effectiveness under this test would infer that rational customers would not elect to participate in this program.

Rate Impact Measure (RIM) Test

The RIM test is designed to ensure that all ratepayers, not just the program's participants, will benefit from a proposed DSM program. The RIM test includes the costs associated with incentive payments to participating customers and decreased revenues to the utility. DSM programs can reduce utility revenues due to reduced kilowatt-hour (kWh) sales and reduced demand. The decreased utility revenues typically are recovered from the general body of ratepayers at the time of a rate case. A DSM program that passes the RIM test ensures that all customer rates are the same or lower than rates would be without the DSM program.

Total Resource Cost (TRC) Test

The TRC test measures the overall economic efficiency of a DSM program from a social perspective. This test measures the net costs of a DSM program based on its total costs, including both the participants' and the utility's costs. Unlike the RIM test, customer incentives and decreased utility revenues are not included as costs in the TRC test. Instead, these factors are treated as transfer payments among ratepayers. Moreover, if appropriate, certain external costs and benefits such as environmental impacts may be taken into account. Because incentives and foregone revenues are not treated as "costs," electric rates for all customers tend to be higher for programs implemented solely using the TRC test to judge cost-effectiveness.

Ensuring Cost-Effectiveness

Ensuring utility-sponsored DSM programs remain cost-effective benefits the general body of electric ratepayers. These programs can reduce costs to ratepayers by postponing capital expenditures such as future power plant construction, and reducing current electrical generation costs, including fuel and variable O&M costs. DSM programs can also benefit customers by improving reliability.

When an IOU determines that a DSM program is no longer cost-effective, the utility must petition the Commission for modification or discontinuation of the program. In many instances, programs may need to be modified due to the adoption of a more stringent appliance efficiency standard or building code. In contrast, if new efficiency measures become available that are cost-effective, the utility may petition the Commission for approval of a new program.

2019 Electric DSM Goalsetting Proceeding

Pursuant to Sections 366.82(2) and 366.82(6), F.S., the electric FEECA utilities filed proposed goals for the 2020-2029 period in April 2019. The utilities proposed goals that were lower overall than those established in the 2014 goalsetting proceeding, with some utilities proposing goals of zero or near-zero for the 10-year period. A technical hearing on the proposed goals was held on August 12 and 13, 2019. The Commission heard testimony on cost-effectiveness tests,

whether a goal of zero fulfilled statutory requirements, how to account for free ridership, and how to ensure low-income customers are able to effectively participate in DSM programs.

By issuing Order No. PSC-2019-0509-FOF-EG[14] on November 26, 2019, the Commission rejected the goals proposed by the electric FEECA utilities and chose to continue with the 2020-2024 portion of the goals established in the 2014 goalsetting proceeding.[15] While the goalsetting process produces annual goals, the cumulative goals for the entire 10-year period are shown in Table 5 for illustrative purposes. The Commission also expressed a desire to review the goalsetting process for potential revisions~~, as appropriate, before the conclusion of the 2020-2024 period~~ In July 2020, a docket was established to consider proposed amendments to Rule 25-17.0021, F.A.C. A rule development workshop for this docket is scheduled for January 14, 2021.[16]

Table 5
Cumulative Commission-Approved Electric DSM Goals, 2015-2024

Electric Utility	Summer Demand Goals (MW)	Winter Demand Goals (MW)	Annual Energy Goals (GWh)
FPL	526.1	324.2	526.3
DEF	259.1	419.3	195.0
TECO	56.3	78.3	144.3
Gulf	68.1	36.7	84.2
FPUC	1.3	0.4	2.0
OUC	5.0	8.4	13.0
JEA	10.8	9.7	25.8
Total	**926.7**	**877.0**	**990.6**

Source: Order No. PSC-2014-0696-FOF-EU.

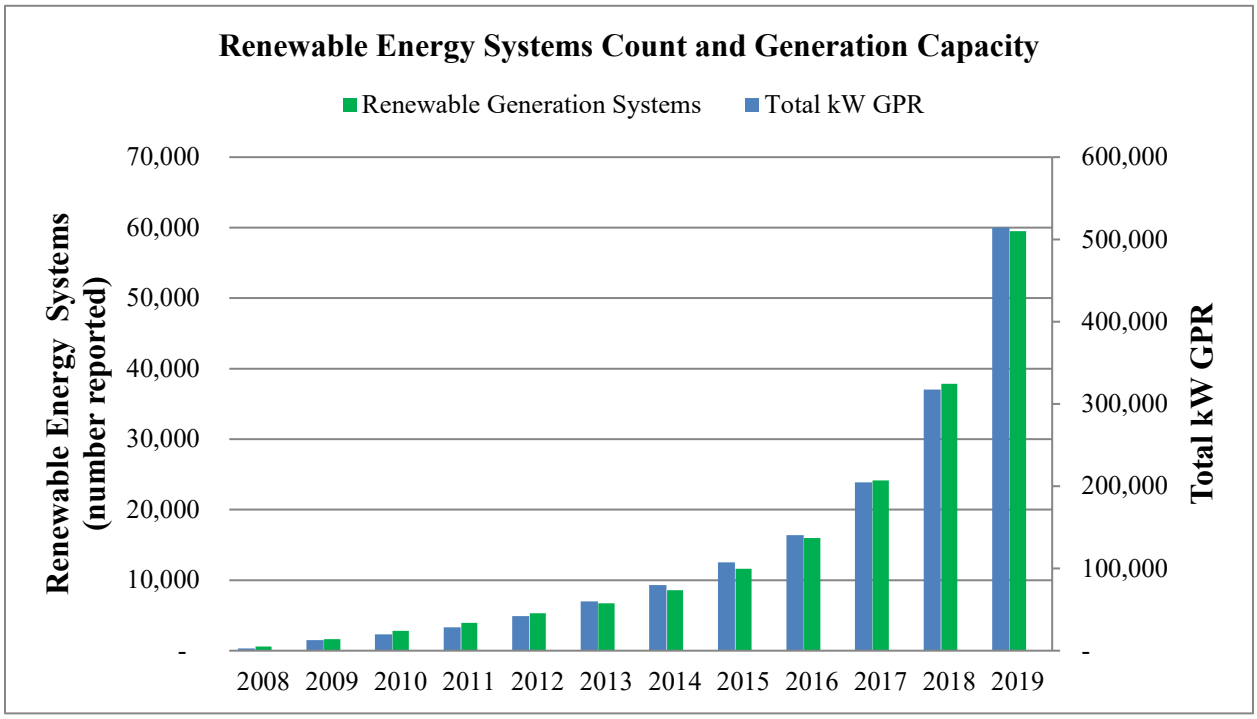
The goals established in 2014 were based upon estimated energy and demand savings from measures that passed both the RIM and Participants cost-effectiveness tests. Measures that pass the Participants test ensure that participating customers' benefits exceed the costs of the measure or program to the participants. Use of the RIM test minimizes subsidies between customers who participate in DSM programs and those who do not participate but pay for program expenditures. The RIM test also ensures rates would remain the same or lower than otherwise would occur.

As part of its review of goals in 2019, the Commission required the electric IOUs to continue implementing Rule 25-6.065, F.A.C., (Customer-owned Renewable Generation Rule) as a means of encouraging the development of demand-side renewable energy systems. Figure 2 shows the

[14] Order No. PSC-2019-0509-FOF-EG, issued November 26, 2019, in Docket Nos. 20190015-EG through 20190021-EG, *In re: Commission review of numeric conservation goals.*
[15] Within 90 days of the issuance of the Order approving goals, the electric FEECA Utilities shall file individual DSM plans designed to meet their approved goals.
[16] See Docket No. 20200181-EU, Proposed amendment of Rule 25-17.0021, F.A.C., Goals for Electric Utilities.

growth in the number of customer-owned renewable energy systems in Florida, as well as the growth in gross power ratings (i.e. generating capacity) from 2008 through 2019.

Figure 2
Demand-Side Renewable Energy Systems



Source: Data compiled from Interconnection and Net Metering Reports provided to the Commission from IOU, municipal, and rural electric cooperative electric companies, 2008-2019.

2.2 Summary of the 2019 Goalsetting Process for Peoples Gas

PGS is the only natural gas utility that meets the therm sales threshold for establishing conservation goals under FEECA. In October 2018, PGS filed a petition for approval of numeric therm reduction goals for the 2019-2028 period. PGS estimated its goals based upon its current Commission-approved DSM programs. Because PGS had existing programs already in place, there is expected to be no additional cost to its customers, aside from the new audit programs. PGS utilized the Participants and GRIM tests to calculate its goals.[17] The Commission approved the goals for PGS in Order No. PSC-2019-0361-PAA-GU, issued in August 26, 2019. Table 6 shows the 10-year therm-savings goals for PGS over the 2019-2028 period.

[17]Rule 25-17.009, F.A.C., requires natural gas conservation programs to pass the Participants test and the GRIM test in order to prove cost-effectiveness.

Table 6
Commission-Approved DSM Goals for PGS, 2019-2028

Cumulative Savings, in Therms		
Residential	**Small-Commercial**	**Combined**
3,749,583	2,426,634	6,176,217

Source: Order No. PSC-2019-0361-PAA-GU.

PGS was also required to develop a residential audit program as part of the goalsetting process. However, PGS filed for and was granted a waiver of Rules 25-17.003(3)(a) and (b), F.A.C., which require all FEECA utilities to offer residential customers three different types of on-site audits - Building Energy Efficiency Rating System (BERS) Audits, Computer-Assisted Audits, and Walk-Through Audits. PGS argued that the on-site audits would impose a substantial hardship on the Company and that the purpose of the underlying statute can be achieved by other means. The Commission allowed PGS to offer an electronic, online-only audit in lieu of on-site audits for residential customers. The Commission approved the implementation of the electronic audits for PGS's residential customers, as well as on-site audits for its commercial customers, beginning in 2020. Customers of PGS are still eligible to receive walk-through energy audits through their electricity provider.

2.3 Impact of Outside Factors on FEECA Utility DSM Programs

Conservation in Florida is prompted by customer actions to conserve energy, federal appliance efficiency standards and state building codes, and utility-sponsored DSM programs. Customers can save energy and reduce their bills through behavioral changes and by investing in energy efficient homes, appliances, and equipment. Federal appliance efficiency standards have become more stringent over time, thus increasing the baseline energy efficiency of new appliances and heating and air conditioning equipment available to Florida's consumers. Likewise, changes in the Florida State Building Code (FLBC) have resulted in more energy efficient new and renovated homes.

Utilities design DSM programs to encourage conservation that exceeds levels set by current building codes and minimum efficiency standards. More stringent efficiency standards and building codes, as well as customer actions to implement efficiency outside of utility programs, reduce the potential incremental demand and energy savings available from utility-sponsored DSM programs.

Federal efficiency standards and state building codes establish a baseline in assessing the cost-effectiveness of a potential DSM program. Florida utility DSM programs offer rebates and incentives for appliances that exceed federally established minimum efficiency standards. However, increases in federal efficiency standards, independent conservation efforts by consumers, and general conservation practices make it more challenging for utilities to achieve demand and energy savings through DSM programs. Moreover, participation rates in the utility programs are driven by the anticipated payback to the participating customer. While utility incentives tend to increase customers' "take rate" in conservation programs, electric rates are also a contributing factor in customers' decisions to invest in more efficient appliances. Thus, low or declining electric prices tend to reduce customer energy efficiency investments. This

makes it crucial that the FEECA utilities frequently evaluate conservation programs to ensure that they remain cost-effective. Likewise, the FEECA utilities are also expected to evaluate the potential for new, cost-effective DSM program opportunities as energy-efficiency technologies develop.

The cost-effectiveness of DSM measures has declined due to several factors outside of the FEECA utilities' control. First, new federal efficiency standards and state building codes have become more stringent over time. These higher standards and codes decrease the number of cost-effective DSM measures that can be offered by the electric utilities. Second, natural gas is the primary fuel source for electricity generation in Florida. The average price of natural gas fell from $8.86/MMBtu in 2008 to $3.73/MMBtu in 2013, the most recent full year before the Commission established the 2015-2024 DSM goals.[18] In turn, lower natural gas prices reduced utility avoided costs, making fewer programs pass cost-effectiveness testing.[19] Lower fuel prices can also impact customer participation in utility-sponsored DSM programs due to reduced monthly electric bills. As a result, customers could have less of an incentive to implement energy efficiency measures.

State Building Code

At the state level, the FLBC is amended annually to incorporate interpretations and clarifications as well as to update efficiency standards. The Florida Building Commission updates the FLBC with relevant new standards every three years. In 2017, the FLBC was updated and became effective in December 2017. After review of the updated FLBC and the existing DSM programs, it was found that there was no impact on the programs established as a result of the 2014 goalsetting proceeding. The FLBC is scheduled to be updated again in December 2020.

Federal Government Efficiency Standards

At the federal government level, the U.S. Department of Energy's (DOE) Building Technologies Office establishes minimum energy efficiency standards for more than 60 categories of appliances and other equipment, including HVAC equipment. According to DOE, "Products covered by standards represent about 90 percent of home energy use, 60 percent of commercial building use, and 30 percent of industrial energy use."[20] In July 2019, DOE reported that they had completed 14 rulemaking actions in the first half of the year, including one final rule for conservation standards addressing external power supplies. The DOE also reported 73 pending Energy Conservation Standards and Test Procedures in consideration or development. Some of the products being considered for Conservation Standards and Test Procedures include commercial ice makers, ceiling fans, dishwashers, faucets, and showerheads. Further details can be found on the DOE Office of Energy Efficiency and Renewable Energy's buildings reports website at http://energy.gov/eere/buildings/reports-and-publications.

Federal standards that change the baseline requirements for a product may have a direct effect on DSM programs. If a federal standard change occurs, the utilities must file petitions modifying the associated program to account for the new established baseline.

---

[18]EIA Henry Hub Natural Gas Spot Price Annual Average https://www.eia.gov/dnav/ng/hist/rngwhhdD.htm
[19]Current gas prices have remained low at $2.56/MMBtu as of August 28, 2020. https://www.eia.gov/naturalgas/weekly/
[20]http://energy.gov/eere/buildings/appliance-and-equipment-standards-program

Section 3. FEECA Utilities' Goal Achievements

3.1 Assessing Goal Achievement

Commission rules require separate goals be set for electric residential and commercial/industrial (C/I) customers, assigning context to measuring goal achievement within these two primary customer categories. Each utility's achievements in these categories are also combined and compared against total goals.

Each FEECA utility must file an annual DSM report pursuant to Rule 25-17.0021, F.A.C., which summarizes demand savings, energy savings, and customer participation rates for each approved program. The report also includes the residential, C/I, and total energy efficiency achievements compared to the approved DSM goals. Each FEECA utility's current (2019) and archived annual DSM reports from prior years can be found on the Commission's website: http://www.floridapsc.com/.

Monitoring annual goal achievements enables the Commission to evaluate the effectiveness of each utility's programs. In addition to reviewing the FEECA utilities' annual DSM reports, staff may request additional information from the utilities on their demand and energy saving achievements. Staff's data requests can, for example, seek explanations of factors preventing the utilities from achieving projected participation levels. Each FEECA utility's DSM performance in 2019 is discussed below. The utility achievements have been compared to the annual goals established by the Commission in November 2014. Table 7 provides a breakdown of each electric utility's goal achievements for the period.

FPL

FPL met its 2019 total goals and all individual demand goals. However, it achieved 90 percent of its total Residential Energy Savings Goal. FPL cited changes in the air conditioning marketplace for the lack of residential savings.

DEF

DEF met its 2019 total goals and all individual customer class goals.

TECO

TECO met its 2019 total goals and all individual customer class goals.

Gulf

Gulf was unable to achieve any of its 2019 goals. Energy audit programs usually function as a gateway to greater DSM program participation, but Gulf's customer participation in residential and commercial audit programs declined in 2019 relative to 2018. Gulf's decline in audit programs in 2019 occurred despite the Company's attempts to engage its customers through advertising using billboard, print, radio, television, digital, direct mail, and social media promotions. Gulf cited lack of customer interest in its energy audits, more stringent building and appliance codes, and low incentive levels as reasons for its shortfall in energy and demand savings.

FPUC
FPUC met all of its 2019 total and residential goals; however, it did not meet any of its C/I goals. The Company cited a lack of customer interest in its C/I programs and low incentives as factors.

JEA
JEA met its 2019 total goals and all individual customer class goals.

OUC
OUC met its 2019 total goals and all individual customer class goals.

Table 7
Electric DSM Goals Compared to Annual (2019) Achievements

Utility	Winter (MW)		Summer (MW)		Annual (GWh)	
	Goals	Achieved Reduction	Goals	Achieved Reduction	Goals	Achieved Reduction
FPL*						
Residential	16.4	19.7	26.5	29.8	24.2	**21.7**
Commercial/Industrial	15.7	18.8	25.8	29.7	27.3	32.5
Total	32.1	38.5	52.3	59.4	51.5	54.2
DEF						
Residential	38.0	46.0	18.0	27.0	13.0	43.0
Commercial/Industrial	5.0	70.0	9.0	91.0	8.0	38.0
Total	43.0	116.0	27.0	118.0	21.0	81.0
TECO						
Residential	7.6	8.3	3.1	5.7	6.9	16.8
Commercial/Industrial	1.6	22.4	3.3	29.2	9.9	74.6
Total	9.2	30.7	6.4	35.0	16.8	91.4
Gulf						
Residential	3.40	**1.86**	5.90	**2.58**	6.00	**3.80**
Commercial/Industrial	0.20	**0.02**	0.70	**0.49**	2.20	**1.09**
Total	3.60	**1.88**	6.60	**3.07**	8.20	**4.89**
FPUC						
Residential	0.03	0.11	0.08	0.19	0.05	0.39
Commercial/Industrial	0.02	**0.00**	0.05	**0.01**	0.15	**0.03**
Total	0.05	0.11	0.13	0.20	0.20	0.42
JEA						
Residential	0.96	2.06	0.94	2.81	2.50	6.30
Commercial/Industrial	0.01	0.02	0.14	0.77	0.08	2.15
Total	0.97	2.08	1.08	3.58	2.58	8.45
OUC						
Residential	0.21	0.35	0.20	0.50	0.72	1.03
Commercial/Industrial	0.66	2.56	0.37	3.03	0.82	11.33
Total	0.87	2.91	0.57	3.54	1.54	12.36

*Bold numbers indicate the utility did not meet its annual goals within that category.
Source: FEECA utilities' demand-side management annual reports.

