

I. Meeting Packet



State of Florida
Public Service Commission
INTERNAL AFFAIRS AGENDA
Thursday – January 20, 2022
Immediately Following Hearing
Room 105 – Gerald L. Gunter Building

1. Public Utility Research Center 2021 Annual Report to the Florida Public Service Commission by Dr. Ted Kury (Attachment 1)
2. Implementation of Sections 40104 and 40431 of the Infrastructure Investment and Jobs Act (Attachment 2)
3. Legislative Update
4. General Counsel's Report
5. Executive Director's Report
6. Other Matters

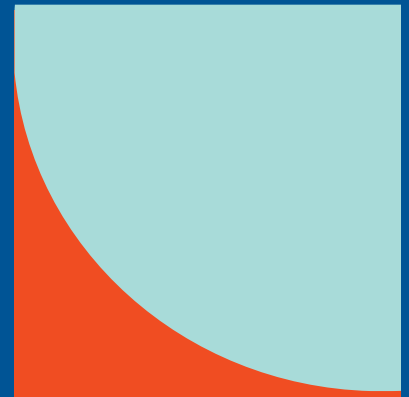
BB/aml

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.

ANNUAL REPORT 2021

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 future collaboration.



PURC 2021 Annual Report to the Florida Public Service Commission

UPDATE ON PURC RESEARCH AND OUTREACH

Table of Contents

<u>Statistics and Highlights</u>	2
<u>Primary Research Projects</u>	4
<u>Outreach</u>	9
<u>Training and Development</u>	15
<u>Faculty Research Bios</u>	17
<u>Appendix: Research Papers Listing</u>	19

PURC 2021 Annual Report to the Florida Public Service Commission

UPDATE ON PURC RESEARCH AND OUTREACH

STATISTICS AND HIGHLIGHTS

Statistics

- Six online courses providing 59 hours of online instruction
- 48 blog posts
- 11 working papers and journal articles
- 4 opinion editorials

Plans for 49th Annual PURC Conference, February 23 – 24, 2022

We are excited to host our 49th Annual Conference, *Unlocking Innovation: Keys to Getting it Right*, and will return to an in-person format in Gainesville. The audience and speakers will consider how Florida can advance technologies, policies, and regulations that make sense for the state's future. Thank you to Commissioner La Rosa for agreeing to provide a keynote at the event.

48th PURC/World Bank International Training Program on Utility Regulation and Strategy

We were grateful for the return of our flagship PURC/World Bank International Training Program on Utility Regulation and Strategy, hosted October 11 – 20, 2021. We welcomed 30 participants from 12 countries to Gainesville. Since its inception in 1997, this program has educated more than 3600 professionals representing 156 nations. In addition to the program, select participants completed the **PURC Leadership Workshop: Practicing Leadership in a Political Environment** on October 17, 2021.



Next Generation Leaders: CEOs Dialogue

How can you as a leader prepare to rise into the executive ranks? How can you get ready for the complex challenges ahead? Through this comprehensive 5-week program, participants worked on their actual leadership

challenges, reflected on their leadership styles, gained new insights on the dimensions of leadership, studied how to strengthen their organizations, learned what it takes to implement change successfully, and observed leadership in real time. Geared towards busy professionals, the interactive course methodology immersed participants in practical concepts, tools and approaches to address real leadership challenges within themselves and their organizations, and to get them ready for next steps in their careers. This virtual leadership program was hosted in partnership with CANTO, and was held over a 5-week period during May and June of 2021.

48th Annual PURC Conference (2021)

The 48th Annual PURC Conference, “Resilience and Recovery in Regulation: What is the pandemic teaching us?” examined what has been learned about our regulatory system and its adaptability during the COVID-19 pandemic. The conference was hosted online, February 17 – 19, 2021. We appreciate the more than 40 PSC staff that registered and joined us virtually for the conference.

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 2021, Dr. Mark Jamison was active in engaging with various media outlets and podcasts, which can be viewed online in the [Warrington newsroom](#). We hosted two speaker series events on-campus featuring former FCC chairman, Mignon Clyburn, and the Honorable Brendan Carr of the FCC, in addition to 4 online events co-hosted with the American Enterprise Institute.

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.

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.

Load-Following Forward Contracts

Load-following forward contracts (LFFCs) are becoming increasingly popular in the electricity sector. A LFFC obligates an electricity supplier to deliver at a pre specified unit price a fraction of the buyer's ultimate demand for electricity. This paper shows that relative to more standard ("swap") forward contracts, LFFCs can increase the expected wholesale price of electricity and thereby reduce expected consumer and economic benefits.

Market Structure, Risk Preferences, and Forward Contracting Incentives

This paper examines the distinct impacts of forward contracting on generators and buyers of electricity. Increased forward contracting systematically reduces the variance of a generator's profit, but can increase the variance of a buyer's profit. Consequently, increased risk aversion or market uncertainty can lead buyers, but not generators, to prefer reduced levels of forward contracting. This paper examines how the extent of equilibrium forward contracting varies with industry conditions, including the number of generators, the number of buyers, their aversion to profit variation, and the structure of retail electricity prices.

Preparing to Harden Electrical Resources for Hurricane Season

Communities that are likely to suffer effects of significant damage from named storms need to have confidence that cost estimates and projected benefits are reliable. This transparency to administrators, political leaders, and planners conveys a public message that utility hardening policies such as undergrounding cables and vegetation maintenance reflect a broad consensus among diverse experts. Collaboration among varied planners also ensures that widely noticed disparities among individual estimates do not confuse concerned public observers of the decision-making process.

Can We Secure Our Electric Grid?

A broad, well-informed consensus among policy makers, nationwide businesses and industries, military experts, government officials, and concerned scientists has developed around the need for the nation to address the

vulnerability of the widespread attacks on America's electrical grid. This paper examines the types of threats and current responses.

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.

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 increases 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 2021, his posts were read over 115,000 times. His blogs are available at <https://theconversation.com/profiles/theodore-j-kury-406888/articles>.

ICT AND TELECOM

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.

Effects of Components on Ecosystem Value: The Case of the iPhone and Mobile Broadband

This paper examines how component changes affect network value, focusing on the effect of the iPhone on mobile broadband. Theory indicates that increased component value can increase sales for network access. Using data from multiple countries, the research finds the iPhone and its imitators explain 60% of the average rise in mobile broadband’s growth rate. Per capita GDP mattered in developed, but not developing countries. The quality of government mattered in both types of countries, but regulation mattered more in developed countries, while rule of law mattered more in developing countries.

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.

Platform Competition and Differentiation: Developer Choices in Mobile Platforms

This paper examines how app developers and other tech companies choose whether to build on the Apple platform, the Android platform, or both. It finds that the platforms compete for these businesses and differentiate primarily in “thin” markets where it is uneconomical for more than one platform to accommodate specialized needs.

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.

Leveraging Digital Transformation for Capital Markets Development: Closing the Digital Divide

This paper examines disconnects between what governments in the Caribbean say are their broadband aims and the policies they adopt. These include outdated regulatory models, asymmetric regulation between telecom providers and the so-called edge providers, taxation of telecom providers, and a lack of demand-side policies for stimulating broadband subscriptions. Absent a recognition of and resolution of these disconnects, governments risk adopting policies, such as government ownership of networks, that will exacerbate problems and prove costly for citizens.