PGS

Table 8 provides a breakdown of the goal achievements for PGS for the period. Therm-savings goals for PGS were first approved in August 2019. PGS met its 2019 total goals and all individual customer class goals.

Table 8
PGS DSM Goals Compared to Annual (2019) Achievements

Utility	Annual Energy Reduction, in Therms	
	Goals	Achieved Reduction
PGS		
Residential	338,439	392,946
Commercial/Industrial	216,155	375,139
Total	554,594	768,084

Source: PGS' DSM annual report.

3.2 Low-Income Programs

The 2014 DSM Goals Order[21] states, "When the FEECA utilities file their DSM implementation plans, each plan should address how the utilities will assist and educate their low-income customers, specifically with respect to the measures with a two-year or less payback."[22] In accordance with this Order, each electric FEECA utility has implemented programs within its DSM plan that address low-income conservation. Low-income customer participation in energy conservation programs furthers the intent of FEECA by encouraging potential demand and energy reduction in the State of Florida. Customers that participate in these programs benefit through increased knowledge of conservation opportunities and through rebates on energy saving equipment, resulting in potential bill reduction.

Low-income programs mainly focus on efforts to provide energy efficiency information, weatherization opportunities and the installation of energy efficient measures to residential homes. In many cases, the utilities have established partnerships with government and non-profit agencies. They work together to help identify low-income neighborhoods and educate customers on conservation opportunities through energy audits, bill inserts, presentations, and other measures.

All of the electric FEECA utilities submitted programs in 2015 in their DSM plans highlighting how they reach and encourage qualifying customers. Each FEECA utility's conservation efforts with respect to low-income customers during 2019 are discussed below.[23]

[21]The 2014 DSM Goals Order references electric utilities only.
[22]Order No. PSC-14-0696-FOF-EU, issued December 16, 2014, in Docket Nos. 20130199-EI through 20130205-EI, *In re: Commission review of numeric conservation goals.*
[23]This report covers the programs in 2019, which were a part of the 2015 approved DSM Plans. The newly approved 2020 DSM plans and programs will be addressed in next year's report.

FPL
FPL states that its energy audit, the Residential Energy Survey, is available to all customers and is a way to identify energy-saving opportunities at no cost to the customer. In 2017, FPL continued to enhance the Energy Retrofit sector of its Residential Low-Income Program. Changes included proactive outreach to customers in designated low-income zip codes to offer retrofit services. It also allowed field service representatives the ability to perform retrofits in designated low-income zip codes during energy surveys. These enhancements helped the program exceed projected participation in each period since 2017. Participation levels in 2019 were approximately 40 percent higher than FPL's original projection.

DEF
DEF offers information to its customers about energy conservation programs through bill inserts, the Company's website, and community outreach efforts. DEF's outreach efforts include meetings with community leaders and presentations at local conferences. In 2019, DEF hosted neighborhood dinner meetings at local community centers where they shared information about how to lower utility bills and explained the opportunities available through DEF's Low-Income Weatherization Assistance Program and other DSM programs.

TECO
TECO utilizes a multi-pronged approach of communication and education to reach out to low-income customers. Over the past few years, TECO has increased customer awareness by adding several new communication avenues, largely in social media, and focusing on increasing participation in energy education and awareness events. In 2019, TECO reviewed its low-income programs in order to make changes in 2020, including providing direct market materials to its Neighborhood Weatherization Program team.

Gulf
Gulf's customer service representatives provide conservation program information, as appropriate, when customers contact the Company with billing concerns or questions about savings options. These services, as well as the audit programs it offers, are available to all customers regardless of economic status. Gulf specifically targets lower-income neighborhoods via its Community Energy Saver program. Gulf has also partnered with the Salvation Army to provide an instructor-led energy education session as part of the agency's financial literacy training for clients. Since 2018, this partnership has provided an additional avenue for Gulf to access customers who are in the most need of assistance.

FPUC
In 2019, the Company hosted on-site events to educate its customers about energy efficiency and to offer energy conservation surveys and measures to combat high electrical usage. These events targeted low-income senior centers or housing developments. On an on-going basis, the Company searches for opportunities like this to reach this key demographic.

JEA
JEA provides a specific program for low-income customers called its Neighborhood Energy Efficiency Program. This program includes the installation of conservation products and provides energy education packets that give customers energy-saving ideas and information

about JEA's other DSM programs, as well as community conservation programs. JEA also provides speakers from its Ambassador Team to give a "Savings Without Sacrifice" presentation to neighborhood associations, churches, schools, community development groups, and other organizations in low-income neighborhoods. JEA holds regular meal events with leaders of multiple advocacy groups for low-income customers, seniors, and disabled persons to keep these leaders aware of utility programs, changes, and resources.

OUC

In 2019, OUC continued its Project Care and Efficiency Delivered programs to reach low-income customers. Project Care assists customers in paying their energy bills and implementing energy efficiency measures. OUC donates $2 for every $1 donated to the program. Efficiency Delivered offers up to $2,000 of energy and water efficiency upgrades. For households with income of less than $40,000, OUC pays 85 percent of costs. Qualified participants pay the remaining 15 percent over the first 12 months, interest free.

OUC's Power Pass Program allows customers to pay-as-they-go or pay in advance for utility services. The program is ideal for low-income customers because it requires no deposits, late fees, or monthly bills.

3.3 Investor-Owned Utility Research and Development Programs

In addition to specific DSM programs that provide measurable demand and energy savings, the five electric IOUs conduct conservation research and development initiatives to evaluate emerging DSM opportunities. In these programs, Florida's electric IOUs often partner with universities or established industry research organizations. With the constant arrival of new electricity-consuming products and new technologies, research and development by Florida's electric IOUs creates a unique opportunity to identify emergent options to conserve electricity. The recent initiatives undertaken by the electric IOUs are discussed below.

FPL

FPL participates in relevant co-funded projects through the DOE and national organizations such as Electric Power Research Institute (EPRI). This co-funding approach enables FPL to participate in larger research projects and gain insights at a fraction of the total cost. In 2018, FPL continued its participation in multiple EPRI programs, such as the Technology Innovation Program and the End-Use Energy Efficiency and Demand Response Research Program. These projects are ongoing and therefore did not produce any final reports in 2019.

DEF

DEF continued a project with the University of South Florida to leverage customer-sited solar PV and energy storage for a cost-effective demand response program. DEF also continued its research on CTA-2045 Technology, a port that enables connected appliances to receive and execute commands, and its potential for energy conservation programs. The Company continued to work on numerous other projects, including Energy Management Circuit Breakers, cloud communications to control variable-capacity heat pumps, and gathering data on how customers charge their electric vehicles. New for 2019, DEF is looking into leveraging DSM of residential

loads to provide grid resiliency and launched a project to document the value of long-duration customer-side energy storage systems.

TECO

In 2019, TECO continued several of its battery storage research initiatives, including a project exploring the use of large commercial electric vehicle lithium-ion batteries to export power to the Company's grid during peak times. TECO also continued examining a Commercial Small to Mid-sized Business Online Energy Audit program and researching Home Energy Management Systems, including Heat Pump Water Heaters, in its Energy Planner Program.

Gulf

Gulf completed two projects in 2018 that revolve around the Tesla Powerwall, a rechargeable energy storage product designed for home use. The Tesla Powerwall Demand Response project investigates the ability of the Powerwall to improve the effectiveness of current DSM programs, specifically its impact on load-shifting and peak reduction. The Tesla Powerwall Demand Photovoltaic Project evaluates the impact of solar shifting and solar smoothing, and how battery storage may be able to overcome the typical shortcomings of grid-tied solar photovoltaics. Gulf did not initiate any new projects in 2019.

FPUC

In 2019, FPUC installed the second and third systems in its Distributed Battery Technology Pilot Program. This research explores the impacts battery technology has on FPUC's electrical system and how this may provide future benefits to customers. FPUC is currently monitoring the performance of the program's solar array while connected to various battery systems.

Section 4. Conservation Cost Recovery

Florida's IOUs are allowed to recover reasonable expenses for Commission-approved DSM programs through cost recovery clauses. For electric IOUs, the recovery mechanism is the ECCR clause. For natural gas LDCs, the recovery mechanism is the Natural Gas Conservation Cost Recovery (NGCCR) clause. These costs include utility expenses such as administrative costs, equipment, and incentive payments to customers. Before requesting recovery of costs through the ECCR clause, an electric IOU must prove that its DSM programs are cost-effective and benefit the general body of ratepayers. The Commission conducts a financial audit each year prior to approving cost recovery of these expenses.

4.1 Electric IOU Cost Recovery

From 2010 through 2014, annual electric utility expenditures to fund conservation programs grew due to additions and modifications of these programs. However, annual costs recovered from customers through the ECCR clause after 2014 have declined for most IOUs, due to DSM program modifications designed to meet the Commission's 2014 goals. Table 9 shows the annual DSM expenditures recovered by Florida's IOUs from 2010-2019.

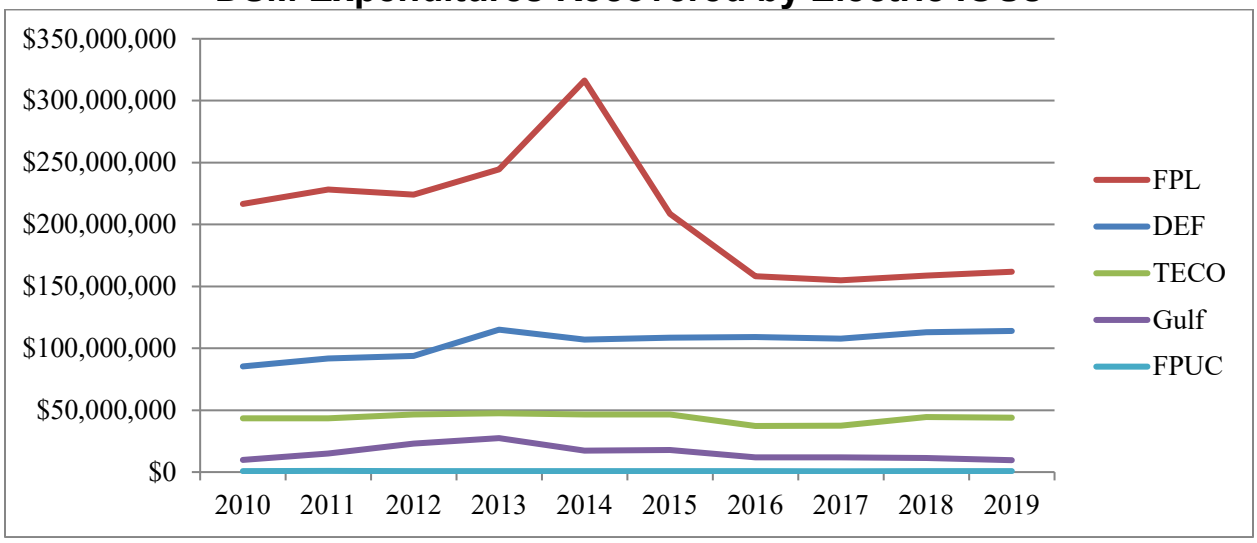
Table 9
DSM Expenditures Recovered by IOUs

	FPL	DEF	TECO	Gulf	FPUC	Total
2010	$216,568,331	$85,354,924	$43,371,442	$9,859,407	$693,331	$355,847,435
2011	$228,293,640	$91,738,039	$43,349,092	$15,003,596	$954,297	$379,338,664
2012	$224,033,738	$93,728,110	$46,593,831	$22,885,826	$695,235	$387,936,740
2013	$244,443,534	$115,035,455	$47,502,652	$27,431,962	$806,698	$435,220,301
2014	$316,311,166	$107,033,335	$46,620,508	$17,412,618	$772,612	$488,150,239
2015	$208,643,788	$108,455,141	$46,516,401	$17,961,885	$718,616	$382,295,831
2016	$158,174,787	$109,155,438	$37,242,148	$11,915,459	$687,590	$317,175,422
2017	$154,916,595	$107,890,962	$37,585,598	$11,854,558	$640,996	$312,888,709
2018	$158,735,829	$112,863,333	$44,558,717	$11,399,250	$656,154	$328,213,283
2019	$161,738,898	$114,084,224	$43,988,528	$9,607,262	$865,843	$330,284,755
Total						**$3,717,351,379**

Source: Docket Nos. 20110002-EG through 20200002-EG, Schedules CT-2 from the IOUs' May testimony.

Figure 3 shows trends in annual DSM expenditures for the five electric IOUs from 2010 to 2019.

Figure 3
DSM Expenditures Recovered by Electric IOUs



Source: Docket Nos. 20110002-EG through 20200002-EG, Schedules CT-2 from the IOUs' May testimony.
*FPL's 2014 recovery included a one-time $56.3 million payment to Solid Waste Authority of Palm Beach County.

During the annual ECCR clause proceedings, the Commission approves the ECCR factors, by customer class, which each utility will apply to the energy and demand portions of customer bills. These factors are set using each IOU's estimated conservation costs for the next year and reconciliation for any actual conservation cost over- or under-recovery amounts associated with the current and prior years.

In November 2020, the Commission set the ECCR factors for the 2021 billing cycle. Table 10 illustrates the approved ECCR factors and the monthly bill impact for a residential customer. For illustrative purposes, these factors are applied to a typical monthly residential bill based on a 1,000 kilowatt-hour (kWh) per month energy usage.

Table 10
Residential Energy Conservation Cost Recovery Factors in 2021

Utility*	ECCR Factor (cents per kWh)	Monthly Bill Impact (Based on usage of 1,000 kWh)
FPL	0.149	$1.49
DEF	0.338	$3.38
TECO	0.166	$1.66
Gulf	0.090	$0.90
FPUC	0.150	$1.50

*While JEA and OUC fall under the FEECA Statute, the Commission does not regulate electric rates for municipal utilities.
Source: Order No. PSC-2020-0447-FOF-EG, Docket No. 20200002-EG.

4.2 Natural Gas Cost Recovery

Commission Rule 25-17.015, F.A.C., establishes a mechanism for recovery of reasonable costs attributed to natural gas conservation programs. While PGS is the only natural gas utility subject to FEECA, the other LDCs covered in this section offer Commission-approved DSM programs without a specific therm savings goal. As it does for the electric IOUs, the Commission also conducts financial audits of the LDCs' conservation expenditures on a yearly basis and adjusts the LDCs' cost recovery factors to allow for recovery of actual and projected program-related costs. Table 11 shows the amounts each LDC recovered in natural gas conservation program expenditures from 2010-2019.

Table 11
DSM Expenditures Recovered by LDCs

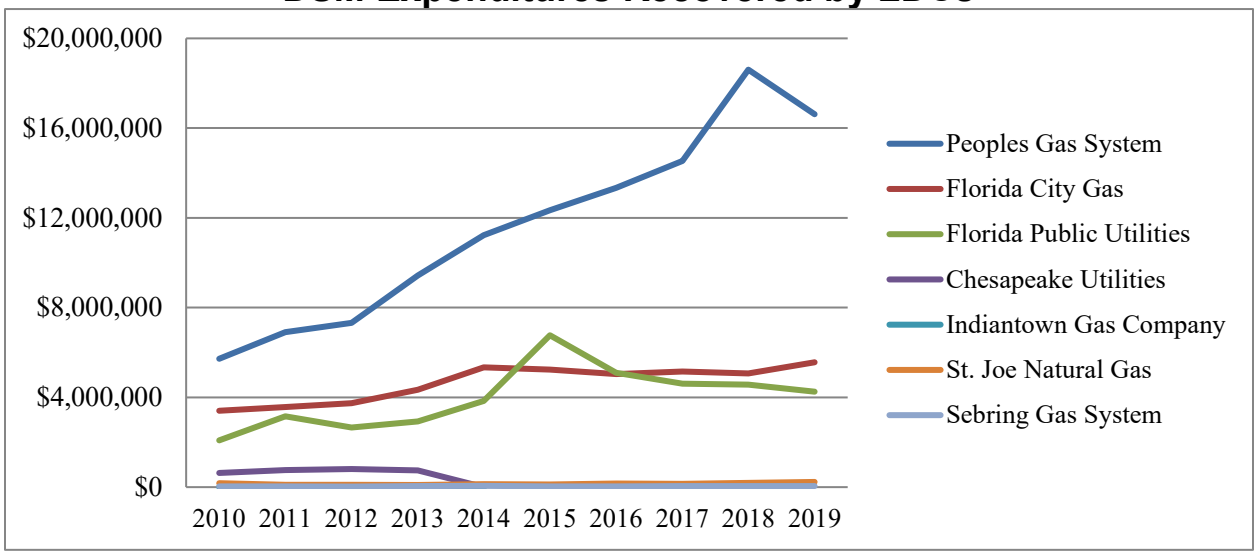
	Peoples Gas System	Florida City Gas	Florida Public Utilities	Chesapeake Utilities	Indiantown Gas Company	St. Joe Natural Gas	Sebring Gas System	Total
2010	$5,721,003	$3,404,142	$2,084,724	$627,734	$8,733	$170,374	$37,283	$12,053,993
2011	$6,906,668	$3,573,513	$3,163,050	$755,779	$11,357	$106,300	$34,640	$14,551,307
2012	$7,314,940	$3,743,811	$2,655,654	$806,747	$5,238	$102,425	$25,090	$14,653,905
2013	$9,432,551	$4,342,603	$2,935,140	$742,412	$10,222	$96,575	$53,967	$17,613,470
2014	$11,229,211	$5,343,191	$3,844,386			$128,000	$58,382	$20,603,170
2015	$12,335,245	$5,240,383	$6,768,175			$123,400	$33,563	$24,500,766
2016	$13,345,716	$5,037,863	$5,098,245	*	*	$156,250	$36,801	$23,674,875
2017	$14,543,555	$5,149,573	$4,617,501			$144,900	$42,237	$24,497,766
2018	$18,605,532	$5,067,917	$4,562,021			$190,625	$47,126	$28,473,221
2019	$16,619,336	$5,564,237	$4,252,769			$231,600	$46,184	$26,714,126
Total								**$207,336,599**

Source: Docket Nos. 20110004-GU through 20200004-GU, Schedules CT-2 from LDCs' May testimony.

* Spending combined with Florida Public Utilities Company

Figure 4 shows the trends in annual conservation expenditures for all LDCs from 2010 to 2019. In 2013, the Commission approved the LDCs' Commercial Conservation programs, resulting in additional overall conservation expenditures. [24]

Figure 4
DSM Expenditures Recovered by LDCs



Source: Docket Nos. 20110004-EG through 20200004-EG, Schedules CT-2 from the LDCs' May testimony.

In November 2020, the Commission set the natural gas LDC conservation cost recovery factors for the 2021 billing cycle. Table 12 provides the LDCs' residential cost recovery factors for 2021 and the impact on a typical residential customer bill using 20 therms of natural gas per month.

Table 12
Residential Natural Gas Conservation Cost Recovery Factors in 2021

Utility	Cost Recovery Factor (Cents per Therm)	Monthly Bill Impact (Based on usage of 20 Therms)
Peoples Gas System	9.591	$1.92
Florida City Gas	26.401	$5.28
Florida Public Utilities	7.642	$1.53
Chesapeake Utilities	12.747	$2.55
Indiantown Gas Company	7.366	$1.47
St. Joe Natural Gas	57.353	$11.47
Sebring Gas System	10.222	$2.04

Source: Order No. PSC-2020-0436-FOF-GU, Docket No. 20200004-GU.

[24]Order No. PSC-14-0039-PAA-EG, issued January 14, 2014, in Docket No. 20130167-EG, *In re: Petition for approval of natural gas energy conservation programs for commercial customers, by Associated Gas Distributors of Florida.*

Section 5. Educating Florida's Consumers on Conservation

5.1 Commission Consumer Education Outreach

While the Commission has statutory authority to require conservation efforts by regulated utilities, as part of the agency's outreach program, the Commission complements utility efforts with its own conservation related activities. To effectively reach as many consumers as possible, the Commission's consumer education program uses a variety of platforms to share conservation information, including the Commission website, public events, brochures, press releases, E-Newsletters, and Twitter. Conservation information is also available through other governmental and utility websites. Section 5.2 lists related websites for state and federal agencies, investor-owned electric utilities, and local gas distribution companies to further assist consumers. Most of the data in this section covers October 2019 through September 2020.

Triple E Award

Each quarter, the Commission recognizes a small business for implementing Commission approved, cost-effective conservation programs. Covering the state's five major geographic areas, the Commission presents its Triple E Award—for Energy Efficiency Efforts—to a local business that has accomplished superior energy efficiency by working with its local utility to help reduce its energy footprint. Triple E Award recipients receive an award plaque; are featured under Hot Topics on the FPSC homepage, www.Floridapsc.com, and are highlighted statewide via a press release, tweeted @floridapsc, and archived on the FPSC website.

Website Outreach Resources

An assortment of information is available on the Commission website to help consumers save energy. According to Google Analytics, website page views for October 1, 2019 through August 18, 2020 totaled over 1.1 million. Requests to use the Commission's Conservation House, highlighted on the homepage, have come from the U.S. and also overseas. Its interactive design illustrates energy saving strategies for both inside and outside the home. "Find Your Utility" and "Lifeline Assistance" pages were among the most heavily visited of the Consumer Assistance pages.

The Commission also offers several energy conservation brochures to help consumers save energy. Brochures may be viewed and printed directly from the website, FloridaPSC.com/publications, ordered online, or requested by mail or phone. From October 2019 through September 2020, the FPSC received more than 25,000 requests for brochures.

Newsletters

The Commission's quarterly Consumer Connection E-Newsletter features current energy and water conservation topics, consumer tips, and general Commission information. Consumer tips and information highlighted through video and text during the reporting period include: Chairman Gary Clark's message on National Consumer Protection Week, the Florida Channel's "On the Line" coverage of the Commission's Conservation Goals and Storm Hardening meeting, and FPSC Encourages Hurricane Preparedness/Utilities Prepare For Busy Storm Season. The Consumer Connection E-Newsletter is available under Consumer Corner on the Commission's

homepage and distributed to consumers via Twitter (@floridapsc) and by subscribing to the free newsletter online.

National Consumer Protection Week

National Consumer Protection Week (NCPW), highlighting consumer protection and education efforts, was instrumental to the Commission's 2020 conservation education efforts. Chairman Gary Clark recognized the 22nd Annual NCPW (March 1-7, 2020) with the importance of education and awareness about utility services and about avoiding scams targeting utility customers. The Commission keeps consumers informed year-round through outreach awareness and education events, free resources, and hearings, meetings and workshops. Also during the week, the Commission made presentations to consumers statewide showing them how to save money through energy and water conservation and how to avoid scams. For 13 years, the FPSC has joined government agencies, advocacy organizations, and private sector groups nationwide to highlight NCPW.

Older Americans Month

Each May, the Commission participates in Older Americans Month, a national project to honor and recognize older Americans for their contributions to families, communities, and society. "Make Your Mark" was this year's theme, but the Commission had to cancel its planned 2020 educational sessions due to the COVID-19 pandemic. Also canceled in May was the Jacksonville Expo, which the Commission annually attends for consumer outreach.

Energy Awareness Month

Each October, the U.S. Department of Energy (DOE) sponsors National Energy Awareness Month to promote smart energy choices and highlight economic and job growth, environmental protection, and increased energy independence. In 2019, the Commission created a Twitter campaign, #NationalEnergyAwarenessMonth, providing daily energy saving tips to its followers throughout the month of October.

Community Events

FPSC Commissioners are active in communities around the state and regularly present energy conservation information to students at area schools, to seniors and low-income residents at local community centers, and to county and city businesses at meetings or other events.

Through ongoing partnerships with governmental entities, consumer groups, and many other service organizations, the Commission regularly distributes energy and water conservation materials. The Commission also actively seeks new community events, venues, and opportunities where conservation materials can be distributed and discussed with consumers. With in-state travel suspended in April 2020 due to the COVID-19 pandemic, many outreach events were canceled during the reporting period. The following are events where conservation information was shared:

- Taylor Senior Center
- Leon County Lunch and Learn, Bradfordville Community Center
- Hands of Central Florida
- Leon County Lunch and Learn, Lake Jackson

- Dixie County Senior Service Center
- Levy County Senior Service Center
- Leon County Lunch and Learn – Ft. Braden Community Center
- Lake Jackson Community Center
- Lake Panasoffkee Senior Center
- 21st Annual Active Living Expo (2-day event)
- Museum of Florida History's 37th Annual Children's Day
- Florida Children's Week at the Florida Capitol
- Florida Senior Day – Florida Capitol
- Gilchrist Senior Service Center
- Lafayette Senior Service Center
- Bethel Towers Senior Independent Living Facility
- Lane Wiley Senior Center
- Jim Fortuna Senior Center
- Bay County Council on Aging
- Callaway Arts and Conference Center
- New Smyrna Beach Senior Center
- Deltona Senior Center
- Lunch and Learn - Miccosukee Community Center

Hearings and Customer Meetings

As an ongoing outreach initiative, the Commission supplies conservation brochures to consumers at Commission hearings and customer meetings across the state. From October 2019 through September 2020, Commission staff distributed information and addressed consumer questions at 8 public hearings and meetings. Consumers who file a complaint with the Commission about high electric or natural gas bills also receive conservation information.

Library Outreach Campaign

Each August, the Commission provides educational packets, including conservation materials, to Florida public libraries across the state for consumer distribution. The Commission's Library Outreach Campaign reached 616 state public libraries and branches in 2020. To reduce mailing and production costs, the Commission's 2020 campaign included a cover letter, book marks, and our consumer-friendly brochure order form. Following the Campaign, the FPSC filled many libraries' brochure order requests.

Media Outreach

News releases are posted to the website and distributed via email and Twitter on major Commission decisions, meetings, and public events. The Office of Consumer Assistance & Outreach also issues news releases urging conservation. For instance, in March, the Commission highlighted the federal government's Fix a Leak Week and offered easy repairs to save valuable water and money, and in April, Water Conservation Month was recognized. For May's National Drinking Water Week, the FPSC reminded consumers to conserve water.

Youth Education

The Commission emphasizes conservation education for Florida's young consumers. During 2019 and 2020, the Commission continued to produce its student resource booklet, *Get Wise and Conserve Florida!*, to teach children about energy and water conservation. The booklet is promoted to all public libraries through the Library Outreach Program and is available at all Commission outreach events. The student resource book also continues to be a favorite during senior events.

5.2 Related Websites

State Agencies and Organizations

Florida Public Service Commission – http://www.floridapsc.com/
Florida Department of Environmental Protection – http://www.dep.state.fl.us
The Office of Energy – https://www.fdacs.gov/Divisions-Offices/Energy
Florida Solar Energy Center – https://energyresearch.ucf.edu/
Florida Weatherization Assistance – https://www.benefits.gov/benefit/1847
Florida's Local Weatherization Agencies List – https://floridajobs.org/community-planning-and-development/community-services/weatherization-assistance-program/contact-your-local-weatherization-office-for-help

U.S. Agencies and National Organizations

U.S. ENERGY STAR Program – https://www.energystar.gov/
U.S. Department of Energy – Energy Efficiency and Renewable Energy Information http://www.eere.energy.gov/
National Energy Foundation – https://nef1.org/

Florida's Utilities Subject to FEECA

Florida Power & Light Company – http://www.fpl.com/
Duke Energy Florida, LLC – http://www.duke-energy.com/
Tampa Electric Company – http://www.tampaelectric.com/
Gulf Power Company – http://www.gulfpower.com/
Florida Public Utilities Company – http://www.fpuc.com/
JEA – http://www.jea.com/
Orlando Utilities Commission – http://www.ouc.com/
Peoples Gas System – http://www.peoplesgas.com/

Florida's Investor-Owned Natural Gas Utilities

Florida City Gas – http://www.floridacitygas.com/
Florida Division of Chesapeake Utilities – http://www.chpk.com/companies/chesapeake-utilities/
Florida Public Utilities Company – http://www.fpuc.com/
Florida Public Utilities Company – Ft. Meade Div. – http://www.fpuc.com/fortmeade/
Florida Public Utilities Company – Indiantown Div. – http://www.fpuc.com/about/fpufamily
Peoples Gas System – http://www.peoplesgas.com/
Sebring Gas System – http://www.sebringgas.com/
St. Joe Natural Gas Company – http://www.stjoenaturalgas.com/

Appendix A. FEECA Utilities' Conservation Programs

Electric IOUs

Florida Power & Light Company https://www.fpl.com/save/programs-and-resources.html	
Residential Programs	Residential Home Energy Survey Residential Ceiling Insulation Residential Air Conditioning Residential New Construction (BuildSmart) Residential Low-Income Residential Load Management (On Call)
Commercial/Industrial Programs	Business Energy Evaluation Business Lighting Business Heating, Ventilating, and Air Conditioning Business Custom Incentive Business On Call Commercial/Industrial Load Control (CILC) Commercial/Industrial Demand Reduction (CDR)
Other	Conservation Research and Development (CRD) Cogeneration & Small Power Production

Duke Energy Florida, LLC https://www.duke-energy.com/home/savings	
Residential Programs	Home Energy Check Residential Incentive Low-Income Weatherization Assistance Program Neighborhood Energy Saver Residential Energy Management
Commercial/Industrial Programs	Business Energy Check Commercial Energy Management Better Business Florida Custom Incentive Standby Generation Interruptible Service Curtailable Service
Other	Technology Development Qualifying Facility

Tampa Electric Company http://www.tampaelectric.com/residential/saveenergy/ http://www.tampaelectric.com/business/saveenergy/	
Residential Programs	Residential Energy Audits Residential Ceiling Insulation Residential Duct Repair Residential Electronically Commutated Motors (ECM) Energy Education, Awareness, and Agency Outreach ENERGY STAR Multi-Family ENERGY STAR for New Homes Residential Heating and Cooling Neighborhood Weatherization (Low-Income) Residential Price Responsive Load Management (Energy Planner) Residential Wall Insulation Residential Window Replacement
Commercial/Industrial Programs	Commercial/Industrial Energy Audits Commercial Ceiling Insulation Commercial Chiller Cogeneration Conservation Value Commercial Cool Roof Commercial Cooling Demand Response Commercial Duct Repair Commercial Electronically Commutated Motors (ECM) Industrial Load Management (GSLM 2&3) Lighting Conditioned Space Lighting Non-Conditioned Space Lighting Occupancy Sensors Commercial Load Management Refrigeration Anti-Condensate Control Standby Generator Thermal Energy Storage Commercial Wall Insulation Commercial Water Heating
Other	Conservation Research and Development Renewable Energy

Gulf Power Company https://www.gulfpower.com/residential/savings-and-energy https://www.gulfpower.com/business/savings-and-energy	
Residential Programs	Residential Energy Audit and Education Community Energy Saver (Low-Income) Residential Custom Incentive HVAC Efficiency Improvement Residential Building Efficiency Energy Select Residential Service Time of Use Pilot
Commercial/Industrial Programs	Commercial/Industrial Energy Analysis Commercial HVAC Retrocommissioning Commercial Building Efficiency Commercial/Industrial Custom Incentive Critical Peak Option
Other	Conservation Demonstration and Development

Florida Public Utilities Company http://www.fpuc.com/electric/residential/rebates/ http://www.fpuc.com/electric/commercial/commercial-rebates/	
Residential Programs	Residential Energy Survey Residential Heating and Cooling Efficiency Upgrade
Commercial/Industrial Programs	Commercial Energy Consultation Commercial Heating and Cooling Efficiency Upgrade Commercial Reflective Roof Commercial Chiller Upgrade
Other	Low-Income Energy Outreach Conservation Demonstration and Development

Electric Municipal Utilities

JEA https://www.jea.com/ways_to_save/home/ https://www.jea.com/ways_to_save/business/	
Residential Programs	Residential Energy Audit Residential Solar Water Heating Residential Solar Net Metering Neighborhood Efficiency (Low-Income) Residential Efficiency Upgrade Energy Efficient Products Residential New Build
Commercial/Industrial Programs	Commercial Energy Audit Commercial Solar Net Metering Commercial Prescriptive Small Business Direct Install Custom Commercial

Orlando Utilities Commission http://www.ouc.com/residential/save-energy-water-money http://www.ouc.com/business/business-rebates-programs	
Residential Programs	Residential Home Energy Survey Residential Duct Repair/Replacement Rebate Residential Ceiling Insulation Upgrade Rebate Residential Window Film/Solar Screen Rebate Residential High Performance Windows Rebate Residential Efficient Electric Heat Pump Rebate Residential New Home Rebate Residential Efficiency Delivered (Low-Income)
Commercial/Industrial Programs	Commercial Energy Survey Commercial Efficient Electric Heat Pump Rebate Commercial Duct Repair Rebate Commercial Window Film/Solar Screen Rebate Commercial High Performance Windows Rebate Commercial Ceiling Insulation Rebate Commercial Cool/Reflective Roof Rebate

Natural Gas LDC

Peoples Gas System https://www.peoplesgas.com/residential/saveenergy/rebates/ https://www.peoplesgas.com/business/saveenergy/rebates/	
Residential Programs	Residential Customer Assisted Energy Audit Residential New Construction Residential Appliance Retention Residential Appliance Replacement Oil Heat Replacement
Commercial/Industrial Programs	Commercial Walk-Through Energy Audit Commercial Electric Replacement Gas Space Conditioning Small Package Cogeneration Commercial New Construction Commercial Retention Commercial Replacement
Other	Monitoring and Research Conservation Demonstration and Development

Appendix B. FEECA Utilities' Conservation Program Descriptions

Electric FEECA IOUs

A. Florida Power & Light Company

Residential Programs

Residential Home Energy Survey
The Residential Home Energy Survey Program encourages implementation of recommended energy efficiency measures, even if they are not included in FPL's DSM programs. The Residential Home Energy Survey Program also identifies FPL DSM programs that could be appropriate considering the residential customers' home layouts and electricity usage patterns. FPL offers in-home, phone-assisted, and online audits for its residential customers.

Residential Ceiling Insulation
The Residential Ceiling Insulation Program encourages customers to improve their homes' thermal efficiency.

Residential Air Conditioning
The Residential Air Conditioning Program encourages customers to install high-efficiency central air conditioning systems.

Residential New Construction (BuildSmart)
The Residential New Construction Program encourages builders and developers to design and construct new homes that achieve BuildSmart certification and move towards ENERGY STAR qualifications.

Residential Low-Income
The Residential Low-Income Program assists low-income customers through state Weatherization Assistance Provider ("WAP") agencies and FPL conducted energy retrofits.

Residential Load Management (On Call)
The Residential Load Management Program allows FPL to turn off certain customer-selected appliances using FPL-installed equipment during periods of extreme demand, capacity shortages, or system emergencies.

Commercial/Industrial Programs

Business Energy Evaluation
The Business Energy Evaluation Program educates customers on energy efficiency and encourages implementation of recommended practices and measures, even if these are not included in FPL's DSM programs. The Business Energy Evaluation is also used to identify potential opportunities to implement for other FPL DSM programs. FPL offers the Business Energy Evaluation in on-site or online formats.

Business Lighting
The Business Lighting Program encourages customers to install high-efficiency lighting systems.

Business Heating, Ventilating, and Air Conditioning (HVAC)
The Business HVAC program encourages customers to install high-efficiency HVAC systems.

Business Custom Incentive
The Business Custom Incentive Program encourages customers to install unique high-efficiency technologies not covered by other FPL DSM programs.

Business On Call
The Business On Call Program allows FPL to turn off customers' direct expansion central air conditioning units using FPL-installed equipment during periods of extreme demand, capacity shortages, or system emergencies.

Commercial/Industrial Load Control (CILC)
The Commercial/Industrial Load Control Program allows FPL to control customer loads of 200 kW or greater during periods of extreme demand, capacity shortages, or system emergencies. The CILC Program was closed to new participants as of 2000.

Commercial/Industrial Demand Reduction (CDR)
The Commercial/Industrial Demand Reduction Program allows FPL to control customer loads of 200 kW or greater during periods of extreme demand, capacity shortages, or system emergencies. FPL installs a load management device at the customer's facility and provides monthly credits to customers. Unlike the CILC program, the CDR program is still open to new customers.

Cogeneration & Small Power Production
The Cogeneration and Small Power Production Program facilitates the interconnection and administration of contracts for cogenerators and small power producers.

Research and Development Programs

Conservation Research and Development (CRD)
Under Conservation Research and Development, FPL conducts research projects to identify, evaluate, and quantify the impact of new energy efficient technologies. FPL uses the findings to potentially add new energy efficient technologies to DSM programs.