The Biden-era FCC Dilemma: Would Restoring Net Neutrality Regulations Hurt the Poor?

Empirical studies of the effects of net neutrality regulations have concluded that the regulations depress investment and innovation in broadband. They also prohibit pricing strategies that benefit the poor, such as zero rating, where an online content provider pays for a subscriber’s data usage to make the service more affordable. So it appears that, if the Biden administration wants to promote broadband for the poor, it should drop its plan to re-establish net neutrality regulations.

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

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.

Principles and Strategies for Effective Leadership in the "New Normal"

To lead effectively during times of constant change and uncertainty, leaders should: (1) Lean into the uncertainty (Learning to live in the discomfort of uncertainty will free up some space for clearer thinking.); (2) Recognize that it is all about experimentation (It is about "next practices" rather than best practices.); (3) Embrace mistakes (Mistakes are a necessary part of this evolving process and need to be used as learning tools and experiments.); and (4) Lead with a focus on empathy and communication (In a time in which so many are struggling and uncertainty is king, we must ensure people know you are "there" for them.)

The Challenges of Reviewing Merger Proposals

The regulator faces several challenges in determining whether a merger would be in the public interest. Utility mergers have high visibility and often involve one of the largest if not the largest employer and taxpayer in the state. Politics become inevitable and the effects of a merger are never known beforehand. As with other matters, regulators must exercise judgment along with the best information available to decide on what is in the public good.

OUTREACH

Ethics in the Age of a Technological Revolution

In this podcast episode of *Palveshow*, Dr. Mark Jamison and Palveshey Tariq discuss the many ways in which ethics should be approached and thought about in the age of a technological revolution. This podcast was published on December 24, 2021.

Examining the Role of Economic Analysis in Antitrust

Parts of the Biden administration, Federal Trade Commission, Congress, and media believe the past 40 years of consumer-oriented antitrust analysis and enforcement have enabled the growth of market power and anticompetitive behavior. Members of both parties seem to newly believe that big firms are always bad, and they are advocating for less emphasis on economics in antitrust under the premise that empirical research is too burdensome and ineffective. Why is this line of thinking gaining such momentum in our governing system? What is the proper role of economic analysis in antitrust? This presentation was given on December 3, 2021.

How Can Congress Act More Constructively on Antitrust?

Bills targeting the business models and competitive strategies of Big Tech firms are gaining bipartisan momentum in Congress. However, the bills' sponsors often contradict themselves, overlooking signs of healthy competition in the tech space with little regard for how their proposals would affect consumers. What are the most problematic features in these bills? And where, if at all, might Congress divert its attention for more-meaningful change in antitrust? This presentation was given on November 30, 2021.

Taking the Cryptic Out of Cryptocurrency

Cryptocurrency is a mystery to many of us. In this episode of *From Florida*, Mark Jamison provides a straightforward explanation of cryptocurrency's origins, how it works, why it's attractive to some investors, what regulators are looking at and implications of cryptocurrency for the average person. He also talks about the one big question no one has yet answered: Who is or was Satoshi Nakamoto? Jamison is the director and Gerald Gunter Professor of the Public Utility Research Center and director of the Digital Markets Initiative at the University of Florida's Warrington College of Business. This podcast was published on November 2, 2021.

Broadband Questions yet to be Answered in Infrastructure Bill

"If you live in rural Florida, you are 20% less likely to have broadband available to you than if you live in an urban area. If you are Black or Hispanic, you are 13% to 20% less likely to have broadband than if you were white," Jamison stated in his editorial. He told AOTMP® that many types of communities can benefit from broadband, and while some populations are thirsty for advanced technologies, others may be unaware of its value. A provision of the program should include targeted efforts to help people better understand what ways and how broadband can benefit them. This presentation was given on October 28, 2021.

Student sponsorship to Florida Women in Energy Leadership Forum

This fall we sponsored four students' participation in the Florida Women in Energy Leadership Forum in Orlando, Florida. The students networked with energy professionals, learned about critical energy issues, and learned how they can develop careers in the energy sector.



Analyzing Congress' Skirmish with Big Tech

With five bills introduced to the House Judiciary Committee in June of this year, Congress is moving swiftly to rein in what it sees as the market power and abusive business practices of "Big Tech" firms — namely Apple, Amazon, Facebook, and Alphabet Inc.'s Google. What is behind Congress' push for new antitrust laws targeted at these companies, and how would these laws impact consumers? On this episode, Shane and AEI co-host Mark Jamison are joined by NetChoice Policy Counsel Jennifer Huddleston for a conversation on what Congress' proposals would mean for the future of mergers and acquisitions in the tech industry, along with how these proposals would deprive consumers of services they enjoy thanks to Silicon Valley's culture of "permissionless innovation." This podcast was published on October 19, 2021.

What's Going On at the Federal Trade Commission? (Part I & II)

Under Chairwoman Lina Khan's leadership, the Federal Trade Commission (FTC) is undergoing a number of process reforms that are poised to make the commission less democratic by allocating more power to the chair herself. If successful, what impact will these reforms have on the future of the commission — and on the laws it's tasked with enforcing? In the first episode of a two-part discussion, Shane and AEI Nonresident Senior Fellow Mark Jamison co-host a conversation with Bilal Sayyed, former director of the FTC's Office of Policy Planning and a senior adjunct fellow at TechFreedom. Bilal shares his insights on how Chairwoman Khan's reforms will reshape long-standing policies around how the FTC is run, and on the challenges companies may face under the new FTC's scrutiny. Part I of this podcast was published on October 5, 2021, and Part II was published on October 7, 2021.

Leadership in 5G Technologies: What's at Stake for Florida and the US?

PURC's Digital Markets Initiative and the Bob Graham Center for Public Service welcomed the Honorable Brendan Carr of the Federal Communications Commission to campus on October 6, 2021. Commissioner Carr shared what the Commission is doing to accelerate 5G buildout and the importance of US leadership. As part of the event, he engaged in a panel discussion of experts, including the Honorable Andrew Giles Fay of the Florida Public Service Commission, to consider what's at stake for Florida.



Opportunities and Challenges of Institutional Climate Action Plans

Universities evaluating their impact on the world around them start with the glaring realization – they use a lot of electricity. A large university campus may have a peak load over 60 MW, making them larger electricity consumers than many small countries. To foster a better understanding of how this energy consumption impacts their community, many college and universities are developing climate action plans. Dr. Ted Kury shared the challenges and opportunities of these climate action plans at the US Energy Association’s Advanced Energy Technology Forum on September 9, 2021 and was also featured in their September 2021 newsletter.

America’s Digital Disparity is Too Great to Tolerate. What Will We Do?

America has spent billions of dollars to close the gap between the broadband haves and have-nots. What do we have to show for it? As part of PURC’s Digital Markets Initiative and in partnership with the Bob Graham Center for Public Service we hosted Mignon Clyburn, a former Commissioner of the Federal Communications Commission, on-campus to explain what it will take for the US to see real results. The speaker series event was hosted September 9, 2022.



Broadband Initiatives in the Federal Infrastructure and Jobs Act

In partnership with the Florida Chapter of the Federal Communications Bar Association, PURC Director Mark Jamison joined a panel discussion on the broadband provisions of the Infrastructure Investment and Jobs Act. Topics included mapping, challenges of adoption, and what to expect from the National Telecommunications and Information Administration (NTIA). This virtual event was hosted September 13, 2021.