B. Duke Energy Florida, LLC

Residential Programs

Home Energy Check
The Home Energy Check is a residential energy audit program that provides residential customers with an analysis of their energy consumption and educational information on how to reduce energy usage and save money. DEF offers walkthrough, online, and phone-assisted audits for its residential customers.

Residential Incentive
The Residential Incentive Program provides incentives to residential customers for energy efficiency improvements in both existing and new homes.

Low-Income Weatherization Assistance Program
The Low-Income Weatherization Assistance Program works with the Florida Department of Economic Opportunity and local weatherization providers to deliver energy education, efficiency measures, and incentives to weatherize the homes of low-income families.

Neighborhood Energy Saver
The Neighborhood Energy Saver Program installs energy conservation measures, identified through an energy assessment, in the homes of customers in selected neighborhoods where at least 50 percent of households have incomes equal to or less than 200 percent of the poverty level established by the U.S. government.

Residential Energy Management
The Residential Energy Management Program uses direct control of customer equipment to reduce system demand during winter and summer peak capacity periods by temporarily interrupting select customer appliances.

Commercial/Industrial Programs

Business Energy Check
The Business Energy Check Program provides no-cost energy audits at non-residential facilities either over the phone or at the customer's facility.

Commercial Energy Management
The Commercial Energy Management Program uses direct control of customer equipment to reduce system demand during winter and summer peak capacity periods.

The Commercial Energy Management Program was closed to new participants in 2000, but is still open for existing participants.

Better Business
Better Business is an umbrella efficiency program that provides incentives to existing C/I and government customers for HVAC, roof insulation, duct leakage and repair, demand-control ventilation, and cool roof coating.

Florida Custom Incentive
The Florida Custom Incentive Program provides incentives for individual custom projects, such as new construction measures or thermal energy storage systems, that are cost effective but not addressed by DEF's other programs.

Standby Generation
The Standby Generation Program is a demand control program that reduces DEF's system demand based on control of customer equipment. This program is available to C/I customers who have on-site generation capability and are willing to reduce demand on DEF's system when requested for system reliability purposes.

Interruptible Service
Interruptible Service is a direct load control DSM program in which customers allow DEF to interrupt their electrical service during times of capacity shortages based on peak or emergency conditions. In return, customers receive a monthly bill credit.

Curtailable Service
Curtailable Service is an indirect load control DSM program in which customers contract to curtail all or a portion of their electricity demand during times of capacity shortages. In contrast to the Interruptible Service Program, the customer, instead of DEF, controls whether or not the customer's appliances are turned off during times of stress on the grid. In return, customers receive a monthly bill credit.

Qualifying Facility
The Qualifying Facility Program supports the interconnection and purchase of as-available energy as well as firm energy and capacity from qualifying facilities including those that use renewable energy and distributed energy resources.

Research and Development Programs

Technology Development
The Technology Development Program allows DEF to investigate technologies that hold promise for cost-effective demand reduction and energy efficiency. DEF will investigate variable capacity heat pump air conditioners, building automated energy efficiency and demand response, energy management circuit breakers, and more.

C. Florida Public Utilities Company

Residential Programs

Residential Energy Survey
In the Residential Energy Survey Program, FPUC provides the customer with specific whole-house energy efficiency recommendations. FPUC also provides customers with lists of blower-door test contractors who can check for duct leakage. Finally, FPUC provides the customer with a conservation kit. FPUC offers in-home and online audits to its residential customers.

Residential Heating and Cooling Efficiency Upgrade
The Residential Heating and Cooling Upgrade Program incentivizes customers operating inefficient heat pumps and air conditioners to replace them with more efficient units. The program also provides incentives for customers to install a new heat pump.

Low-Income Energy Outreach
The Low-Income Energy Outreach Program partners with Department of Economic Opportunity approved Low-Income Weatherization Program operators to offer Residential Energy Surveys, distribute energy conservation materials, and more.

Commercial Programs

Commercial Energy Consultation
In the Commercial Energy Consultation Program, FPUC energy conservation representatives conduct commercial site visits to assess the potential for applicable DSM programs, educate customers about FPUC's commercial DSM programs, and more.

Commercial Heating and Cooling Efficiency Upgrade
The Commercial Heating and Cooling Upgrade Program provides rebates to small commercial customers (customers with a maximum of 5 ton units) if the customers install a high-efficiency central air conditioner or heat pump with a minimum 15 SEER.

Commercial Reflective Roof
The Commercial Reflective Roof Program provides rebates to non-residential customers who convert or install a new cool roof on an existing or new building. The rebates cover up to 25 percent of the added upfront cost of installing a cool roof compared to an alternative roof.

Commercial Chiller Upgrade
The Commercial Chiller Upgrade Program offers customers an incentive of up to $175/kW of savings above minimum efficiency levels.

Research and Development Programs

Conservation Demonstration and Development
The Conservation Demonstration and Development Program researches energy efficiency and conservation projects to identify, develop, demonstrate, and evaluate promising end-use energy efficient technologies across a wide variety of applications.

D. Gulf Power Company

Residential Programs

Residential Energy Audit and Education
The Residential Energy Audit and Education Program is the primary educational program to help customers improve the energy efficiency of their new or existing home. The program provides energy conservation advice and information that encourages the implementation of efficiency measures and behaviors that result in electricity bill savings. Gulf offers its residential customers in-home and online audits.

Community Energy Saver (Low-Income)
The Community Energy Saver Program installs energy conservation measures in the homes of low-income families at no cost to the customers. The program also educates families on behavioral changes designed to save money by decreasing energy use.

Residential Custom Incentive
The Residential Custom Incentive Program aims to increase energy efficiency in the residential rental property sector. The program promotes the installation of efficiency measures available through other programs, such as HVAC maintenance and quality installation, high performance windows, and reflective roofing. As suitable, the program has other incentives to surmount the split-incentive barrier in a landlord/renter situation.

HVAC Efficiency Improvement
The HVAC Efficiency Improvement Program aims to increase energy efficiency and improve HVAC cooling system performance for new and existing homes. Gulf increases efficiency through HVAC maintenance, duct repair, and HVAC quality installation.

Residential Building Efficiency
The Residential Building Efficiency Program is an umbrella efficiency program for existing and new residential customers to install eligible equipment such as high-performance windows, reflective roofs, and ENERGY STAR window air conditioners. The goals are to increase customer demand for energy efficient technologies and to create long-term energy savings and peak demand reduction.

Energy Select
The *Energy Select* Program gives customers a way to manage their energy consumption by programming their heating and cooling systems and major appliances, such as electric

water heaters and pool pumps, to respond automatically to prices that vary during the day and by season in relation to Gulf's cost of producing or purchasing energy.

Residential Service Time of Use Pilot
The Residential Service Time of Use Pilot Program provides residential customers the opportunity to use customer-owned equipment to respond automatically and take advantage of a variable pricing structure with a critical peak component. The pilot will be offered to 400 residential customers. The goal is to measure customers' response, with customer owned equipment, to a variable electricity price.

Commercial Programs

Commercial/Industrial Audit
The Commercial/Industrial Audit Program provides advice to Gulf's existing C/I customers on how to reduce energy consumption. The program ranges from an Energy Analysis Audit and walk-through surveys to a Technical Assistance Audit and computer programs that simulate options for very large, energy-intensive customers. Gulf offers this audit in the form of an on-site walkthrough.

Commercial HVAC Retrocommissioning
The Commercial HVAC Retrocommissioning program offers retrocommissioning at a reduced cost for qualifying installations by C/I customers. Retrocommissioning is a process of identifying suboptimal performance in a facility's systems and replacing the outdated equipment.

Commercial Building Efficiency
The Commercial Building Efficiency Program is an umbrella efficiency program for C/I customers to encourage the installation of high-efficiency equipment in order to reduce energy and demand. The high-efficiency equipment is focused on commercial geothermal heat pumps, ceiling/roof insulation, and reflective roofs.

Commercial/Industrial Custom Incentive
The Commercial/Industrial Custom Incentive Program offers energy efficient end-user equipment to C/I customers. The C/I Custom Incentive Program also offers energy services such as comprehensive audits, design, and construction of energy conservation projects. Covered projects include demand reduction or energy improvement retrofits that are beyond the scope of other DSM programs.

Critical Peak Option
This program allows customers on Gulf's Large Power Time-of-Use rate schedule an option to receive credits for capacity that can be reduced during peak load conditions. The program provides a fixed, per-kW credit for measured on-peak demand and a charge for any measured demand recorded during a called critical peak event.

Research and Development Programs

Conservation Demonstration and Development
The Conservation Demonstration and Development Program is an umbrella program for the identification, development, and evaluation of end-use energy efficient technologies.

E. Tampa Electric Company

Residential Programs

Residential Energy Audits
The Residential Energy Audits Program includes a walk-through free energy check, a customer-assisted energy audit, a computer-assisted paid energy audit, and a building energy ratings system (BERS) audit.

Residential Ceiling Insulation
The Residential Ceiling Insulation Program offers rebates to existing residential customers to install additional ceiling insulation in existing homes.

Residential Duct Repair
The Residential Duct Repair Program encourages residential customers to repair leaky duct work of central air conditioning systems in existing homes.

Residential Electronically Commutated Motors (ECM)
The Residential Electronically Commutated Motors Program encourages residential customers to replace their existing HVAC air handler motors with more efficient ECMs.

Energy Education, Awareness, and Agency Outreach
The Energy Education, Awareness, and Agency Outreach Program engages and educates groups of customers and students on energy efficiency in an organized setting. Also, participants receive an energy savings kit with energy saving devices and information.

ENERGY STAR for New Multi-Family Residences
The ENERGY STAR for Multi-Family Residences Program utilizes a rebate to encourage construction of new multi-family residences that meet the requirements to achieve the ENERGY STAR certified apartments and condominiums label.

ENERGY STAR for New Homes
The ENERGY STAR for New Homes Program incentivizes residential home builders to build homes that qualify for the ENERGY STAR award by achieving energy efficiency levels greater than current Florida building code baseline practices.

Residential Heating and Cooling
The Residential Heating and Cooling Program offers rebates to residential customers for installing high-efficiency heating and cooling equipment in existing homes.

Neighborhood Weatherization (Low-Income)
The Neighborhood Weatherization Program provides for the installation of energy efficient measures for qualified low-income customers.

Renewable Energy
The Renewable Energy Program delivers renewable energy options to TECO's customers through program administration, renewable electricity generation, evaluation of potential new renewable sources, and market research.

Residential Price Responsive Load Management (Energy Planner)
The Residential Price Responsive Load Management (Energy Planner) Program reduces weather-sensitive loads through an innovative price responsive rate. The price responsive rate encourages residential customers to make behavioral or equipment usage changes by pre-programming HVAC, water heating, and pool pumps.

Residential Wall Insulation
The Residential Wall Insulation Program offers rebates to existing residential customers to install additional wall insulation in existing homes.

Residential Window Replacement
The Residential Window Replacement Program offers rebates to existing residential customers to install window upgrades in existing homes.

Commercial Programs

Commercial/Industrial Energy Audits
In the C/I Energy Audits Program, C/I customers can receive more limited free energy audits or comprehensive paid energy audits.

Commercial Ceiling Insulation
The Commercial Ceiling Insulation Program incentivizes C/I customers to install additional ceiling insulation in existing commercial buildings.

Commercial Chiller
The Commercial Chiller Program offers rebates to C/I customers for installing high efficiency chiller equipment.

Cogeneration
The Cogeneration Program incentivizes large industrial customers with waste heat or fuel resources to use their onsite energy to avoid fuel waste and install electric generating equipment. The large industrial customers may sell their surplus electric generation to TECO.

Conservation Value
The Conservation Value Program offers rebates to C/I customers to invest in energy conservation measures that are not in other C/I programs.

Commercial Cool Roof
The Commercial Cool Roof Program encourages C/I customers to install a cool roof system above conditioned spaces.

Commercial Cooling
The Commercial Cooling Program encourages C/I customers to install high efficiency direct expansion commercial air conditioning cooling equipment.

Demand Response
The Demand Response Program incentivizes C/I customers to reduce electricity demand at certain peak times.

Commercial Duct Repair
The Commercial Duct Repair Program encourages C/I customers to repair leaky ductwork of central air conditioning systems in existing C/I facilities.

Commercial Electronically Commutated Motors (ECM)
The Commercial Electronically Commutated Motors Program encourages C/I customers to replace air handler motors or refrigeration fan motors with ECMs.

Industrial Load Management (GSLM 2&3)
The Industrial Load Management Program incentivizes large industrial customers to allow TECO to interrupt part of or their entire electrical service during periods of peak stress on the grid.

Lighting Conditioned Space
The Lighting Conditioned Space Program encourages C/I customers to invest in more efficient lighting technologies in existing conditioned areas of C/I facilities.

Lighting Non-Conditioned Space
The Lighting Non-Conditioned Space Program encourages C/I customers to invest in more efficient lighting technologies in existing non-conditioned areas of C/I facilities.

Lighting Occupancy Sensors
The Lighting Occupancy Sensors Program encourages C/I customers to install occupancy sensors to control C/I lighting systems.

Commercial Load Management
The Commercial Load Management Program incentivizes C/I customers to allow TECO to control weather-sensitive heating, cooling, and water heating systems to reduce the associated weather-sensitive peak demand.

Refrigeration Anti-Condensate Control
The Refrigeration Anti-Condensate Control Program encourages C/I customers to install anti-condensate equipment sensors within refrigerated door systems.

Standby Generator
The Standby Generator Program incentivizes C/I customers to use available emergency electrical generation capacity in order to reduce weather-sensitive peak demand on the grid.

Thermal Energy Storage
The Thermal Energy Storage Program encourages C/I customers to install an off-peak air conditioning system.

Commercial Wall Insulation
The Commercial Wall Insulation Program encourages C/I customers to install wall insulation in existing C/I structures.

Commercial Water Heating
The Commercial Water Heating Program encourages C/I customers to install high efficiency water heating systems.

Research and Development

Conservation Research and Development (R&D)
The Conservation Research and Development Program allows TECO to explore DSM measures that have insufficient data on cost-effectiveness and the impact on TECO's ratepayers.

Electric FEECA Municipal Utilities

A. JEA

Residential Programs

Residential Energy Audit
In the Residential Energy Audit Program, JEA examines homes, educates customers, and makes recommendations on low-cost or no-cost energy-saving practices and measures.

Residential Solar Water Heating
The Residential Solar Water Heating Program pays a financial incentive to customers to encourage the use of solar water heating technology.

Residential Solar Net Metering
The Residential Solar Net Metering Program promotes the use of PV by purchasing excess electricity from residential customers who have PV.

Neighborhood Efficiency (Low-Income)
The Neighborhood Efficiency Program offers education concerning the efficient use of energy and water as well as the direct installation of an array of energy and water efficiency measures at no cost to income qualified customers.

Residential Efficiency Upgrade
The Residential Efficiency Upgrade Program provides incentives to encourage the use of high efficiency HVAC and water heating. This is one of the DSM programs that JEA offers which has not been approved by the Commission and is not part of the FEECA goalsetting process. Nevertheless, this program creates demand and energy savings.

Energy Efficient Products
The Energy Efficient Products Program provides incentives to encourage the use of high efficiency lighting and efficient appliances. This is one of the DSM programs that JEA offers which has not been approved by the Commission and is not part of the FEECA goalsetting process.

Residential New Build
The Residential New Build Program promotes the use of high efficiency HVAC, water heating, lighting, and appliances in the new construction market. This is one of the DSM programs that JEA offers which has not been approved by the Commission and is not part of the FEECA goalsetting process. Nevertheless, this program creates demand and energy savings.

Commercial Programs

Commercial Energy Audit
In the Commercial Energy Audit Program, JEA examines businesses, educates customers, and makes recommendations on low-cost or no-cost energy-saving practices.

Commercial Solar Net Metering
The Commercial Solar Net Metering Program promotes the use of PV by purchasing excess electricity from commercial customers who have PV.

Commercial Prescriptive
The Commercial Prescriptive Program provides incentives to encourage the use of high efficiency HVAC, lighting, cooking, and water heating products. This is one of the DSM programs that JEA offers which has not been approved by the Commission and is not part of the FEECA goalsetting process. Nevertheless, this program creates demand and energy savings.

Small Business Direct Install
The Small Business Direct Install Program promotes the use of high efficiency HVAC, lighting, water heating, and appliances in the small business sector. This is one of the DSM programs that JEA offers which has not been approved by the Commission and is not part of the FEECA goalsetting process. Nevertheless, this program creates demand and energy savings.

Custom Commercial
The Custom Commercial Program promotes the use of custom efficiency measures based on specific applications for each customer. This is one of the DSM programs that JEA

offers which has not been approved by the Commission and is not part of the FEECA goalsetting process. Nevertheless, this program creates demand and energy savings.

B. Orlando Utilities Commission

Residential Programs

Residential Home Energy Survey
The Residential Home Energy Survey Program consists of three measures: a Residential Energy Walk-Through Survey, a Residential Energy Survey DVD, and an interactive Online Energy Survey.

Residential Duct Repair/Replacement Rebate
The Residential Duct Repair/Replacement Rebate Program provides up to a $160 rebate to encourage customers to repair leaking ducts on existing systems.

Residential Ceiling Insulation Upgrade Rebate
The Residential Ceiling Insulation Upgrade Rebate Program is offered to residential customers to encourage the upgrade of attic insulation.

Residential Window Film/Solar Screen Rebate
The Residential Window Film/Solar Screen Rebate Program encourages solar shading on windows.

Residential High Performance Windows Rebate
The Residential High Performance Windows Rebate Program encourages customers to install windows that minimize heating, cooling, and lighting costs.

Residential Efficient Electric Heat Pump Rebate
The Residential Efficient Electric Heat Pump Rebate Program provides rebates to customers in existing homes who install heat pumps having a seasonal energy efficiency ratio (SEER) of 15.0 or higher.

Residential New Home Rebate
The Residential New Home Rebate Program offers rebates for cool/reflective roofs, block wall insulation, ceiling insulation upgrades to R-38, heat pumps, ENERGY STAR washing machines, ENERGY STAR heat pump water heaters, and solar water heaters.

Residential Efficiency Delivered (Low-Income)
The Residential Efficiency Delivered Program is income based and provides up to $2,000 of energy and water efficiency upgrades based on the needs of the residential customer's home. An OUC Conservation Specialist visits the home, performs a home survey, and recommends which home improvements have the most potential of lowering utility bills.

Commercial Programs

Commercial Energy Survey

The Commercial Energy Audit Program includes a free survey consisting of a physical walk-through inspection of the commercial facility performed by experienced energy experts. Following the inspection, the customer receives a written report.

Commercial Efficient Electric Heat Pump Rebate

The Commercial Efficient Electric Heat Pump Rebate Program provides rebates to qualifying customers in existing buildings who install heat pumps having a seasonal energy efficiency ratio (SEER) of 15.0 or higher.

Commercial Duct Repair Rebate

The Commercial Duct Repair Rebate Program provides rebates of 100 percent of the cost, up to $160, when qualifying customers have an existing central air conditioning system of 5.5 tons or less. Then, customers must seal ducts with mastic and fabric tape or Underwriters Laboratory approved duct tape.

Commercial Window Film/Solar Screen Rebate

The Commercial Window Film/Solar Screen Rebate Program aims to reflect heat during hot summer days and retain heat on cool winter days. The program provides rebates of $1 per square foot for window tinting and solar screening with a solar heat gain coefficient (SHGC) of 0.44 or shading coefficient of 0.5 or less.

Commercial High Performance Windows Rebate

The Commercial High Performance Windows Rebate Program encourages customers to install windows that minimize heating, cooling, and lighting costs.

Commercial Ceiling Insulation Rebate

The Commercial Ceiling Insulation Rebate Program aims to increase a building's resistance to heat loss and gain. Participating customers receive a rebate per square foot for upgrading their attic insulation up to R-30.

Commercial Cool/Reflective Roof Rebate

The Commercial Cool/Reflective Roof Rebate Program aims to reflect the sun's rays and lower roof surface temperature while increasing the lifespan of the roof. OUC provides rebates per square foot of ENERGY STAR cool/reflective roofing that has an initial solar reflectance greater than or equal to 0.70.

Natural Gas FEECA Utility

A. Peoples Gas System

Residential Programs

Residential Customer Assisted Energy Audit
The Residential Customer Assisted Audit is designed to save energy by increasing residential customer awareness of natural gas use in personal residences. Recommendations provided to the customer include an estimated range of energy savings including insightful advice on how to manage their overall energy usage. This audit is only available in an online format.

Residential New Construction
The Residential New Construction Program is designed to save energy for new homeowners by offering incentives to builders for the installation of natural gas appliances.

Residential Appliance Retention
The Residential Appliance Retention Program is designed to encourage current natural gas customers to make cost-effective improvements in existing residences by replacing existing natural gas appliances with energy efficient natural gas appliances.

Residential Appliance Replacement
The Residential Appliance Replacement Program is designed to encourage customers to make cost-effective improvements in existing residences by replacing existing electric appliances with energy efficient natural gas appliances.

Oil Heat Replacement
The Oil Heat Replacement Program is designed to encourage customers to make cost-effective improvements in existing residences by converting/replacing their existing oil heating system to more energy efficient natural gas heating.

Commercial/Industrial Programs

Commercial Walk-Through Energy Audit
This program is designed to reduce demand and energy consumption of C/I facilities by increasing customer awareness of the energy use in their facilities.

Commercial Electric Replacement
The Commercial Electric Replacement Program is designed to encourage commercial customers to make cost-effective improvements in existing facilities by replacing electric resistance appliances with energy efficient natural gas appliances.

Gas Space Conditioning
The Gas Space Conditioning Program is designed to encourage commercial customers to make cost-effective improvements in existing facilities by converting/replacing their electric space conditioning equipment to energy efficient natural gas space conditioning equipment.

Small Package Cogeneration
The Small Package Cogeneration Program is designed to encourage commercial customers to make cost-effective improvements in existing facilities by the installation of an energy efficient on-site natural gas-fired combined heat and power system for the simultaneous production of mechanical and thermal energy.

Commercial New Construction
The Commercial New Construction Program is designed to save energy for new commercial facility owners by offering incentives to commercial customers for the installation of natural gas appliances.

Commercial Retention
The Commercial Retention Program is designed to encourage current natural gas commercial customers to make cost-effective improvements in existing residences by replacing existing natural gas appliances with energy efficient natural gas appliances.

Commercial Replacement
The Commercial Replacement Program is designed to encourage commercial customers to make cost-effective improvements in existing facilities by replacing electric appliances with energy efficient natural gas appliances.

Research and Development

Monitoring and Research
The Monitoring and Research Program is designed to pursue research, development, and demonstration projects designed to promote energy efficiency and conservation.

Conservation Demonstration and Development
The Conservation Demonstration and Development Program is designed to encourage Peoples Gas System and other natural gas LDCs to pursue opportunities for individual and joint research, including testing of technologies to develop new energy conservation programs.

Appendix C. FEECA Utilities' Energy Audits

Residential energy audits are required by Section 366.82(11), F.S. Energy audits serve as an avenue for utilities to identify and evaluate conservation opportunities for customers. FEECA utilities use energy audits as a gateway to their other DSM programs. For example, some rebate programs require customers to have an energy audit so that the utility can identify existing equipment before the customer is eligible to participate. Utilities also use energy audits to educate customers on behavioral changes and energy efficiency investments they can make outside of utility-sponsored DSM programs.

Rule 25-17.0021, F.A.C., requires that all FEECA utilities offer a Walk-Through Audit, a Building Energy-Efficiency Rating System (BERS) Audit, and a Computer-Assisted Audit to their residential customers. All FEECA electric utilities also offer Walk-Through audits for their commercial customers. In addition to the required audits, FEECA utilities are now offering online audits and some are offering phone audits, and residential customers have been increasingly requesting these types of audits. While online and phone audits are not as thorough as Walk-Through audits, they give customers access to much of the same information on their own time, without needing to schedule appointments with their utility. These audits also typically have lower administrative costs than Walk-Through audits.

Tables 13 and 14 below reflect data for the FEECA utilities that conducted residential and commercial audits in 2019. As previously noted, PGS was granted a waiver, as a part of its goalsetting process, exempting it from the requirement to offer Walk-Through audits. The Commission allowed PGS to offer an electronic, online-only audit in lieu of on-site audits for residential customers. PGS launched its online audits in 2020. Therefore, the information shown in Table 13 and 14 does not include PGS audit details.

During 2019, the FEECA electric utilities performed 241,025 residential audits, as shown in Table 13.[25] Residential online audits attracted nearly three and a half times as many participants as did the residential walk-through audits.

[25]Walk-Through, BERS, and Computer-Assisted audits all require a utility auditor to physically inspect the customer's premises, and therefore are consolidated for the purposes of Tables 13 and 14.

Table 13
Residential Audits by Type in 2019

Utility	Audit Type			
	Walk-Through, BERS, and Computer Assisted	Online	Phone	Total
FPL	16,955	80,695	19,711	117,361
DEF	13,754	5,596	9,783	29,133
TECO	6,787	57,370	0	64,157
Gulf	2,575	10,006	0	12,581
FPUC	123	0	0	123
JEA	5,947	10,265	0	16,212
OUC	1,278	180	0	1,458
Total	**47,419**	**164,112**	**29,494**	**241,025**

Source: FEECA utilities' demand-side management annual reports.

These FEECA utilities also performed 8,506 commercial energy audits in 2019. A breakdown of these audits performed in 2019 can be found in Table 14. In-person commercial audits continue to attract more participants than online audits by a wide margin.

Table 14
Commercial Audits by Type in 2019

Utility	Audit Type		
	Walk-Through, BERS, and Computer Assisted	Online	Total
FPL	5,099	1,556	6,655
DEF	565	0	565
TECO	867	0	867
Gulf	109	60	169
FPUC	19	0	19
JEA	157	0	157
OUC	74	0	74
Total	**6,890**	**1,616**	**8,506**

Source: FEECA utilities' demand-side management annual reports.

Impact of COVID-19 on Audit Programs

Although this report reviews the 2019 annual goal results for the FEECA utilities and fulfills the statutory obligations of Section 366.82(10), F.S., a significant global health pandemic event began early in 2020, which impacted how the seven electric FEECA utilities can offer their audit programs. On March 1, 2020, Governor Ron DeSantis declared a public health emergency[26] related to the outbreak of COVID-19. On March 9, 2020, a state of emergency was declared,[27] leading to the implementation of the State's Comprehensive Emergency Management Plan.[28]

Below is a condensed summary describing how the seven electric FEECA utilities modified their practices for offering audit programs in response to the COVID-19 pandemic from roughly March through October 2020.[29]

FPL

FPL suspended employee visits to customers' homes and businesses in March 2020. FPL does not have a date for when visits will resume, but states that it has successfully shifted all participation to its online and phone channels to offset the suspension of on-site surveys.

DEF

DEF suspended on-site appointments in March 2020. Messages were posted on social media notifying customers of the suspension and encouraged phone-assisted and online audits as an alternative. DEF resumed residential on-site visits in June 2020, and commercial on-site visits in early May on a case-by-case basis. Beginning June 15, 2020, DEF began routinely performing commercial on-site visits when requested by the customer. DEF is performing commercial on-site audits after hours to limit COVID-19 exposure. Safety precautions, such as wearing protective equipment, have been implemented to ensure safety and protection.

TECO

TECO suspended on-site appointments in March 2020. Emphasis was placed on the phone and online offerings in an effort to provide assistance for customers. TECO implemented a commercial phone-audit in place of the field audit, which involves an energy analyst reviewing the customer's billing information and discussing several steps the customer can take to lower their energy usage.

Gulf

Gulf suspended on-site visits in March 2020. Gulf continues to promote phone and online audits through social media, the Company's website, and advertisements. There is no timetable for when Gulf will resume on-site visits.

[26] Executive Order No. 20-51
[27] Executive Order No. 20-52
[28] https://www.floridadisaster.org/globalassets/cemp/2020-cemp/2020-state-cemp.pdf
[29] Utilities' Responses to Staff's First Set of Interrogatories, Docket No. 20200002-EG.

FPUC

FPUC suspended in home audits mid-March 2020. FPUC has encouraged customers to participate in the phone and online audits provided on the Company's website. There is no timetable for when FPUC will be returning to performing in home audits.

JEA

JEA suspended on-site visits in March 2020, beginning virtual/remote Efficiency Assessments starting in late April. There is no official projected start date to resume on-site visits, but virtual/remote audits continue to assist customers with their conservation and utility consumption needs.

OUC

OUC energy auditors are not currently entering the customer's home. However, energy auditors visit the property and remain outside, where they can verify the meter and other information, and speak to the customer at a safe distance while wearing a mask. OUC will re-evaluate entering customer homes and businesses on a monthly basis.

Attachment 3

State of Florida

Public Service Commission

CAPITAL CIRCLE OFFICE CENTER • 2540 SHUMARD OAK BOULEVARD
TALLAHASSEE, FLORIDA 32399-0850

-M-E-M-O-R-A-N-D-U-M-

DATE: January 12, 2021

TO: Braulio L. Baez, Executive Director

FROM: Marissa Ramos, Public Utilities Supervisor, Division of Engineering TB
Kathryn G.W. Cowdery, Senior Attorney, Office of the General Counsel SMC

RE: **Post-Workshop Briefing on Testing in the Distribution System for Secondary Water Standards**

CRITICAL INFORMATION: Place on January 21, 2021 Internal Affairs Agenda. Staff seeks Commission guidance.

At the July 28, 2020, Internal Affairs (IA) meeting, Commission staff (staff) presented its briefing on several water and wastewater items, including testing in the distribution system for secondary water quality standards. The Commission directed staff to hold a subsequent workshop on this topic to gather additional information, which was held on October 8, 2020. Staff from the Division of Engineering and Office of General Counsel prepared this briefing memorandum to summarize what occurred at the workshop, the post-workshop comments submitted by participants, and the Commission's process for addressing issues pertaining to this briefing topic. Staff also seeks Commission guidance on an approach for staff to bring problematic water quality matters to the Commission's attention earlier in a rate proceeding that could facilitate the provision of more complete information for final decisions on water quality issues.

Workshop Summary

Staff conducted a workshop on October 8, 2020, to discuss testing for secondary water quality standards in distribution systems. Participants included representatives for: Florida Utility Services 1, LLC, Pluris Wedgefield LLC (Pluris), Utilities, Inc. of Florida (UIF), U.S. Water Services Corporation (U.S. Water), the Florida Rural Water Association (FRWA), and the Office of Public Counsel (OPC). Also, in attendance were Commissioners Graham and Polmann. During the workshop, U.S. Water provided a PowerPoint presentation discussing some of the common causes of secondary water quality issues along with some possible treatment solutions. [1] Following the presentation, the workshop participants discussed several matters, such as current utility practices, testing costs, testing options (including the location and frequency), and the implementation of additional testing standards. Participants were asked to submit post-workshop

[1]The presentation is available on the Commission's website http://www.floridapsc.com/UtilityRegulation/StaffWorkShop

comments, which were filed in Docket No. 20200000-OT (Undocketed filings for 2020) on October 21, 2020, and are summarized below.

Summary of post-workshop comments

In its post-workshop comments, UIF recommends sampling within distribution systems on an annual basis at sampling points determined by the system operator. UIF believes testing annually in the distribution system would provide more of an objective understanding and allow for more clarification on possible issues within source water, the piping system, or both. It would also be beneficial to have annual testing results to monitor if and how the water quality is changing from year to year within the piping network. Additionally, the Utility believes sampling costs should be recovered through rates and approximates each sample at $150. Overall, UIF believes annual sampling in the distribution system for secondary water standards would establish a benchmark and also serve to inform the Commission of any possible issues ahead of a rate case. The Utility acknowledges the comments put forth by the FRWA concerning the costs of sampling, especially for smaller Class C utilities, but UIF believes secondary water quality standards should be addressed uniformly, despite the size of a utility.

U.S. Water's comments included a draft rule that proposes that each utility submit to the Commission, for its review and approval, their testing plan which takes into account system specific criteria regarding the customer base, construction of the distribution system, and customer complaint information. The draft rule also recommends additional utility actions depending on the percentage of the customer base raising concerns about secondary water quality standards. For example, if the total number of customer complaints is less than five percent of the total customer base, the utility should follow the required testing of the Florida Department of Environmental Protection (DEP). If this percentage exceeds five percent, the utility should follow its individual approved testing plan, as submitted in accordance with the draft rule. The draft rule provides that secondary water standard results should be submitted to the Commission with a summary of the test results that would include an explanation of the issue, the proposed resolution, and potential cost of the proposed resolution. Additionally, the draft rule suggests that each utility perform secondary testing results no more than 12 months before its rate increase request.

Pluris supports testing for secondary standards in the distribution system on an annual basis. Pluris states that the location(s) of the test should be determined by the system operator or by the DEP and the costs of the tests should be recoverable through rates as operation and maintenance expense. Pluris intends to begin this practice and present the results in its next rate case.

The FRWA acknowledges that while the DEP established regulatory levels for secondary water standards, the DEP has not taken regulatory action against utilities who have exceedances. Additionally, the FRWA states that aesthetics are not regulated on a federal level and most states do not regulate them. The FRWA believes that annual testing, as suggested in the post-workshop comments of the other participants, may be a possible solution for large utilities (Class A & B). However, the FRWA is concerned that the costs of such annual testing for the smaller Class C utilities could be problematic since many do not have a large customer base to share the costs.

The FRWA suggests starting with annual testing for Class A & B utilities for now with the possibility of Class C utilities participating in annual testing in the future. The FRWA also suggested narrowing down which tests are needed based on the customer complaint to save on testing costs.

OPC, in its post-workshop comments, recognizes that the effects of secondary water standards may be subjective, but believes they should be monitored and controlled within the objective standards and metrics set forth by the Environmental Protection Agency (EPA) and the DEP. OPC recommends that each utility be required to provide the results of secondary water testing conducted within the six months immediately preceding the filing of its rate increase request. OPC also believes the tests should be conducted in more than one location depending on the size and make-up of the system. Additionally, the costs of regular annual testing, as suggested by other participants, could be recovered as an operating and maintenance expense. However, the costs for any testing necessitated by or conducted in response to a customer complaint should be borne by the utility. OPC specifies that the only time a customer should pay for a test is if they voluntarily, without prompting from the utility, decide to have the water tested. OPC suggests that the Commission consider adopting certain objectively measurable criteria for secondary water standards, establish testing requirements for more relevant and frequent testing, and clarify the utility's responsibility to pay for such testing.

It appears many of the workshop participants believe that testing for secondary water quality standards within the distribution system may provide additional insight into water quality. Most participants also appear to support testing on an annual basis, especially prior to rate increase proceedings, and that testing costs should be recovered from customers. However, OPC does not agree with other participants on the recovery of testing costs. As stated above, OPC believes that if the testing is due to a customer complaint, the utility should incur such testing costs. Additionally, to reduce testing costs, the FRWA suggests using the customer complaint as a guide in choosing which specific tests should be conducted. While the number of participants was small, when compared to the number of regulated water utilities, there was a diverse group that represented consumers and both large and small water utilities. Staff believes that the discussion at the workshop and the post-workshop comments were complete and thorough.

Current Process

The Commission is required in fixing rates to consider the extent to which a utility provides water service that meets DEP secondary water quality standards.[2] When a water utility's quality of service is determined to be not satisfactory, the Commission may order additional testing or reporting, or impose a reduction to the utility's return on equity or a utility officer's salary in an effort to hold utility management accountable for the identified quality of service issue.

[2]Section 367.0812(1), F.S. The Commission may also, on its own motion or based on complaints of customers, review water quality as it pertains to DEP secondary water standards outside of a rate case proceeding pursuant to Section 367.111(3), F.S.

Currently, staff evaluates the quality of service with respect to secondary water quality standards in rate cases on a case-by-case basis by reviewing customer complaints and assessing the utility's compliance with regulations set forth by the DEP.[3] It is important to recognize that testing for secondary standards in a utility's water distribution system occurs infrequently and has only been ordered by the Commission or requested by its staff four times in the past 25 years.[4] In these cases, testing in the distribution system was done in response to customer complaints.

For example, Bocilla Utilities, Inc. (Bocilla) provides water to approximately 400 customers in Charlotte County and is a consecutive system and, therefore, the Utility is not subject to the DEP's secondary standards. However, due to customer complaints that pertained to odor and color issues, the Commission ordered Bocilla to test at six different locations for secondary water quality standards.[5] The Commission also reduced Bocilla's return on equity by 50 basis points, but this reduction was removed once the Utility presented its test results and the issues were resolved.