The Future of Telecom Regulation in the Wake of the Pandemic

PURC Director and Gerald Gunter Professor Mark Jamison discusses how the pandemic has impacted the future of telecommunication regulation across the world. Watch Jamison’s conversation with CANTO Chairman David Cox from the CANTO Conference. This presentation was given on August 5, 2021.

Is Big Tech Anticompetitive?

America’s biggest tech companies have revolutionized work, entertainment, and just about every aspect of life. But some in Washington are raising concerns about Big Tech, hoping to make the tech sector more competitive using antitrust action. Companies like Google, Amazon, and Facebook are seen as too powerful, anticompetitive, or politically biased. In this episode, guest Mark Jamison discusses the possibility of antitrust action against some of our biggest companies. This podcast was published on Jun 30, 2021.

EPPC Symposium on Regulating Big Tech

Should antitrust laws or practices change to address issues in Big Tech? Practices should change, but not laws, according to PURC and DMI director, Mark Jamison. Dr. Jamison explained that digital markets move too fast for current antitrust practices and that today's practices tend to ignore the value of tech ecosystems. He suggested that antitrust return to its economic roots and focus on sources of market power. This is important because with current practices, but time antitrust enforcers detect market power, digital markets have moved on. The EPPC event was held online on June 29, 2021.

What Lies Ahead for Section 230?

Section 230 of the Communications Decency Act was designed to promote a competitive online ecosystem that maximizes user control while guarding against illegal activities. The law is credited with empowering unprecedented innovation, but it is also blamed for allowing Big Tech to suppress speech and avoid liability for seemingly unchecked misinformation. Proposals to reform Section 230 - and views about its impact - vary. Some believe the law is a key protector of online expression, while others believe it provides cover for suppression of free speech. And some seek to expand Big Tech's responsibility to limit what can be said on social media. This presentation was given on May 26, 2021.

Antitrust in the App Economy

How might antitrust and competition policy proposals directed at software platforms impact small, innovative companies in the app economy? That was the topic addressed by Dr. Mark Jamison in a panel sponsored by ACT | The App Association. Antitrust is a hot topic in Congress and in legislatures and courts across the nation, especially as it applies to tech-driven markets. Dr. Jamison explained how network effects should be viewed in a positive light, rather than as a barrier to competition, because they incentivize companies to develop rival platforms. He also described how the two main platforms -- Apple's iOS and Google's Android systems -- compete aggressively for businesses. He and other panelists examined how current antitrust proposals would discourage startups and limit entrepreneurial opportunities if implemented. The panel was held on April 29, 2021, online.

Dynamic Antitrust Discussion Series: "House Report on Big Tech"

Public Utility Research Center Director and Gerald Gunter Professor Mark Jamison discussed the House Report on Competition in the Digital Markets with Federal Trade Commissioner Christine Wilson (BA '91) and Aurelien Portuese, director of antitrust and innovation policy at the Information Technology & Innovation Foundation (ITIF). The House report focuses on a handful of tech giants to draw policy recommendations about antitrust enforcement. One of the most dramatic policy recommendations of the report is the structural separation of digital platforms - namely, the break-up of tech giants such as Google, Facebook, Amazon, and Apple. What are the justifications for such a proposal and what are the possibilities for these break-ups to be part of foreseeable legislative changes? This presentation was given on April 12, 2021.

Free Speech in the Digital Age: Assessing the Values and Consequences of Free Expression

Does free speech apply to all corners of society, including the internet? The Constitution prohibits Congress from making any law "abridging the freedom of speech, or of the press", and, since the 1960s, courts have interpreted this as an expansive right of individuals and institutions with few exceptions. However, public support for free speech seems to be decreasing, especially as it pertains to social media platforms. Free speech critics support more government controls and are pressing social media platforms to censor certain ideas, opinions, and people. And sometimes, social media platforms seem happy to comply. This presentation was given on March 29, 2021.

How will the Biden-Harris administration deal with the tech industry?

How will the Biden-Harris administration deal with the tech industry? That was the topic of a panel including Mark Jamison, Director of PURC and UF's Digital Markets Initiative. The panel examined the roles of competition and regulation in the performance of the tech industries. Dr. Jamison emphasized the need for allowing markets to work and for new analytical methods that would be able to provide real insights into the dynamic companies and markets that we find in tech. He explained the importance of making sure that competition policies emphasize consumer welfare, the problems of assuming that government officials can improve outcomes by changing industry structure, and the need to allow startups opportunities to sell their new businesses to established companies that can make the products even more successful. His fellow panelists included Professor Douglas Melamed of Standard University, William Baer of Brookings Institution, and Parag Shah, Founder of Vemos. The panel was held on March 4, 2021, and was sponsored by the Competition Policy Institute and by ACT The App Association.

How Should Government Officials Think About the Regulation of Big Tech?

That was the topic of Mark Jamison's presentation to Young Voices, a nonprofit that promotes libertarian and classical liberal students in the media. Dr. Jamison explained how government officials determine when to examine a company for antitrust violations and how such investigations are conducted. He then described the mismatches between the traditional methods of antitrust and today's tech markets. These characteristics include the speed of change, the illusion of high profits, and the interdependencies of businesses and platforms. He explained the importance of the consumer welfare standard in antitrust, and answered questions about state antitrust cases and international impacts of US antitrust. Dr. Jamison is PURC's director and the director of the university's Digital Markets Initiative. He made this presentation online on February 15, 2021.

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 carefully monitored the financial consequences and begun planning for recovery.

More than 100 participated online in the 48th Annual PURC Conference where speakers and the audience examined what we have learned and what do we do next.

Annual PURC Award for Best Paper in Regulatory Economics

The 2021 Public Utility Research Center Prize for the best paper in regulatory economics was awarded to By R. Andrew Butters, Jackson Dorsey, and Gautam Gowrisankaran for their paper *Soaking Up the Sun: Battery Investment, Renewable Energy, and Market Equilibrium*.

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 2021, the glossary of terms is available in 11 languages including Bulgarian and Arabic.

TRAINING AND DEVELOPMENT

Comprehensive Regulatory Impact Analysis: a PURC Online Course

Over six weeks, participants learn tools and approaches for 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. In Fall 2021, Dr. Ted Kury and Dr. Sanford Berg worked with 6 participants from 3 countries who all successfully completed the course.

PURC Training on Regulatory Impact Analysis (RIA)

In this training, Dr. Ted Kury and Dr. Mark Jamison worked with participants from the Communications and Information Technology Commission of Saudi Arabia (CITC) on several topics concerning RIA. Participants mastered these issues in lecture periods as well as by working with each other in breakout discussion groups and real-world simulations. Topics included issues such as the RIA process, determining costs and benefits, the uses of focus groups and surveys, and more. This course was held online via Zoom from October 24 - 28, 2021.

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

We were excited to host 21 regulatory professionals in our October 2021 Leadership Workshop. Throughout the workshop, they identified and developed their individual leadership profiles; examined personal practices of successful leaders to develop vision, resolve conflict and set priorities; analyzed what is different about practicing leadership in a political environment; and developed their own personal action plans and an accountability system to address their unique challenges. This training was held in-person on October 17, 2021.