In another case, in order to address the water quality complaints from seven of the 1,264 Cypress Lakes Utilities Inc. (Cypress Lakes) customers, staff requested Cypress Lakes to conduct tests of the water in the distribution system at locations close to these seven customers' meters. This request was made even though the data showed that the Utility was in compliance with all DEP primary and secondary water quality standards. Cypress Lakes conducted tests at eight points in its water distribution system. The test results, which were below the DEP's maximum contaminant levels, were considered in the Commission's ultimate determination that the quality of service provided by Cypress Lakes was satisfactory. These two examples show the disparity in the utility size, location, and reasons why additional testing was requested.

Conclusion

As discussed previously in staff's July 17, 2020 Internal Affairs memorandum and during the October 8, 2020 workshop, the need for additional testing for secondary standards in the distribution system does not present itself frequently. Many times, the secondary water quality issues a particular customer has may not be experienced by the rest of the customer base. In addition, the water utilities regulated by the Commission differ greatly in the size and make-up of their respective systems and the types of issues with their water quality. Finally, the testimony and complaints received from customers and considered by the Commission, pursuant to 367.0812 F.S., is key to identifying where a problem may exist. Therefore, staff believes that proposing rules requiring all utilities to test for secondary standards in their water distributions systems is not warranted and would result in unnecessary testing costs being passed on to utility customers. Staff believes there is great benefit in continuing to evaluate the secondary water quality

[3]Testing of secondary water contaminants is required once every three years with the testing location(s) at the water supply entry point(s) to the distribution system, pursuant to Table 7: Monitoring Frequencies and Locations of DEP Rule 62-550.822, F.A.C. There are no DEP mandated testing requirements for secondary water quality within the water distribution systems. The DEP has discretion to require testing in the distribution system, if circumstances warrant.
[4]Docket Nos. 19950615-SU and 19960545-WS, 20090462-WS, 20130212-WS and 20160065-WU
[5]Docket No. 20160065-WU

for water utilities on a case-by-case basis. As discussed below, the staff's current internal processes could be enhanced to address the issue of whether to require individual utilities to provide distribution system test results as part of a rate proceeding.

As stated above, staff currently reviews customer complaints and DEP or Health Department water quality test results for secondary water quality standard problems. This practice would continue. However, during the course of a rate case proceeding, but prior to the case being considered by the Commission, staff would determine whether there were customer complaints and/or test results that would warrant the Commission requiring the utility to conduct secondary water quality standard tests in the distribution system. If so, staff would prepare an interim staff recommendation to the Commission on the issues of requiring the utility to conduct secondary water quality standard tests in the distribution system, the cost of the testing, and utility recovery of those costs in the rate case. The Commission would decide whether to order testing and allow recovery of testing costs. If testing is ordered, the test results would be included in staff's final recommendation on the utility's quality of service, and would be available for the Commission's consideration on the issue. This process would be very similar to the process used for Cypress Lakes discussed above.

This interim procedure should not disrupt any applicable statutory time requirements for processing the case or issuing the final order and would provide the Commission with timely and more complete information to factor into its decisions on quality of service issues. Utilities would continue to be evaluated on a case-by-case basis and avoid unnecessary testing costs for those utilities where secondary water quality issues are not apparent.

MR:jp

cc: Keith Hetrick, General Counsel
Apryl Lynn, Deputy Executive Director - Administrative
Mark Futrell, Deputy Executive Director - Technical

III. Supplemental Materials for Internal Affairs

Note: The records reflect that there were no supplemental materials provided to the Commission during this Internal Affairs meeting.

IV. Transcript

BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

PROCEEDINGS: INTERNAL AFFAIRS

COMMISSIONERS PARTICIPATING: CHAIRMAN GARY F. CLARK
COMMISSIONER ART GRAHAM
COMMISSIONER JULIE I. BROWN
COMMISSIONER ANDREW GILES FAY
COMMISSIONER MIKE LA ROSA

DATE: Tuesday, January 21, 2021

TIME: Commenced: 9:30 a.m.
Concluded: 10:45 a.m.

PLACE: Betty Easley Conference Center
Room 148
4075 Esplanade Way
Tallahassee, Florida

REPORTED BY: DEBRA R. KRICK
Court Reporter and
Notary Public in and for
the State of Florida at Large

PREMIER REPORTING
114 W. 5TH AVENUE
TALLAHASSEE, FLORIDA
(850) 894-0828

P R O C E E D I N G S

CHAIRMAN CLARK: All right. It's 9:30 a.m., we are going to go ahead and get started this morning. Let me welcome everyone to the Internal Affairs Agenda.

Good morning Commissioners. Welcome to the meeting. We've got a fairly lengthy IA this morning scheduled, so we are going to get started, get things kicked off and try to move through the agenda.

Before we begin, Commissioners, any opening comments from Commissioners? All right. That's great.

All right. First up this morning, Dr. Mark Jamison with the Public Utility Research Center here to give his 2020 annual report.

Welcome, Dr. Jamison.

DR. JAMISON: Good morning, and thank you for taking the time to allow me to talk with you. You have got a really big busy agenda, as you mentioned, so I will try to keep this brief.

You have already received, I believe, the copies of our report, and let me just start by thanking you for your support over the years. PURC and the Florida Public Service Commission have had

a very long relationship going back to the early 1970s, and it's a relationship we value, and so we are always seeking your input and listening to you the things that we would be doing that would be more valuable to you.

I will just hit some highlights in our report the things that we've been doing over the past year or so. COVID impacted us like it has everyone else. So we did a lot of things on-line. We hosted 55 different on-line events. We posted 32 different blog posts to try and communicate well with people. We've got 13 different working papers that were released this year by various callers that we work with. So let me just kind of go through the highlights of those different aspects of what we have been doing.

A lot of our on-line work was with something we called Next Practices Live. Once the pandemic hit, we realized that the people we worked with around the world were in a situation that they had never been in before. None of us had been in it before. And the most important thing they needed to do was communicate with each other. Here's what we're trying. Here's what worked, didn't work, at least as far as we could tell. So we started these

on-line events where we just interviewed different utility officials, public officials around the world on what they were doing.

The biggest discussions were around how do we keep customers connected, and then how are we going to pay for the bills that aren't being paid? And that's been -- that's a recurring theme still today in many parts of the world, including the United States, as I will talk about in a moment.

Performance: How is the utility going to maintain its performance. And by utilities, we have water, energy and telecommunications all together. How do we protect the employees and protect the customers as well? That was a big issue for people to talk about. And then as you experienced, how do you practice leadership in this kind of environment?

We don't have easy answers. All we have are ideas, and thoughts, and opportunities to try things, and so we talked a lot about that, providing leadership in kind of an ambiguous environment. And then how do you communicate well with people, and on-line when you are used to all sitting together and talking?

So those are the kind of things that we did.

A lot of the things we did on-line were of that nature. We also hosted and event with the Energy Bar Association. This was actually our look at utilities and regulation post-pandemic. That might have been a little premature because we are still heavily into all of it. It was at least useful to talk about. What of the lessons we are learning, and how do we think we come out on the other side? The -- and, Commissioner -- Commissioner Brown, you were -- you were on this, so we really appreciate your -- your contributions to it.

We also have our digital markets initiative that is looking at the digitization of -- of business. We have several events there that we worked on as well on competition issues, and one of the, I think, interesting events got together the business people who do -- do research and teaching with the legal aspects, because it turns out though those two groups don't talk with each other, and so in the business school, and our scholars in the business schools, look at how does a firm actually gain a good competitive advantage in a marketplace, and then over in law school, they are teaching people how do you punish people that get a good advantage in the competitive marketplace. So we

thought maybe those two groups of people should talk and see maybe -- maybe they could coordinate better on some of the things that they are doing.

We have a lot of research that we've been up to as well. Still looking at the energy storage. How had a paper that looks at the incentives for energy storage, and what are the proper ways to design that. At least our conclusions in that particular paper, that the initiatives being done right now are overcompensating for what energy storage -- for the incentives for getting energy storage properly used.

We've done a lot on who will pay -- who pays for the pandemic, and looked at the differences between investor-owned utilities, municipal-owned utilities, how to deal with the aspect of that bill is growing. I know that the Florida Public Service Commission has been on top of that, but a lot of people are not, and so we worked on that as well. That's been something we've done in the news quite often, Ted Curry, our Director of Energy Studies, has been interviewed many, many times on that, and we have been putting out some things for journalists to be able to use.

We've also looked at broadband deployment.

That's something always on peoples' minds. How can we do that better? And one of the things we particularly studied was how innovation really makes a big impact on broadband deployment. Very specifically, we just simply looked at how important was the iPhone in expanding broadband? And found out that it increased the growth rate proud band by, like, 25 percent in the U.S. and other developed countries. That's a pretty significant impact.

So as we think about what really gets infrastructure to expand, those innovations at the edges that makes things more valuable probably deserve more credit than we've given them in the past.

And one of the things that the business college, and actually the whole university is emphasizing, is going deeper into data analytics. And so we've been -- we've been asked very specifically by our Dean to look at data analytics in the utilities field. So actually, I will be getting with you on that to see are the things that we could be talking about and doing that would be very useful in the space of data analytics and regulation.

I know the electric utilities are deeply into that. There is actually Utility Analytics Association that we have spoken at before. As I recall, a lot of our investor-owned utilities in Florida are active in that, even some of the municipal utilities are. But in the water, I have not heard much in the water in that space, so we would like to talk and see where are there things that we could do to help you with that would be valuable in that space.

Let me just wrap up with things that we are doing on-line. For those of you that know us well, you know a lot of our bread and butter is doing education programs for -- largely for utility regulators, but also for utilities around the world. And since they can't come here, we can't go there, that switched for us, and so we developed ways of doing things on-line.

We have done courses the past year for the World Bank on-line, for Caribbean islands. We actually did one on telecommunications for Saudi Arabia. Africa, we did one as well. And we are going to be launching a whole series of courses that will be on-line too. And the format just gets completely different, and what you expect to

accomplish becomes completely different as well.

So we talk and we do about that, are the things that we could be plugging in and making more available to you. So since you don't have to travel to Gainesville and spend time here, can we take advantage of that particular situation?

So that's kind of the highlights of what we have been up to. Would be glad to answer any questions.

CHAIRMAN CLARK: Thank you, Dr. Jamison.

On behalf of the Commission, let me say thank you to you and your staff. We appreciate the relationship and the cooperation and the support we receive from PURC, and you guys do an outstanding job.

Commissioners, do you have any of questions?

Commissioner Brown.

COMMISSIONER BROWN: Thank you.

And I would echo the Chairman's comments, Dr. Jamison. Thank you. You have been able to adapt in this virtual environment and still really flourish with the work that you do.

I have a question, really just, about the Caribbean. I know you have been very close with the Caribbean and the regulators. I am curious how

they are responding to the pandemic. I imagine, as is the rest of the world, they are having a difficult time. Do you know what they are doing?

DR. JAMISON: Well, it depends on where you are. They are very much -- they initially were paying a great deal of attention to making sure everybody was -- was staying connected and expanding the connections, especially for broadband. They were going through the same things we were going in the U.S., where schools were not going to meet physically. It's unacceptable for people to not go to school, so how do we actually expand connections in broadband?

They took approach very similar to the U.S. and a lot of things were just done voluntarily. The utility said, we are not going to let people do without service. We looked to expand the service, so they did that, always keeping in mind how their different employees might be affected, and so they made allowances for that as well.

The Caribbean, as far as the spread of COVID, has done pretty well because they are islands. They were able to -- actually, I was talking with St. Lucia, I have talked with them several times, and they were pretty much able to eradicate COVID

early on. Of course, once they started opening the borders back up, it came back, but not with the great a vengeance last I heard. It's been about a month or so since I have spoken with them, so that -- so I am not sure if that's still true, but at least was then.

So I think what you will find just in kind of a summary is that they are mapping to things that you see in the U.S., for the most part, just on a smaller scale.

COMMISSIONER BROWN: Thank you. And thanks again for the work that you do.

DR. JAMISON: Sure. Thank you. Thank you for the support.

And I should mention with, our Energy Bar Association event, the Chairman was one of our speakers too. I was talking off the top of my head too quickly and I didn't get that said, so my apologies for omitting you.

CHAIRMAN CLARK: Thank you, Commissioner Brown.

Commissioner Fay.

COMMISSIONER FAY: Thank you, Mr. Chairman.

I also echo the compliments for PURC. I think it's a great program. I think it's an unusual,

outstanding star at the University of Florida, and I, you know, continue to support that.

I will say, I don't know if we are going to put Commissioner La Rosa on the spot, I don't know if he supports FSU or UF, or maybe some alternative, but, Dr. Jamison, you work a little bit with Commissioner Harold Gray in Delaware, who has been involved with some of your programming, and staff, and I work with him on education subcommittee, and he is just really plugged in from a tech perspective and just brings a lot to our discussion, so I appreciate you involving him, because I think he really adds a lot to the discussion.

In addition to that, I just -- you know, I have the concerns about the transition as far as COVID, and how it impacted what you guys have done within your program. Have you been able to maintain -- it looks like from your reports and what you are publishing, your product has been maintained. You have continued to carry on, but you have been able to maintain your staff and keep a program that you believe is able to fulfill the responsibilities?

DR. JAMISON: Yeah. We had -- thank you for

the kind words. We have been able to maintain our productivity. That is certainly true.

We are down two staff people. We actually had some people, one decided she wanted to be a full-time mom, so she left. Another, her husband moved to Tampa, and she said, well, it will just be easier to get a job in Tampa, so she did as well. And we've got -- we replaced -- oh, we lost somebody else as well. So we've -- we've not fully replaced just because we don't have finances we ones did, but we have been able to maintain our work.

COMMISSIONER FAY: Great. And I hope we will continue to support your program too, so thank you for what you do.

DR. JAMISON: Well, thank you.

CHAIRMAN CLARK: Thank you, Commissioner Fay.

Commissioner La Rosa.

COMMISSIONER LA ROSA: Thank you, Chairman.

And to - guess to address that question from Commissioner Fay, I keep a lot of my alliances close to me, but I think it's no secret that I am a UCF grad, so I am certainly a Knight at heart, but growing up in South Florida, the Canes ring very close to my roots, so I am certainly a Cane from

Florida, so I guess I am on the opposite end of some of these.

Dr. Jamison, thank you for your hard work, and thank you for your entire team's hard work. And it's certainly a pleasure to reading through what you guys have put together this year, and I look forward to getting more involved with your organization as, obviously, I am the new guy on the block here at the Commission.

You know, a similar question, or maybe even a follow-up to Commissioner Brown, when you were talking about the Caribbean. I know that the island of Puerto Rico experienced, obviously, some difficulties through Hurricane Maria and they were, you know, looking to kind of to get back on-line with some of their infrastructure needs.

Any -- I guess the best way to ask this is that any additional hurdles were thrown their way through the pandemic in comparison to other Caribbean Islands, or things that they are facing down there south of us?

DR. JAMISON: Not in a technical sense. I -- I try to be fairly -- fairly candid, but still politic in the things that I might say. But if I were to compare Puerto Rico to Florida, one of the

main differences when it comes to infrastructure is the quality of our government system, and especially the quality of the Florida Public Service Commission, because my -- my sense, just talking with people in Puerto Rico, is some of their biggest challenges is how deeply politics has stuck its fingers into the operations of the utilities and the operations of the regulator.

And whenever we allow that to happen, when we compromise that independence, then investment dollars don't flow. And not only do investment dollars not flow, management decisions are more political than they are business oriented.

And when I have -- I was on a committee in Puerto Rico, that's exactly what I told them as well, that I thought that was their biggest problem. And I think that is still true. I talked with people in Puerto Rico seen recently.

If they could improve that independence so that regulators made decisions that were substantive in law and provided that stable business environment, and if the business was making decisions based upon, you know, what makes financial sense, what makes operational sense, I think things would improve considerably in Puerto

Rico.

COMMISSIONER LA ROSA: Thank you, Chairman. I appreciate your time.

Thank you very much.

CHAIRMAN CLARK: All right. Thank you, Commissioners.

Any other questions for Dr. Jamison?

Commissioner Brown.

COMMISSIONER BROWN: Just one follow-up to the Puerto Rico question.

Do you know what the status is on the PREPA potential disposition or sale?

DR. JAMISON: I have -- I have seen only news items on it. I -- since I am not deeply involved anymore, I have not kept up with it.

COMMISSIONER BROWN: Me neither. Thank you.

DR. JAMISON: Well, they face -- they face enormous problem with selling the utility because it's received so much FEMA money. And according to law, they have to give that back, and I am not sure that that would go so well.

COMMISSIONER BROWN: Yeah, I think FEMA money and HUD money.

DR. JAMISON: Yeah.

CHAIRMAN CLARK: All right. Anyone else?

Again, thank you, Dr. Jamison, for all of your hard work, and thank your team as well.

DR. JAMISON: Thank you so much. I appreciate all of your support, and we will be back in touch.

CHAIRMAN CLARK: Thank you.

All right. Next up, Item No. 2 is the Draft 2020 Annual Report on FEECA. And I believe Michael Barrett is going to introduce this item.

Michael, are you on the line?

MR. BARRETT: Yes, sir. Good morning, Commissioner.

CHAIRMAN CLARK: Good morning.

MR. BARRETT: The item before you, Item 2 -- Item 2 is a draft annual report on activities pursuant to the Florida Energy Efficiency and Conservation Act, which we refer to as FEECA. Section 366.82(10), Florida Statutes, requires the Commission to submit this report annually to the Governor and the Legislature by March 1st. This report summarizes each utility's achievement for its meeting goals set by this commission.

In 2019 FEECA DSM programs achieved savings of 231 gigawatt hours of energy and over 220 megawatts in summer demand reduction. FEECA utilities also performed over 247,000 audits in 2019.

There are two new features in this year's report. On page 14, you have included a figure showing the number of customer-owned renewable energy connections and gross power ratings for each year reported since 2008. Also new this year, beginning on page 55, we have included Appendix C that offers more in-depth look at energy audits.

I would like to take a moment to thank Cindy Muir and the Division of Consumer Assistance and Outreach for their contribution to Section 5 of the report, which highlights the Commission's community events and other efforts to educate consumers on conservation.

Staff is seeking approval of this report, and asks for the ability to correct any scrivener's error that are identified. In addition, we are seeking permission to work with the Chairman and the Executive Director's offices on the distribution letters that go with this report to the Governor and other parties.

Staff is here to answer any questions. And I have verified that subject matter experts from the FEECA utilities are on the line as well and available for that purpose.

Thank you revery much.

CHAIRMAN CLARK: Thank you, Mr. Barrett.

I know each of you received a copy of the report. We have a number of our utility folks that are on the line. So, Commissioners, I will open the floor up for any discussion, any questions?

Commissioner Brown, I see you smiling and ready to go.

COMMISSIONER BROWN: You know this is a very important item to me, and I appreciate you allowing additional time and input of the parties to participate in this today, so thank you, Mr. Chairman.

And really, I want to talk and focus my comments on the audit. And, you know, I think conservation efforts under FEECA could be transformational with an increase in the number of audits. You know, ultimately, customers taking conservation measures on their own without any subsidies from the general body of ratepayers is absolutely the goal here.

So I want to talk about what happened in 2019, and how we have about 11 million customers of our FEECA a utilities that we regulate under FEECA, and in 2019, we only had about 240,000 audits. So I want to kind of explore that, particularly in light

of the fact that Gulf mentioned that there was a decrease in their audits, which is why they were unable to meet the goals, and really just kind of open it up to the parties.

I know they spoke in terms of in general what they do. And obviously, it comes down to the customer making their effort to explore the audits, but with -- with COVID, there is just such an opportunity of the -- touching with those customers and offering those services. So really kind of want to explore with the FEECA utilities what they are doing, because 240 out of 11 million customers in a year really is a small, small proportion.

CHAIRMAN CLARK: All right. Thank you, Commissioner Brown.

Gulf, are you on the line? Would you like to address Commissioner Brown's remarks?

MR. FLOYD: Yes, sir. Good morning, Commissioner Brown. This is John Floyd with Gulf Power.

We agree that the audits are an important part of educating our customers, not only on the availability for participation in our utility sponsored programs, but also more generally of ways to safe energy and manage their utility expenses.

And Gulf did note in our report last year that we had seen a decrease in participation, and we clarified that through a data request, that that was really primarily in the in-home version of the energy audit. We've actually seen a substantial increase over the last few years in participation on the -- for the on-line option, as more customers have preferred that more self-service type of tool.

And so we've done a lot to enhance that, provide greater insights for customers, and we promote that quite a bit more through our traditional advertising means, as well as, you know, through contacts with our care center and on our website.

And so we -- we -- we do support and, obviously, and agree and want to increase the availability of those kind of services to our customers, you know, to help them -- to help them out.

COMMISSIONER BROWN: Thank you.

I did -- and we don't have to go through all the FEECA utilities, but I did just want to highlight that that is an integral component of the FEECA statute, really. And conservation and renewable energy is going to continue to play such

an person role in Florida's energy future. And we have a docket right now out there with the goal setting -- associated with the 2019 goal setting proceeding, and I appreciate staff adding an additional line on page two.

Is there anything further, though, to add to explore the next steps moving forward? That's a question for staff.

CHAIRMAN CLARK: Mr. Futrell.

MR. FUTRELL: Commissioner Brown, this is Mark Futrell, and we did hold a workshop last week, on January 14th, and staff took comments from a number of parties, the FEECA utilities, a number of advocacy groups, the Office of Public Counsel. At the conclusion of the workshop, staff provided -- asked that comments be provided by February 15th, I believe is the day, and we will assess those comments, and hopefully we will also get some draft rule language suggestions from the parties, as well as other suggestions, we will take a look at those comments and decide next steps.

COMMISSIONER BROWN: Thank you, and we're not on a specific time clock on that, is that correct?

MR. FUTRELL: That's correct. That's correct.

COMMISSIONER BROWN: Thank you.

Mr. Chairman, I just have two more questions for Duke and TECO specifically.

Going to Duke's -- let me find my notes here, going to Duke's investor-owned utilities R&D programs, very interested in those. And this is really a good time for us to kind of explore that. Also with the, you know the potential of being asked to be included in base rates, so I would loof love to hear about the results from your partnership with USF, where you leverage customer-sited solar PV and energy storage for a cost-effective program here, and just explore that a little bit more, and also ask if that revenue requirements are going to be the recent -- the most recent proposal settlement proposal.

MS. CROSS: Hey, good morning. This is Lori Cross from Duke Energy.

Yeah, so this USF project is one that we are doing through our technology development program, which is part of our DSM programs. And the cost of that project -- those -- that project and all -- all the projects that we do there are recovered through DSM.

So in answer to your question about whether or not these costs are part of what's being considered

in that base rate settlement agreement that was filed for approval last week, no, there is -- I don't -- currently, there is no plan to move these costs to base rates. They are something that we are doing through technology development, which is a DSM program.

But, yeah, this is something that we started back in 2015 actually, where we installed PV array and Level 2 EV chargers at USF campus in St. Petersburg. And then in 2018, we upgraded the energy storage system -- actually Tesla upgraded the system at their expense. We added two 50 kW fast chargers, and now we can operate the system in kind of a microgrid mode, and we are studying, you know, how we can leverage that for, you know, to do setting, you know, peak saving demand response.

And then also we have associated with that program, this is in the information that we provided to you, we have a public website where anyone can go and look and see the performance, you know, of the system and what's going on, so that's available for the public.

So kind of where we are on that is we are continuing just to observe the performance in various circumstance -- in various circumstances,

operate the battery on a microgrid mode, and then we are continuing to work with the university to complete our research milestones and we will continue to monitor the performance.

You know, one of the primary benefits of these projects that we do through this program in collaboration with the universities are the educational opportunities that are provided through those partnerships.

So I hope that answers your question. Anything further?

COMMISSIONER BROWN: No, that's great. I am really supportive of this type of program. I like to see more of this under the DSM R&D proposals. I think it's really the future, and we are going to glean a great deal of information from the work product there. So thank you for the update.

And just one last question, Mr. Chairman, of TECO --

CHAIRMAN CLARK: Certainly.

COMMISSIONER BROWN: -- again along the R&D side. Another interesting project, electric -- large commercial electric vehicle lithium ion batteries exporting power to the company's grid during the peak times, I would love to hear a

little bit more about that project other than what is in our report.

MR. ROCHE: Thank you, Commissioner Brown. This is Mark Roche with Tampa Electric.

In 2019, we --

COMMISSIONER BROWN: Good morning.

MR. ROCHE: Good morning -- we really had three R&D efforts. Two of them involved energy storage. The one you are referring to was the large vehicle batteries, where, you know, we have, you know, large vehicles are, you know, powder by battery. So when we were -- we were looking at that program, it kind of coupled into, you know, we knew that the costs, because we had been monitoring this kind of relates to the other R&D program we were evaluating.

So in 2016, we started to look at small to midsize batteries, really in the 75 to 100 kW range, so we partnered with the University of South Florida to do a battery study for us, which we included in a prior DSM annual report filing, and it was really a phased project. So the second phase was to really look at, you know, what customers could we go out into the community and, you know, get a couple of participants, you know,

that would be willing to serve as a host. You know, we would fund the battery install, and then see how we could see how we could actually leverage that battery for demand-side management.

When we started receiving the cost of the battery, I will just say they were quite excessive. So even on the low end, you know, like a 75 kW battery, you know, the cost for just the battery itself was in excess of $250,000 -- excuse me?

CHAIRMAN CLARK: Someone was talking over you. Just continue, please.

MR. ROCHE: Sorry, Chairman.

So at that time, we chose to really suspend the small to midsize battery program at that time. And really, we have been kind of monitoring those battery prices, you know, even since the suspension, and that kind of led us, in going back to the large vehicle, is that, you know, kind of coupled with when, you know, Tampa Electric developed its DSM plan, you know, some of the things that we saw for cost-effectiveness with solar, with batteries, and also with electric vehicle chargers, is that we really thought that, you know, there might be a good opportunity to actually, like, couple all of these three things

together. So we took the large vehicle battery initiative, and then we bolted that into the five-year pilot program that, you know, that we called the integrated renewable energy system.

So that system is, you know, currently under way to be built. It will involve an 800 kW PV array. We projected two 250 kW batteries to be infold stoled with it, along with six electric vehicle chargers, and then six of the large vehicle truck chargers to be coupled all into one system. And then once it's built, then we can kind of leverage that system to see the real benefits that we can get from demand-side management.

Currently, that project is projected to be fully built by the end of May of this year. So that program is on track to be installed and ready to start testing sometime in the summer of this year.

COMMISSIONER BROWN: Great update. Thank you, Mark, so much. And thanks for your work on the R&D front.

MR. ROCHE: All right. Thank you.

CHAIRMAN CLARK: Thank you, Commissioner Brown.

Any other Commissioners have questions for the

parties?

Commissioner Fay.

COMMISSIONER FAY: Thank you, Mr. Chairman. I think my left hand works better than my right. We are getting this. I appreciate it.

I think this question is probably best for staff, but if the utilities can opine, I am happy to have that.

On page -- I will point to it. On page 16 of the report, section -- the last paragraph of that report, it talks about potentially federal standards changing, and then if they do, how utilities can notify the Commission to adjust those programs.

With the possibility of that occurring, I just want to see, how does the Commission handle that? Like, how do we intake that and work with the utilities to make changes? Would it be done sort of all at once, or would they come in individually? Maybe someone on staff could answer that.

CHAIRMAN CLARK: Mr. Baez.

MR. BAEZ: I am going to kick it off, Commissioner, and then probably pass it on to Mark, who has a better understanding.

As the statement in the report says, or

implies, rather, a lot of the onus is on the utilities to -- to monitor the impacts of changes such as you suggested, possible changes and impacts, and then come before the Commission if they feel that the impacts are sufficient to have to, you know, readjust or tweak the programs in any way. And I would assume that that includes, you know, whatever fallout impact that would have, or follow-on impact that would have on even goals that have been set.

I don't know, Mark, if you want to -- we have had some examples of that --

COMMISSIONER BROWN: Mr. Baez, you are going in and out a little bit.

MR. BAEZ: I am sorry. I keep doing that, Commissioner.

I was saying, as -- as the -- as the statements imply, the onus is on the utility, as most processes with the Commission, we do have process to be able to review after-the-fact, because basically it's a changed circumstance of analysis, as we do with many other things at the Commission.

I don't know if Mark has any historical perspective on this, but I think the short answer

is yes. We are -- we've got enough process available to be able to accommodate when and if any utility feels an impact on their DSM programs from any future changes --

CHAIRMAN CLARK: Mr. Futrell.

MR. FUTRELL: Yeah. Commissioners, I would just offer that, you know, in addition to, as Mr. Baez said, the IDM staff is positioned to monitor federal activities, and then, you know, monitor how those changes in, either federal rule-making or legislation may affect the Commission, our utilities, our customers of the state, and will keep us informed as to what's going on with that.

And I certainly agree with Mr. Baez that if there is federal compliance efficiency standards that occur, then the utilities will certainly be aware of that as to how it might affect their program offerings, the technology that are covered under those programs, and we will make adjustments as needed.

Sometimes these -- these things have happened in the past, and there is typically a period of time before the changes go into effect that allows for manufacturing to adjust, and also for all others affected to be prepared. It's not something

that happens immediately.

So again, the utilities will, I am sure, be ready to react to that if changes do occur.

COMMISSIONER FAY: Great. Thank you. Thank you, Mr. Chairman.

I appreciate that. It sounds like, you know, the Commission is in a position to deal with those as they come in. For fear of saying efficiency too much, I mean, I think the efficiency of these efficiency programs, it doesn't necessarily make sense every time there is some sort of tweak to have the programs coming back in, and I just think we need to consider that if there are significant changes.

The other thing I just -- one final point, not a question. Commissioner Brown mentioned the audit information that we received from Gulf, and I think, you know, Gulf was in their own specific situation their year with storms and what they have dealt with, and I think that I seeing that shift from in-person to on-line audits makes sense.

With that said, I think me and probably the Chairman and some of my colleagues have agreed to disagree a little bit, and I really like the on-line audits, and sometimes I think folks feel

that it's more important to have somebody in person to do those -- those audits, and that they are arguably more effective.

My concerns, it looks like that same data shows Gulf spending, or advertising in that audit process also went down. And so I think when you have a year potentially where you have some of those numbers shift, it's not necessarily a bad thing. The reality is if you have a large chunk of people requesting an energy audit one year, those same people are very unlikely to request an energy audit the following year. They basically sort of move themselves off the list or make those changes or they don't.

So I think going forward, I hope to not see sort of a pattern of those reductions. I think if you have an outlier or a year that shows that, that's likely okay, especially with Gulf's situation. But hopefully going forward, we will see those numbers continue to improve because it does give the consumer that education to make the decision as to what they want to do related to conservation.

So, Mr. Chairman, I appreciate the opportunity to opine on this, and thank you.

CHAIRMAN CLARK: Thank you, Commissioner Fay.

Commissioner La Rosa, let me interject one point. Commissioner Fay opened my door for me in terms of residential audits, and thank you, Commissioner Brown, as well.

Having spent most of my career doing residential energy audits, I do place a significant amount of importance on the process, and do believe that the inverse in audits do provide a level of service to the consumer, and I appreciate that.

And, Commissioner Fay, you kind of stole my question for Gulf. I would like to know a little bit about the numbers relative to the hurricane. When you look at Bay County probably constituting Gulf, I guess 20 percent of your system having been impacted by Hurricane Michael, probably most of those customers significant amounts of damage. If you keep up with the statistics of your audit reporting from your different districts, the Panama City district versus the Pensacola district, if that's where your significant decrease in 2019 came from was a result folks had more important things on their minds during that time, Mr. Floyd.

MR. FLOYD: Yes, sir, Commissioner.

I don't have the statistics to know exactly,

you know, where the decrease occurred in, you know, whether it was the Panama City area or in general. However, I do agree that, you know, during a hurricane recovery effort, customers many times are focused on rebuilding and maybe not as focused on, you know, pursuing, you know, some of the energy audit activities.

That is a good point, and is a, you know, contributing factor to, you know, participation in other of our programs as well, just as customers have more focused on the recovery effort.

CHAIRMAN CLARK: In light of that, can we include some information in the report? I know we are talking about giving staff some authority to make a couple of adjustments here, necessary changes, but being this is the only utility that did not meet any of its goals, I think putting some more substance in relation to the reasons might be of help to us, at least from the historical perspective to understand what happened. If we could get a little bit of data and specifically can relate that back to the effects of the hurricane, that might be a help to us as well.

COMMISSIONER BROWN: I agree, Mr. Chairman.

MR. FLOYD: Absolutely.

CHAIRMAN CLARK: All right. That's all of my questions.

Commissioner La Rosa, you are recognized.

COMMISSIONER LA ROSA: Thank you, Chairman. And I appreciate you jumping in, because that's actually in the direction that I was going in a little bit, was to kind of hear some more from Gulf.

You know, I personally feel that we are more connected to our homes than we ever have before in a very, very different way. No longer our homes are just a place a dwelling unit, to sleep at night, but obviously a there is lot more involvement throughout the week, a lot of folks working from home.

So I guess, you know, maybe my kind of tidbit in both Commissioner Fay and Chairman, you guys had great questions. What does 2020, and maybe more importantly, what does 2021 look like? And is it appropriate to say we are going to make these changes, we are going to add these elements so that we do meet our goals, and maybe we are entertaining the reasons why we didn't meet our 2019 goals?

MR. FLOYD: Yes, sir. Again John Floyd with Gulf.

In 2020 our audit completions, on-line again, increased. So we are seeing an increase in those numbers through 2020. Although, overall, we continue to experience some of the same challenges that led to Gulf not meeting the 2019 goals, and those primarily would be in our HVAC efficiency program that is delivered through trade allies and in our energy select program.

So -- and really our response to that, in 2020, we filed a new DSM plan with some changes to several programs, including our HVAC program, really to respond to feedback that we have, you know, been collecting from trade allies and customers on the kind of program that would be more of interest.

And so those -- those programs were approved by the Commission last year, and were launched in late 2020. And so we expect that beginning this year to have significant improvements in -- in those aspect of our programs.

COMMISSIONER LA ROSA: Thank you.

CHAIRMAN CLARK: Thank you.

Commissioners, any further questions? Any other questions?

All right. If there are no questions, then I

would entertain a motion to approve the draft annual report and to authorize staff to make any necessary changes, and to include data regarding Hurricane Michael's impact on Gulf's inability to meet their goals, if you agree.

COMMISSIONER BROWN: So moved.

COMMISSIONER FAY: Second.

CHAIRMAN CLARK: Motion, do I have a second? Anyone?

COMMISSIONER FAY: Second.

COMMISSIONER GRAHAM: I have a motion and a second.

Any discussion?

All in favor say aye.

(Chorus of ayes.)

CHAIRMAN CLARK: Opposed?

(No response.)

CHAIRMAN CLARK: Motion carries.

Thank you very much, and thank you to all of our utilities that are on the line and prepared to answer questions this morning, thank you for being with us today.

Next up, Item No. 3, summary of the 10/8/20 workshop regarding the secondary water standards. I believe Marissa Ramos is going to introduce the

item.

Marissa, are you on the line?

MS. RAMOS: I am here. Good morning, Commissioners. This is Marissa Ramos with Engineering staff.

The memorandum I'm presenting today serves as a final briefing on the topic of additional testing in water distribution systems. Staff previously presented an memo to you on this topic at the July 28th, 2020, IA, and also held a workshop to gain a better understanding of the industry's practices with regard to this topic on October 8th, 2020.

The purpose of this memorandum is to summarize the workshop and subsequent postworkshop comments from participants. Additionally, staff summarizes the Commission's current process for addressing issues pertaining to this briefing topic, and also discusses the option of enhancing our current process in order to bring secondary water quality issues to the Commission's attention earlier in the rate case process by an interim recommendation.

The objective of the interim recommendation will be to present the Commission with any known information relating to of quality of service in secondary water quality standards, at which time

the Commission may order additional testing in the distribution system.

This process would provide the Commission with more complete and timely information when it evaluates a utility's overall quality of service, which is typically towards the end of the rate case process and staff's final recommendation.

This interim procedure would continue to evaluate utilities on a case-by-case basis, and avoid unnecessary tests and costs for utilities where secondary water quality issues not apparent.

That concludes my introduction. Myself, along with other members of Engineering and Legal staff are available for any questions you may have.

CHAIRMAN CLARK: Thank you very much, Ms. Ramos, for the report.

I had a little bit of difficulty understanding a couple of things, so I am going to start with just a couple of simple questions.

So there is a recommendation -- Mr. Futrell, do you want to address these for us? There is a -- the recommendation here is for an interim set of procedures prior to rule-making, is that what the concept is?