48th PURC/ World Bank International Training Program on Utility Regulation and Strategy

Thirty regulatory professionals from twelve countries travelled to the University of Florida for PURC's flagship program! The international training program is an intensive 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. This training was held in-person from October 11 – 20, 2021.

PPP Fundamentals and Best Practices: A Virtual PURC Workshop

Designed for public officials and their fiscal and legal staff, this workshop introduced participants to the principles and best practices in PPP. A critical consideration is that while every project can be a PPP, that doesn't mean every project should. Dr. Ted Kury worked with 14 participants across Florida in this introductory online workshop on September 21, 2021.

Virtual PURC Training on Competition and Anticompetitive Conduct

In this training, Dr. Mark Jamison worked with participants from the CITC of Saudi Arabia on several topics concerning competition and market power. Participants learned directly from Dr. Jamison in lecture periods as well as with each other in breakout discussion groups and real-world simulations. Topics included issues such as how to identify market power, why market power matters, anticompetitive conduct, ways to prevent monopoly harms, and more. This course was held online via Zoom from August 29 - September 2, 2021.

Next Generation Leaders: CEOs Dialogue

How can you as a leader prepare to rise into the executive ranks? How can you get ready for the complex challenges ahead? Through this comprehensive 5-week program, participants worked on their actual leadership challenges, reflected on their leadership styles, gained new insights on the dimensions of leadership, studied how to strengthen their organizations, learned what it takes to implement change successfully, and observed leadership in real time. Geared towards busy professionals, the interactive course methodology immersed participants in practical concepts, tools and approaches to address real leadership challenges within themselves and their organizations, and to get them ready for next steps in their careers. This virtual leadership program was hosted in partnership with CANTO, and was held over a 5-week period during May and June of 2021.

Weighted Average Cost of Capital: A Topic-Focused Workshop

This zoom-based workshop focused on the derivation of the Weighted Average Cost of Capital (WACC) for regulated utilities. Participants discussed the various considerations for deriving WACC including priorities and practices. They also analyzed the various models used in the estimation of WACC, their inherent strengths and weaknesses, and potential remedies for weaknesses. In this workshop, participants learned the importance of WACC parameters such as risk-free rates, beta, and equity risk premiums, as well as estimation methods for parameters used to derive WACC and available data sources for the determination of WACC. This workshop was provided online on April 7, 2021.

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 emissions. 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

A highlight of Ms. Araceli Castaneda’s leadership work in 2021 was the development and delivery, together with PURC director, Mark Jamison of the 5-week Next Generation Leaders: CEOs Dialogue. This program, hosted by PURC’s partner CANTO, worked with a group of CEOs, mid and high level executives, and up and coming leaders to rise into the net levels of their careers, and to get ready for the complex challenges ahead. Through this comprehensive program, participants worked on their actual leadership challenges, reflected on their leadership styles, gained new insights on the dimensions of leadership, studied how to strengthen their organizations, learned what it takes to implement change successfully, and observed leadership in real time. Ms. Castaneda also contributed to a number of PURC virtual and in-person programs through the delivery of sessions such as Effective Independence, Country Lessons from the Pandemic, or Thinking Strategically, and ran peer consulting groups to address participants’ pressing issues. Ms. Castaneda also co-delivered PURC’s one-day leadership workshop Practicing Leadership in a Political Environment this past October.



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**

Baye, Michael R., and David E. M. Sappington. 2020. "Revealing Transactions Data to Third Parties: Implications of Privacy Regimes for Welfare in Online Markets." *The Journal of Economics and Management Strategy*, Vol. 29(2), Summer 2020, pp. 260-275.

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.

Bet, Germán, Shana Cui, and David E. M. Sappington. 2021. "The Impact of Vertical Integration on Losses from Collusion." *The International Journal of Industrial Organization*, Vol. 77, June 2021, Article 102756.

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. "On the Profitability of Self-Sabotage," University of Florida, Department of Economics, PURC Working Paper.

Brown, David P., and David E. M. Sappington. 2020. "Motivating the Optimal Procurement and Deployment of Electric Storage as a Transmission Asset," *Energy Policy*, Vol. 138, March 2020, Article 111202.

Brown, David P., and David E. M. Sappington. 2020. "Procuring Electric Storage as a Transmission Asset," *The Electricity Journal*, Vol. 33(3), April 2020, Article 106711.

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.

Brown, David P., and David E. M. Sappington. 2022. "Vertical Integration and Capacity Investment in the Electricity Sector," *The Journal of Economics and Management Strategy*, forthcoming.

Brown, David P., and David E. M. Sappington. 2022. "Load-Following Forward Contracts," University of Florida, Department of Economics, PURC Working Paper.

Brown, David P., and David E. M. Sappington. 2022. "Market Structure, Risk Preferences, and Forward Contracting Incentives," University of Florida, Department of Economics, PURC Working Paper.

Castaneda, Araceli. 2021. "Principles and Strategies for Effective Leadership in the "New Normal"" University of Florida, Warrington College of Business, PURC Working Paper.

Channagiri Ajit, Tejaswi, and Mark A. Jamison. 2021. "Platform Competition and Differentiation: Developer Choices in Mobile Platforms" University of Florida, Warrington College of Business, PURC Working Paper.

Cui, Shana, and David E. M. Sappington. 2021. "Access Pricing in Mixed Oligopoly," *Journal of Regulatory Economics*, Vol. 59(3), June 2021, pp. 193-225.

Corton, Maria Luisa, Michelle Phillips, and Aneliese Zimmermann. 2019. "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.

Costello, Kenneth. 2021. "The Challenges of Reviewing Merger Proposals" University of Florida, Warrington College of Business, PURC Working Paper.

Cox, David. 2021. "Leveraging Digital Transformation for Capital Markets Development: Closing the Digital Divide" 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.

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.

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 A. 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://bciprf.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 A. 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. 2021. "The Biden-era FCC Dilemma: Would Restoring Net Neutrality Regulations Hurt the Poor?" 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" *Telecommunications Policy* 45(5): <https://doi.org/10.1016/j.telpol.2021.102126>.

Jamison, Mark A., and Peter Wang. 2021. "Effects of Components on Ecosystem Value: The Case of the iPhone and Mobile Broadband" University of Florida, Warrington College of Business, PURC 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.

Kovacic, William, and D. Daniel Sokol. 2021. "Understanding the House Judiciary Committee Majority Staff Antitrust Report" 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 Working 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 Working Paper.

Kury, Theodore. 2021. "Preparing to Harden Electrical Resources for Hurricane Season" University of Florida, Warrington College of Business, PURC Working Paper.

Kury, Theodore. 2021. "Can We Secure Our Electric Grid?" University of Florida, Warrington College of Business, PURC Working 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," *The Electricity Journal*, Vol. 34(2), March 2021, Article 106902.

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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 7, 2022

TO: Braulio L. Baez, Executive Director

FROM: Cayce H. Hinton, Director, Office of Industry Development and Market Analysis
Benjamin J. Crawford, Public Utilities Supervisor, Office of Industry Development & Market Analysis
Shelby Eichler, Public Utility Analyst III, Office of Industry Development and Market Analysis
Alexander Massiah, Public Utility Analyst I, Office of Industry Development & Market Analysis
Matthew Hardy, Public Utility Analyst I, Office of Industry Development and Market Analysis
Ashley Weisenfeld, Senior Attorney, Office of the General Counsel

RE: *Implementation of Sections 40104 and 40431 of the Infrastructure Investment and Jobs Act*
Critical Information: Please place on the January 20, 2022, Internal Affairs. Guidance is sought on implementation of Sections 40104 and 40431 of the Infrastructure Investment and Jobs Act.