MR. FUTRELL: Yes, sir -- well, that's

partially where staff's concept is. And I will certainly let Marissa or Tom speak up if they want to follow up.

I think staff's proposal that we are recommending is an internal procedure that staff would pursue during the pendency of a proceeding if it indicates through test results that have been previously filed, through customer complaints that we received during the process, and would bring that forward to the Commission as an interim recommendation. We would memorialize that in a standard operating procedure within the Division -- within the Division of Engineering. That would not contemplate rule-making.

CHAIRMAN CLARK: So we -- we have no need -- to get where we want to go -- and, Commissioners, just -- and it's more so for Commissioner La Rosa to kind of bring him up to speed.

We've had situations where, in water cases, there were standard quality -- standards quality considerations that we did not have what we felt like was all of the necessary data to draw a conclusion. And what have we asked staff to do was look at instituting a procedure where we could order quality testing in the interim at some

specific locations to give us a better idea. That had not been contemplated before.

This proposal is to give the Commission the authority to authorize staff to actually go out and have the testing done that we require, not to require the utilities to do any specific testing on regular intervals, but on an as-needed basis, is that right?

MR. FUTRELL: Chairman, let me just clarify that a little bit.

What we would propose is a procedure where if staff sees from testing results that have previously been done, or through complaints and information we acquire during a process, we would bring a recommendation to the Commission for the Commission to decide whether to order additional testing in the distribution system. And that way that would give the Commission a sense of the degree to which it feels testing is needed, and would also give a signal of some early approval of cost recovery for such testing. It would ultimately be decided in the final agenda the final recommendation on the rates to be charged to customers.

CHAIRMAN CLARK: And I guess the rationale --

one of the things we had specifically talked about was just require a blanket amount of testing, but from reading the comments that came to the workshop and listening to a little bit of the workshop, it's my understanding that the biggest burden here would be on our Class C utilities. A and B utilities probably would not notice -- the customers would not notice an increase based on required testing, but in some of the smaller systems, it actually could be burdensome, and in probably 80 percent of all the cases we are going to be looking at was unnecessary beyond the quality standards that DEP is already testing for. Is that a fair statement, Mr. Baez?

MR. BAEZ: I do believe it is. And I think what we were -- what we are all crying to appreciate is -- is where we land between those two extremes, where no testing is required or, rather, consider -- the need considered too late in the process, and -- and just doing a blanket requirement for utilities and, thereby, roping in a lot of unnecessary -- creating unnecessary costs.

This way it's an earlier screen. It can -- it brings focus to the problem earlier in the process, and we do get a chance, not just staff, but also

the Commission, to sort out the proper resolution to it by considering the requirement within -- within the ongoing -- (inaudible) -- rather than -- rather than going to rule-making and, you know, having to deal with the vagaries of that, and then how do you -- how do you cordon off one section, you know, one section of companies. We just really want to focus on the ones that need it, and in order to do that, it behooves us to start that focus early in the process.

CHAIRMAN CLARK: And Commissioner Brown and Commissioner Graham have a lot more experience in this than I do. And, Commissioner Graham, I would love your thoughts on where we are at with this. You have a significant amount of expertise in this area, and you addressed it as well that it was a make concern. How do you think this plays into where we are?

COMMISSIONER GRAHAM: Thank you, Mr. Chairman.

The biggest issue has always been updated -- up-to-date data. A lot of times when we are reading through the staff rec, either we don't have the secondary standard data, you know, we don't have the things that have been done in the last give years, and it's frustrating, especially if

it's a utility that has a history of quality problems. And so this seems like it gives us the tools that we need to, you know, specifically when there is a utility that has quality problems, to actually go out and request that information to be tested for -- for us to go out there in the distribution system and decide where we want to do the testing, and look at the testing, and just have more information. I think just helps us do our job better.

I have no -- no doubt in my mind that when the legislators changed the law five, six years ago, they specifically wanted us to focus more on the quality, and to be able to either incentivize or penalize the utilities for not taking care of, not paying attention to the quality, so I think this is definitely a step in the right direction.

CHAIRMAN CLARK: All right. Thank you very much. I appreciate that affirmation that we are moving this in the right direction now.

One final question for staff is regarding costs. I believe that under the way we are structuring this, or they way that we are proposing this interim process would be if the Commission required testing, would that cost fall back on the

Commission?

MS. RAMOS: Commissioner, this is Marissa.

MR. BAEZ: That wouldn't be our intent at all. I think -- I think what we are trying to do is, speaking plainly for you all, for the Commission, you always have on your conscious whether to create the added cost. And as we all understand, when the Commission requires something, that's -- that -- that cost recovery and that cost is created, right? And that's a burden to the Commission in a decision-making sense.

So what -- what we think this does is it removes -- or it eases that burden, or it peels back that burden that the Commission has in actually imposing the cost to only those cases that, based on facts and based on information and triggered by markers that -- certain markers that the staff would focus on, that you are really only taking on that burden in the instances in when you believe is absolutely necessary.

CHAIRMAN CLARK: I guess my -- my concern there is related to requiring the utility to do testing. Are they going to go out and just do standard testing, or in the rule, can we -- or in the procedure, can we contemplate the concept that

we want the water tested at the tap? We don't want it tested at the hydrant. We want it tested at the tap, or at the meter?

MR. BAEZ: I believe the process would accommodate that, because as part of your decision, it would -- if we could hypothesize that, you know, the Commission would be issuing an order saying you are going to test for secondary standards, and that brings us to whatever -- whatever points along the system you all deem necessary, based on a recommendation from staff.

CHAIRMAN CLARK: Okay. Commissioner Graham.

COMMISSIONER GRAHAM: Thank you, Mr. Chairman.

I guess one of the questions I have is is this going to address any sort of statutory deadlines that we have where, if the staff rec comes out and we don't feel, as a Commissions, that we have enough data here and we want to send them back to do more testing, are we under some -- are we under a deadline where we have to get this stuff done? I mean, is this rule going to allow us more time to seek that data and then make a recommendation?

MR. BALLINGER: Commissioner Graham, this is Tom. I will answer that.

It's not a rule. It's an internal procedure

that we do, and staff is going to keep those statutory deadlines in mind when we bring an interim rec to the Commission.

So the plan is to have that information timely when you make your final decision. This interim would be the extra step that the Commission would order the utility to do this additional testing, to get additional data to have available to it when it makes its final decision, and that the costs would then be passed along to customers.

COMMISSIONER GRAHAM: So then the burden is going to be upon staff to, I guess, get the information to us and then get direction from us to go back out and get the testing done in a timely manner?

MR. BALLINGER: Yes, sir.

COMMISSIONER GRAHAM: Okay. Thank you.

CHAIRMAN CLARK: And, Commissioner Graham, that's my concern as well. That's my only concern, is that this comes to the Commission, the Commission says, we want more testing, and then it goes back. I think, kind of was looking for something more that was triggered at the staff level to say, hey, we are going to need more testing, or at least something that would

indicate -- at least give them some direction that they should probably advise the utility the Commission, based on this standard, is going to want additional testing by the time it gets to them, you might can cut down on the time if you went ahead and did that. I don't know if that's a logical sequence of events, but I agree with Commissioner Graham. I was concerned that it has to come back to us, then has to be put in place.

MR. BAEZ: And I think that where the rub is, and I appreciate what you are saying. We all understand that even an interim decision takes -- takes some time and the lawyers would gibe me for not, you know, mentioning due process, right?

Where -- where I perceive we would get stuck is because that's a -- because that's an additional cost that's being created and the burden placed on the utility to make those -- to make those --

COMMISSIONER GRAHAM: Mr. Chairman, I am having application hard time hearing Mr. Baez.

MR. BAEZ: You got to have -- you got to have a decision in order to create the -- in order to properly create the policy. I don't think that it would be appropriate for a staff -- a staff level decision that created additional cost, that's --

that's too much discretion for our level of comfort. That would be my short answer -- a rather long answer.

CHAIRMAN CLARK: Yeah, and I think that's -- I had some discussion with staff regarding that. That was the general consent. I just don't want it to slow the process down.

MR. BAEZ: No, and that was -- that's why the -- that's why the -- I will use the word convenient, but the more appropriate option that we sensed was to do it -- to do it as an internal process, and then the Commission would only get the cases that were -- the urgent cases, if you will, the cases that actually merited and recognize that there is a process.

CHAIRMAN CLARK: And you are -- you are comfortable with this internal process as opposed to going to rule?

MR. BAEZ: Well, I think the rule -- and Mark tackle me if I am saying too much or too little, but, you know, the rule brings with it its own difficulties in terms of, you know, you have a question how broadly does it apply? Is it -- and then you are down into the actual value judgment. Is it necessary for it to apply to everyone? And

those are the kind of difficult conversations that -- and the -- and the resulting imposition of costs that may, in fact, be unnecessary in many, many, many, many cases. Rules are, you know, they have -- they have their own -- they have their own behavior.

CHAIRMAN CLARK: Commissioner Graham.

COMMISSIONER GRAHAM: Mr. Chairman, I hate to say this, but I need for someone to repeat everything Mr. Baez just said, because I only heard maybe every other word.

CHAIRMAN CLARK: Commissioner Graham, I can't understand you.

COMMISSIONER GRAHAM: I need for somebody to -- I need for somebody to repeat what Mr. Baez said because I could not hear him.

MR. BAEZ: Mr. Baez will try and repeat it and do it a little better.

To the Chairman's question, we -- we have established a preference for an internal process because I think the rule-making process wraps up a lot broader issues that neither the Commission has expressed an interest in explore -- you know, you open up a rule, you open up all of it, and it gets kind of cumbersome.

I think that this is a targeted approach that meets certainly what the Commission has expressed as its intent in dealing with these issues. It moves it earlier in the process. That is to say the staff takes on the responsibility earlier in the process to make a determination of whether the Commission needs to get the subject utility, you know, on the stick, so to speak, with their testing, because the warning comes earlier.

For thing -- for reasons that we have already have gone over, the only way to properly do that is through an interim decision. And to Commissioner -- to Commissioner Graham's earlier question, it's not intended to slow down the process. We -- we -- you know, this sort of dovetails with the process as it moves forward. You know, we are not -- we are not upsetting and we are not anticipating any delays in whatever statutory timeframes we have.

CHAIRMAN CLARK: All right. Commissioner Graham.

COMMISSIONER GRAHAM: Thank you, Mr. Chair.

I think it address -- it addresses most of my concerns that I have had. I mean, I am more than willing to take this step forward, let's see what it looks like, and I guess we can always tweak it

later if it's not working sufficiently enough.

CHAIRMAN CLARK: All right. Sounds good.

Other Commissioners?

Commissioner Brown has been sitting on pins and needles. I am watching her hands, and she's ready to go.

You are recognized.

COMMISSIONER BROWN: Thank you.

And I think this -- all of the concerns that were expressed, I had the same, but ultimately, I agree with staff on evaluating this kind of on a case-by-case basis because of the unintended consequences by going to rule-making that it could really affect and explode costs unnecessarily.

So I just -- the only thing that I really -- I don't understand what we are doing here. We are calling it an interim procedure. I don't understand why we are calling it an interim and why we -- and we are calling it a procedure. I am just confused by all the language of what we are doing.

MR. BALLINGER: Commissioner Brown, this is Tom. Maybe I can help with that.

It's interim in the fact that it's interim in the overall process, if you will, or rate case process. It will be an interim recommendation, but

it will be a permanent procedure that ENG will adopt to look at to evaluate whether to bring this recommendation to the Commission or not.

COMMISSIONER BROWN: Okay. So the -- but the recommendation calls for an interim procedure being adopted here. I mean, do we even need to approve this if this is just something your division is going to be doing as part of your day-to-day responsibilities?

MR. BALLINGER: Not really. This is something we actually did sort of in the Cypress Lakes case, as mentioned in the memo. Although, I will admit, I take the blame on that. And after doing that, I felt very uncomfortable directing the utility to go do testing and incurring costs from a staff directive.

So it's going to be very similar in my mind to what we did in Cypress Lakes, but come to the Commission for approval to give the utility authority to do the testing, and also the recovery of the costs.

COMMISSIONER BROWN: Now, that makes -- that makes complete sense. I just didn't think that the Commission -- Commissioners really had to approve a measure that's already part of your process.

MR. BALLINGER: No, ma'am. It's just we're letting you know what we intend to do and not to go to rule-making, that we will look at this internally. And if you agree this is maybe a step in the right direction to get you some more information, then that's fine. It's just --

COMMISSIONER BROWN: And thank you, Tom.

And then, Mr. Chairman, I didn't know if there were any parties here that wanted to address this recommendation on the line.

CHAIRMAN CLARK: All right. And I will -- in the interim, I will add that I -- one of the reasons I put it on the agenda, Commissioner Brown, for discussion today was my original assumption was that we were going to end up going to rule-making, and so I was trying to get us there to be able to have the Commission decision to move into rule-making. That's kind of where we were leading up to there.

COMMISSIONER BROWN: I am appreciative of getting a status report of it too. And, you know, I know one of the utilities proposed a rule, U.S. Water, but ultimately I think that this is the right direction. I just was so confused by the term interim procedure.

CHAIRMAN CLARK: Understood.

All right. Do we have any of the parties on the line that would like to make a comment?

All right. No parties.

All right. Any other questions? Anyone? Comments? Concerns?

All right. I think we've adequately addressed that issue. Let's move into our next item today.

Before I call for the legislative update, I would like to take just a second of personal privilege, if you would.

Last week, Office of Public Counsel Director, Mr. J.R. Kelly, submitted his resignation, and that process is being opened up, and I asked Adam to give us an update there. But I wanted to take just a second, I don't know if Mr. Kelly is on the line or not today, but just to express my appreciation to him for his hard work, dedication to the consumers of the state of Florida. J.R. is a great person, and a good friend, and I really appreciate all that he has done though advance consumer interest in the state of Florida. So, J.R., if you are on the line, thank you from the bottom of my heart for your dedication, and on behalf of the Commission, we wish you the very, very best.

Mr. Potts, you would give us your legislative update?

MR. POTTS: Yes, sir. Thank you. Good morning.

I don't a long one. I will go in -- there haven't been any new A filed bills -- A bills filed recently since our last IA.

It will be interim committee weeks starting next week for four weeks, and then they will have a week off and then Session will start on March 2nd.

Going back to what the Chair spoke of the Joint Committee on Public Council Oversight will meet in early February is their plan to select a new OPC. There is four candidates, they have to have somebody selected by March 1st. So that should move along fairly quick.

And that really wraps up what I have for today. If you or your staff have any questions or concerns, please let Kelly or myself know, and we will be happy to help you or meet with you, whatever is needed.

CHAIRMAN CLARK: Commissioner Brown.

COMMISSIONER BROWN: Thank you.

Thanks, Adam, for keeping us updated. Do we know if there's, No. 1, an Interim Acting Public

Counsel? And, two, do we know, of the four applicants, if one of them will be selected at that committee meeting, or if there will be another? Just kind of figuring out the deadline for them.

MR. POTTS: There is not an interim acting because the committee would have to select that, and they have not scheduled a meeting yet. I think their plan is that they are just not going to.

As for how it will go, I am not sure if they will do -- I am not sure if they are going to interview all four, if do that at one meeting and then make the selection on the spot, or if they will pick another committee meeting. Staff doesn't seem to be completely sure how that's going to go at this point.

COMMISSIONER BROWN: Yeah, thank you.

And, Mr. Chairman, I kind of echo your sentiment regarding Public Counsel, but they -- it's -- they are integral to this process, and recognize the fact that without a leader at the helm right now, it could be challenging for the Office, so just wanted to put that on the record. I recognize that.

CHAIRMAN CLARK: Thank you, Commissioner Brown.

Other Commissioners have questions for Mr. Potts?

All right. Moving right along, General Counsel's report.

MS. HELTON: Thank you, Mr. Chairman and Commissioners. Welcome to 2021. I know yesterday was a major day in our country's history and turning a new page and new chapter in 2021, certainly this is a new page turn for the Commission too as we head into a new year where we have a number of rate cases on the horizon.

I also know that the Commission faces a lot of challenges this year with budget, personnel and workload issues, and we look forward to the opportunity of meeting those challenges this year, and look forward to rolling up our sleeves and getting to work.

I would like to announce to that end, though, that we are losing one of our major attorneys, that being Rachael Dziechciarz is moving on to a new opportunity, and we wish her the best. For those of you that have had the opportunity to work with her, she is a force that will be missed on our staff, and we look forward to working with Braulio and his staff in trying to fill that position in

these tough times.

Thank you.

CHAIRMAN CLARK: Thank you, Mr. Hetrick.

And our best witches -- best wishes to Rachael on her future endeavors. She will be greatly missed here at the Commission.

All right. Executive Director's report, Mr. Baez.

MR. BAEZ: Thank you, Mr. Chairman and Commissioners.

I was going to update on the staff rule development workshop for the DSM goals, and Mark alluded to some of it. I will only echo that to remind everyone that the postworkshop comments are due on February 15th. And everything, all the written comments are available in Docket 200181. It was a very product difficult workshop, I believe. I hope those of you that were present and listened in as well got the same impression, and we got a lot of work and a lot of hearty discussions ahead with stakeholders.

In any case, if you all have any questions on the progress of that on any given point in time, we would be happy to fill you in on where we are in next steps.

CHAIRMAN CLARK: All right. Anything else, Mr. Baez?

MR. BAEZ: No. Thank you.

CHAIRMAN CLARK: All right. Any of questions for Mr. Baez?

All right. Other matters? Any Commissioner have anything to come before us in IA today? Nothing.

Staff, all clear? I see nobody waiving any hands.

Thank you all very much for joining us today. We look forward to seeing you at our next Agenda Conference.

We stand adjourned.

(Proceedings concluded.)

CERTIFICATE OF REPORTER

STATE OF FLORIDA)
COUNTY OF LEON)

I, DEBRA KRICK, Court Reporter, do hereby certify that the foregoing proceeding was heard at the time and place herein stated.

IT IS FURTHER CERTIFIED that I stenographically reported the said proceedings; that the same has been transcribed under my direct supervision; and that this transcript constitutes a true transcription of my notes of said proceedings.

I FURTHER CERTIFY that I am not a relative, employee, attorney or counsel of any of the parties, nor am I a relative or employee of any of the parties' attorney or counsel connected with the action, nor am I financially interested in the action.

DATED this 2nd day of February, 2021.

DEBRA R. KRICK
NOTARY PUBLIC
COMMISSION #HH31926
EXPIRES AUGUST 13, 2024