On November 15, 2021, President Biden signed into law H.R. 3684, the Infrastructure Investment and Jobs Act (Act), which reauthorizes surface transportation programs for five years, through Fiscal Year 2026, and provides for a one-time transfer of funds from the General Fund into the Highway Trust Fund. It also authorizes programs for water, energy, and broadband infrastructure; and provides emergency supplemental appropriations. It has several provisions that may impact Florida's utilities (summary contained in Attachment A). Additionally, there are two sections that may require action by the Florida Public Service Commission (Commission).

Pursuant to Sections 40104 and 40431 of the Act, state regulatory agencies are required to take certain action regarding "Utility Demand Response" and the "Consideration of Measures to Promote Greater Electrification of the Transportation Sector." Sections 40104 and 40431 specify time frames for state regulatory authorities to act in considering these new standards. As explained below, staff believes Florida is exempt from Sections 40104 and 40431 and no action is required by the Commission. Staff seeks the Commission's guidance.

History

The Public Utility Regulatory Policies Act (PURPA) was enacted by Congress in 1978. Under PURPA, each state regulatory authority was required to consider a list of “standards” aimed at energy conservation, efficient use of facilities and resources by utilities, and equitable rates. These standards included six ratemaking standards: (1) time-of-day rates; (2) seasonal rates; (3) interruptible rates; (4) load management techniques; (5) prohibition of declining block rates; and (6) cost-of-service rates. With respect to each electric utility over which it had ratemaking authority, each state commission was required to give public notice and conduct a hearing to consider and determine whether or not it was appropriate to implement each of the standards. Each state regulatory authority was free to make a determination that implementation of any particular standard was inappropriate, provided that it met the requirements of public notice and hearing and, based on the evidence presented at hearing, issued a written decision providing its rationale.

In response to PURPA, the Commission conducted proceedings to consider each of PURPA’s ratemaking standards and determine whether each particular standard was appropriate for implementation in Florida.

The Energy Policy Act of 2005 (EPACT) amended PURPA to require state regulatory authorities to consider and make a determination concerning whether or not it was appropriate to implement certain standards. Section 1252 of EPACT required state regulatory authorities “to conduct an investigation and issue a decision” regarding time-of-use rates and the installation of meters and devices to facilitate such rates. Section 1254 of EPACT required consideration of implementing a standard requiring electric utilities to interconnect distributed energy sources (e.g. rooftop solar) pursuant to safety standard IEEE 1547.

Docket No. 20070022-EU was opened to address actions responsive to the requirements of Section 1252 of EPACT. The Commission ultimately declined to adopt a standard given past actions of the Commission that provided customers with options to monitor and control energy usage, as well as the potential that the standard could result in service requirements that were not cost-effective for all customers.¹

The staff held a rule development workshop on December 15, 2005, to address Section 1254.² Subsequent to the workshop, Florida Power & Light Company (FPL), Gulf Power Company (Gulf), Progress Energy (now Duke Energy Florida, LLC., or DEF), and Tampa Electric Company (TECO) filed a joint petition for approval of a stipulation in which the investor-owned electric utilities (IOUs) agreed to adopt, on a voluntary basis, the safety standard associated with the interconnection of distributed energy sources. This was filed in lieu of a rulemaking proceeding to establish the safety standard in a Commission rule. The Commission approved the stipulation, satisfying the requirement of EPACT.³

¹ Order No. PSC-07-0212-PAA-EU, issued March 7, 2007, in Docket No. 20070022-EU, *In re: Recommendation on Commission action regarding adoption of PURPA Standard 14, “Time-based Metering and Communications.”*

² Notice of Rule Workshop: <http://www.floridapsc.com/library/filings/2005/10672-2005/10672-2005.PDF>

³ Order No. PSC-06-0707-PAA-EI, issued August 18, 2006, in Docket No. 20060410, *In re: Petition for approval of stipulation regarding interconnection of distributed resources to electric power system, by Florida Power & Light Company, Gulf Power Company, Progress Energy Florida, and Tampa Electric Company.*

Provisions of Section 40104 of the Act

Section 40104 of the Act amends PURPA by adding the following to Section 111(d).

(20) DEMAND-RESPONSE PRACTICES.—

(A) IN GENERAL.—Each electric utility shall promote the use of demand-response and demand flexibility practices by commercial, residential, and industrial consumers to reduce electricity consumption during periods of unusually high demand.

(B) RATE RECOVERY.—

(i) IN GENERAL.—Each State regulatory authority shall consider establishing rate mechanisms allowing an electric utility with respect to which the State regulatory authority has ratemaking authority to timely recover the costs of promoting demand-response and demand flexibility practices in accordance with subparagraph (A).

(ii) NONREGULATED ELECTRIC UTILITIES.—A nonregulated electric utility may establish rate mechanisms for the timely recovery of the costs of promoting demand-response and demand flexibility practices in accordance with subparagraph (A).

The Act also amends Section 112 of PURPA addressing prior state actions.

PRIOR STATE ACTIONS.—Subsections (b) and (c) shall not apply to the standard established by paragraph (20) of section 111(d) in the case of any electric utility in a State if, before the date of enactment of this subsection—

(1) the State has implemented for the electric utility the standard (or a comparable standard);

(2) the State regulatory authority for the State or the relevant nonregulated electric utility has conducted a proceeding to consider implementation of the standard (or a comparable standard) for the electric utility; or

(3) the State legislature has voted on the implementation of the standard (or a comparable standard) for the electric utility.

Pursuant to Section 40104, each regulatory authority shall begin consideration of this standard or set a hearing date for such consideration no later than one year after enactment of Section 40104, and shall make a determination with respect to the standard no later than two years after enactment. However, Section 40104 lists three conditions under which a state is exempt from this “consideration and determination” requirement: (1) the state has already implemented the standard or a comparable standard; (2) the state regulatory authority has conducted a proceeding to consider implementation of the standard or a comparable standard; or (3) the state legislature has voted on implementation of the standard or a comparable standard.

Proposed Implementation of Section 40104

Reducing and controlling the growth of Florida's weather-sensitive peak electric demand and energy consumption became a Legislative objective in 1980, with the enactment of the Florida Energy Efficiency and Conservation Act (FEECA). Sections 366.82(2) and 366.82(6), Florida Statutes (F.S.), require the Commission to establish goals for the FEECA utilities and review the goals every five years, at minimum. The utilities subject to FEECA are required to develop cost-effective demand-side management (DSM) plans that meet those goals and submit them to the Commission for approval.

Pursuant to FEECA, the Commission has well-established rules and procedures regarding approval of demand-response programs and allowing the utilities under its ratemaking authority to recover program costs found to be reasonable. Pursuant to Rule 25-17.0021, Florida Administrative Code (F.A.C.), the Commission sets numeric electric goals with respect to summer and winter electric peak demand reduction and annual energy savings over a ten-year period. By rule, each utility must provide projected savings from peakload shaving for residential and commercial/industrial customers. Once goals are established, the FEECA utilities must submit demand-side management plans containing programs intended to meet the goals for Commission approval. Florida's major electric IOUs subject to FEECA have Commission-approved demand response programs designed to reduce peak demand for both residential and commercial/industrial customers. The Commission has also approved time-of-use rates to encourage customers to use power during off peak periods.

FEECA also provides the Commission with authority to allow electric utilities under the Commission's ratemaking authority to recover reasonable expenses for demand-side management programs through a cost recovery clause mechanism. Rule 25-17.015, F.A.C., known as the Energy Conservation Cost Recovery Clause, establishes the annual cost recovery proceedings in which these utilities may seek to recover costs for demand-side management programs, with the purpose of providing timely recovery of program expenses that are found to be reasonable.

Subsection 40104(g) of the Act provides that the utility demand response provisions shall not apply if the state regulatory authority has conducted a proceeding to consider implementation of the standard for the electric utility. Staff believes the exemption to be self-executing because the Act language includes "shall not apply." A self-executing exemption has no filing requirement: it contains language that describes a factual circumstance which inherently limits the scope of application of requirements. In this case, because the Commission has already held proceedings to consider utility demand response, the language requiring the Commission to conduct such proceedings does not apply. In any proceeding to determine the validity of this exemption the burden of proof rests with the Commission.

Therefore, staff believes that no proceeding is required for the purpose of considering and determining whether or not it is appropriate to implement the Demand Response Practices standard set forth by Section 40104 of the Act.

Provisions of Section 40431 of the Act

Prior to the Act, PURPA did not include requirements addressing electric vehicle charging. Section 40431 of the Act amends PURPA by adding the following:

- (21) ELECTRIC VEHICLE CHARGING PROGRAMS.—Each State shall consider measures to promote greater electrification of the transportation sector, including the establishment of rates that—
- (A) promote affordable and equitable electric vehicle charging options for residential, commercial, and public electric vehicle charging infrastructure;
 - (B) improve the customer experience associated with electric vehicle charging, including by reducing charging times for light-, medium-, and heavy-duty vehicles;
 - (C) accelerate third-party investment in electric vehicle charging for light-, medium-, and heavy-duty vehicles; and
 - (D) appropriately recover the marginal costs of delivering electricity to electric vehicles and electric vehicle charging infrastructure.

Section 112 of PURPA is also amended to address prior state actions addressing electric vehicle charging.

- (h) OTHER PRIOR STATE ACTIONS.—Subsections (b) and (c) shall not apply to the standard established by paragraph (21) of section 111(d) in the case of any electric utility in a State if, before the date of enactment of this subsection—
- (1) the State has implemented for the electric utility the standard (or a comparable standard);
 - (2) the State regulatory authority for the State or the relevant nonregulated electric utility has conducted a proceeding to consider implementation of the standard (or a comparable standard) for the electric utility; or
 - (3) the State legislature has voted on the implementation of the standard (or a comparable standard) for the electric utility during the 3-year period ending on that date of enactment.

Pursuant to Section 40431, each regulatory authority shall begin consideration of this standard or set a hearing date for such consideration no later than one year after enactment of Section 40431, and shall make a determination with respect to the standard no later than two years after enactment. However, Section 40431 lists three conditions under which a state is exempt from this “consideration and determination” requirement: (1) the state has already implemented the standard or a comparable standard; (2) the state regulatory authority has conducted a proceeding to consider implementation of the standard or a comparable standard; or (3) the state legislature has voted on implementation of the standard or a comparable standard within the previous three years.

Proposed Implementation of Section 40431

It is questionable whether all four of the standards identified in Section 40431 fall within the Commission's jurisdiction to consider. However, the Commission has considered measures that fall within its jurisdiction to promote greater electrification of the transportation sector, including establishing specific EV rates, through the approval of IOU EV pilot programs and EV tariffs.

By Order No. PSC-2021-0144-PAA-EI,⁴ the Commission approved TECO's EV charging pilot program, under which TECO is permitted to spend up to \$2 million to purchase, install, own, and maintain 200 EV charging stations. TECO was authorized to begin recovery of pilot program costs in rate base effective April 1, 2021.

In 2019, FPL began a three year pilot program, known as EVolution, which targeted the installation of 1,000 charging ports. The primary objective of the pilot is to gather information ahead of mass EV adoption to better plan for and design EV charging investments. In 2020, the Commission approved a new tariff for FPL with specific EV charging rates for both utility-owned and non-utility owned charging stations. The Commission required FPL to submit annual reports that will allow the Commission to monitor the reasonableness of the utility-owned public chargers. During its 2021 rate case, FPL filed a settlement agreement with parties that contained provisions expanding FPL's current EV charging pilot program to include the following: Public Fast Charging Program, Residential EV Charging Services Pilot, Commercial EV Charging Services Pilot, New Technologies and Software, and Education and Awareness. By Order No. PSC-2021-0446-S-EI,⁵ the Commission approved FPL's expanded EV pilot programs as a component of the rate case settlement agreement on October 26, 2021. The total investment is forecast to be \$175 million over the four-year period 2022-2025. Under the terms of the settlement agreement, FPL is authorized to recover the costs associated with the EV programs in rate base.

In 2017, as part of DEF's rate case settlement agreement, the Commission approved a five-year EV Charging Pilot Program that allowed DEF to invest \$8 million to install and own a minimum of 530 charging ports. Under Order No. PSC-2017-0451-AS-EU,⁶ reasonable costs of the pilot program were allowed to be recovered in rate base through the end of 2021. In 2021, the Commission approved a new settlement agreement that requested approval of a permanent EV charging station program. DEF forecasted the cost to be \$62.9 million over the four-year period

⁴ Issued April 21, 2021, in Docket No. 20200220-EI, *In re: Petition for approval of electric vehicle charging pilot program, by Tampa Electric Company.*

⁵ Issued December 2, 2021, in Docket No. 20210015-EI, *In re: Petition for rate increase by Florida Power & Light Company.*

⁶ Issued November 20, 2017, in Docket Nos. 20170183-EI, 20100437-EI, 20170001-EI, 20170002-EG, and 20170009-EI, *In re: Application for limited proceeding to approve 2017 second revised and restated settlement agreement, including certain rate adjustments, by Duke Energy Florida, LLC., In re: Examination of the outage and replacement fuel/power costs associated with the CR3 steam generator replacement project, by Progress Energy Florida, Inc., In re: Petition for issuance of nuclear asset recovery financing order, by Duke Energy Florida, Inc. d/b/a Duke Energy., In re: Fuel and purchased power cost recovery clause with generating performance incentive factor, In re: Energy conservation cost recovery clause, and In re: Nuclear cost recovery clause.*

2022-2025. By Order No. PSC-2021-0202-AS-EI,⁷ the Commission allowed DEF to recover the costs of the program through rate base.

On March 11, 2020, the Florida Legislature enacted Section 339.287, F.S., requiring the Florida Department of Transportation (FDOT), in consultation with the Commission and the Office of Energy in the Florida Department of Agriculture and Consumer Services, to coordinate, develop, and recommend an EV Infrastructure Master Plan (EVMP) for the development of electric vehicle charging infrastructure along the State Highway System. The EVMP, as a whole, delivers a comprehensive course of action to efficiently and effectively provide for EV charging infrastructure to support the goals of Section 339.287, F.S., and serves as a guide for future legislative, agency-level and public engagement efforts. The primary objectives of the EVMP include supporting short-range and long-range electric vehicle travel as well as emergency evacuation in the state, adapting state highway infrastructure consistent with market demand, and ensuring availability of adequate and reliable EV charging stations. Topics discussed include: barriers to adoption and industry trends, installation considerations, utility regulatory considerations, strategies to develop charging supply, EV market adoption, impacts to transportation funding, resilience and emergency evacuations, identification of potential new EV supply equipment locations, and regional transportation collaborations.

In order to develop the information required by Section 339.289, F.S., Commission staff convened a workshop on October 21, 2020, to gather data from stakeholders in support of the EVMP. Fifteen entities with roles in the EV charging supply chain filed pre-workshop comments with the Commission, and took part in the workshop. Commission staff worked closely with staff at the FDOT and the Office of Energy to develop the required analysis. Additionally, the FDOT coordinated with state, regional and local agencies, as well as industry stakeholders and members of the public. A total of seven stakeholder meetings and two public webinars were conducted, with a 30-day public comment period. The collaborative process was informed by technical analysis, which led to the development of recommendations. The recommendations provided a framework for strategic actions that Florida could consider to promote greater electrification of the transportation sector. The plan was delivered to the Governor, the President of the Senate, and the Speaker of the House of Representatives on July 1, 2021.

Subsection 40431(h) of the Act provides that the EV charging program provisions shall not apply if the State regulatory authority has conducted a proceeding to consider implementation of the standard for the electric utility. As discussed above, staff believes the exemption to be self-executing because the Act language includes "shall not apply." In this case, because the Commission has already held proceedings to consider EV charging programs, the language requiring the Commission to conduct such proceedings, does not apply. In any proceeding to determine the validity of this exemption the burden of proof rests with the Commission. In addition, the Florida Legislature voted in 2020 to require state agencies to develop a charging infrastructure master plan to promote greater electrification of the transportation sector.

⁷ Issued June 4, 2021, in Docket Nos. 20190110-EI, 20190222-EI, and 20210016-EI, *In re: Petition for limited proceeding for recovery of incremental storm restoration costs related to Hurricane Michael and approval of second implementation stipulation, by Duke Energy Florida, LLC.*, *In re: Petition for limited proceeding for recovery of incremental storm restoration costs related to Hurricane Dorian and Tropical Storm Nestor, by Duke Energy Florida, LLC.*, and *In re: Petition for limited proceeding to approve 2021 settlement agreement, including general base rate increases, by Duke Energy Florida, LLC.*

Given the Commission's approval of IOU pilot programs, which include rates for non-utility and utility-owned charging stations, as well as the development of the EVMP at the direction of the Legislature, staff believes no further proceeding is required to consider the Electric Vehicle Charging Programs standard set forth in Section 40431 of the Act.

Infrastructure Investment and Jobs Act

Title I – Grid Infrastructure and Resiliency

Subtitle A Grid Infrastructure and Reliability

Sec. 40101 Preventing outages and the resilience of the electric grid.

- This section directs the Department of Energy (DOE) to establish a grant program to support activities that reduce the likelihood and consequence of impacts to the electric grid due to extreme weather, wildfire, and natural disaster. This section authorizes \$5 billion for the period of fiscal years (FY) 22-26.
- The Secretary of Energy (Secretary) may make a grant under the program to an eligible entity to carry out activities that - (A) are supplemental to existing hardening efforts of the eligible entity planned for any given year; and (B) (i) reduce the risk of any power lines owned or operated by the eligible entity causing a wildfire; or (ii) increase the ability of the eligible entity to reduce the likelihood and consequences of disruptive events.
- The Secretary shall give priority to projects that, in the determination of the Secretary, will generate the greatest community benefit (whether rural or urban) in reducing the likelihood and consequences of disruptive events.
- The Secretary shall ensure that not less than 30 percent of the amounts made available to eligible entities under the program are made available to eligible entities that sell not more than 4,000,000 megawatt hours of electricity per year.
- Eligible entities - (A) an electric grid operator; (B) an electricity storage operator; (C) an electricity generator; (D) a transmission owner or operator; (E) a distribution provider; (F) a fuel supplier; and (G) any other relevant entity, as determined by the Secretary.

Sec. 40103 Electric grid reliability and resilience research, development, and demonstration.

- This section establishes the “Program Upgrading Our Electric Grid Reliability and Resiliency” to provide federal financial assistance to demonstrate innovative approaches to transmission, storage, and distribution infrastructure to harden resilience and reliability and to demonstrate new approaches to enhance regional grid resilience, implemented through states by public and publicly regulated entities on a cost-shared basis. It also directs the Secretary to improve resilience, safety, and reliability and environmental protection in rural or remote areas and—in collaboration with Department of Homeland Security, the Federal Energy Regulatory Commission (FERC), and the North American Electric Reliability Corporation (NERC)—to develop a framework to assess the resilience of energy infrastructure. This section authorizes \$5 billion for the period of FY22-26 for the Energy Infrastructure Federal Financial Assistance program and \$1

million for the period of FY22-26 for Rural or Remote Areas (a city, town, or unincorporated area that has a population of not more than 10,000 inhabitants).

- Eligible entities - (i) a state; (ii) a combination of 2 or more states; (iii) an Indian Tribe; (iv) a unit of local government; and (v) a public utility commission.

Sec. 40104 Utility demand response.

- Public Utility Regulatory Policies Act of 1978 amended to add the following: Paragraph 20 of Section 111(d).
- (20) Each electric utility shall promote the use of demand-response and demand flexibility practices by commercial, residential, and industrial consumers in order to reduce electricity consumption during periods of unusually high demand.
- Each state regulatory authority shall consider establishing rate mechanisms allowing an electric utility (with respect to which the state regulatory authority has ratemaking authority) to timely recover the costs of promoting demand-response and demand flexibility practices.
- Not later than 1 year after the date of enactment of this paragraph, each state regulatory authority (with respect to each electric utility for which the state has ratemaking authority) shall commence consideration under section 111, or set a hearing date for consideration, with respect to the standard established by paragraph (20) of section 111(d).
- Not later than 2 years after the date of enactment of this paragraph, each state regulatory authority (with respect to each electric utility for which the state has ratemaking authority), shall complete the consideration and make the determination under section 111 with respect to the standard established by paragraph (20) of section 111(d).
- Requirement does not apply if the state regulatory authority has already implemented the standard.

Sec. 40106 Transmission facilitation program.

- This section establishes a \$2.5 billion revolving loan fund to allow DOE to serve as an “anchor-tenant” for a new transmission line or an upgrade of an existing line. The section permits DOE to buy a certain portion of the planned capacity (not more than 50%), which it then may sell after determining that the transmission project has ensured financial viability. It also permits DOE to issue loans to or enter into public private partnerships with eligible transmission projects. It also authorizes \$10 million for each of FY22-26 to carry out the program.
- Potential review by a state regulatory entity of the revenue requirement of an electric utility may be requested, if applicable, by the Secretary to help assess the amount paid to an eligible entity for the right to the use of the transmission capacity of an eligible project.

Sec. 40108 State energy security plans.

- This section provides assistance for the creation of State Energy Security Plans that address all energy sources and potential hazards and provides a risk assessment and risk mitigation approach.
- In developing or revising a state energy security plan, the energy office of the state shall coordinate, to the extent practicable, with the public utility or service commission of the state.

Subtitle B – Cybersecurity

Sec. 40121 Enhancing grid security through public-private partnerships.

- This section requires the Secretary of Energy, in coordination with the Secretary of Homeland Security, and if deemed appropriate, consultation with State regulatory authorities, industry, the Electric Reliability Organization, and other relevant federal agencies, to carry out a program to promote and advance the physical security and cybersecurity of electric utilities, with priority provided to utilities with fewer resources.

Sec. 40124 Rural and municipal utility advanced cybersecurity grant and technological assistance program.

- This section directs the Secretary to establish the “Rural and Municipal Utility Advanced Cybersecurity Grant and Technical Assistance Program” to provide grants and technical assistance for utilities to detect, respond to, and recover from cybersecurity threats. This section authorizes \$250 million for the period of FY22-26.
- Eligible utilities include: (i) a rural electric cooperative; (ii) a utility owned by a political subdivision of a state, such as a municipally owned electric utility; (iii) a utility owned by any agency, authority, corporation, or instrumentality of 1 or more political subdivisions of a state; (iv) a not-for-profit entity that is in a partnership with not fewer than 6 entities described in subparagraph (A), (B), or (C); (v) an investor-owned electric utility that sells less than 4,000,000 megawatt hours of electricity per year.

Title III—Fuels and Technology Infrastructure Investments

Subtitle A—Carbon Capture, Utilization, and Storage, and Transportation Infrastructure Findings.

Sec. 40302 Carbon utilization program.

- This section establishes a grant program for state and local governments, as well as public utilities or agencies, to procure and use products derived from captured carbon oxides. It expands DOE’s Carbon Utilization program objectives to include the

development of standards and certifications to support commercialization of carbon oxide products. This section authorizes \$41 million for FY22, \$65,250,000 for FY23, \$66,562,500 for FY24, \$67,940,625 for FY25, and \$69,387,656 for FY26.

Subtitle B—Hydrogen Research and Development

Sec. 40313 Clean hydrogen research and development program.

- This section re-establishes and expands the scope of DOE’s hydrogen research and development program to advance cross-cutting R&D for purposes of demonstration and commercialization of clean hydrogen production, processing, delivery and end-use application technologies.
- Amends Section 805 of the Energy Policy Act of 2005 to add language for the “Clean Hydrogen Research and Development Program.”
- One of the goals of the new program is to demonstrate a standard of clean hydrogen production in the transportation, utility, industrial, commercial, and residential sectors by 2040.
- The Secretary, in partnership with the private sector, shall conduct activities to advance and support several program activities, including: the use of clean hydrogen for commercial, industrial, and residential electric power generation by 2040.

Title IV—Enabling Energy Infrastructure Investment and Data Collection

Subtitle B—Energy Information Administration

Sec. 40414 Data collection on electric vehicle integration with the electricity grids.

- This section directs the EIA to expand data collection with respect to electric vehicle integration with the electricity grid.
- The expanded data would include the following subjects:
 - host-owned or charging-network-owned electric vehicle charging stations
 - aggregators of charging-network electricity demand
 - electric utilities offering managed-charging programs
 - individual, corporate, or public owners of electric vehicles
 - balancing authority analyses of transformer loading congestion; and distribution-system congestion

Subtitle C—Miscellaneous

Sec. 40431 Consideration of measures to promote greater electrification of the transportation sector.

- This section directs states to consider measures to promote greater electrification of the transportation sector including the establishment of rates that promote affordable and equitable electric vehicle charging options, improve the customer experience associated with EV charging including reducing wait times, accelerate third-party investment in public electric vehicle charging, and appropriately recover the marginal costs of delivering electricity to electric vehicles and electric vehicle charging infrastructure.
- Public Utility Regulatory Policies Act of 1978 amended to add the following: Paragraph 21 of Section 111(d).
- (21) Each state shall consider measures to promote greater electrification of the transportation sector, including the establishment of rates that - (A) promote affordable and equitable electric vehicle charging options for residential, commercial, and public electric vehicle charging infrastructure; (B) improve the customer experience associated with electric vehicle charging, including by reducing charging times for light-, medium-, and heavy-duty vehicles; (C) accelerate third-party investment in electric vehicle charging for light-, medium-, and heavy-duty vehicles; and (D) appropriately recover the marginal costs of delivering electricity to electric vehicles and electric vehicle charging infrastructure.
- Not later than 1 year after the date of enactment of this paragraph, each state regulatory authority (with respect to each electric utility for which the state has ratemaking authority) and each nonregulated utility shall commence consideration under section 111, or set a hearing date for consideration, with respect to the standard established by paragraph (21) of section 111(d).
- Not later than 2 years after the date of enactment of this paragraph, each state regulatory authority (with respect to each electric utility for which the state has ratemaking authority), and each nonregulated electric utility shall complete the consideration and make the determination under section 111 with respect to the standard established by paragraph (21) of section 111(d).
- Requirement does not apply if the state regulatory authority has already implemented the standard.

Subtitle D—Schools and Nonprofits

Sec. 40541 Grants for energy efficiency improvements and renewable energy improvements at public school facilities.

- This section directs the Secretary to award competitive grants to make energy efficiency, renewable energy, and alternative fueled vehicle upgrades and improvements at public schools. This section authorizes \$500 million for the period of FY22-26.

Sec. 50109 Rural and low-income water assistance pilot program.

- This section directs the Administrator of the Environmental Protection Agency to establish, not later than two years after the date of enactment of this Act, a pilot program to address water affordability. The pilot program will award grants to eligible entities to develop and implement programs to assist qualifying households with need in maintaining access to drinking water and wastewater treatment.
- Eligible entities: (A) a municipality, Tribal government, or other entity that - (i) owns or operates a community water system, treatment works, or municipal separate storm sewer system; or (ii) as determined by the Administrator, has taken on an unsustainable level of debt due to customer nonpayment for the services provided by a community water system, treatment works, or municipal separate storm sewer system; and (B) a state exercising primary enforcement responsibility over a rural water service provider under the Safe Drinking Water Act or the Federal Water Pollution Control Act.
- Types of assistance could include direct financial assistance, a lifeline rate, bill discounting, special hardship provisions, a percentage-of-income payment plan, or debt relief for the eligible entity of the community water system owned by the eligible entity for arrears payments if it is determined by the Administrator to be in the interest of public health.
- The section directs the Administrator to award a maximum of 40 grants under the pilot program.

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

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PROCEEDINGS: INTERNAL AFFAIRS

COMMISSIONERS
PARTICIPATING: CHAIRMAN ANDREW GILES FAY
COMMISSIONER ART GRAHAM
COMMISSIONER GARY F. CLARK
COMMISSIONER MIKE LA ROSA
COMMISSIONER GABRIELLA PASSIDOMO

DATE: Thursday, January 20, 2022

TIME: Commenced at 10:45 a.m.
Concluded at 11:12 a.m.

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

REPORTED BY: DANA W. REEVES
Court Reporter and
Notary Public in and for
the State of Florida at Large

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

1 P R O C E E D I N G S

2 CHAIRMAN FAY: All right. Good morning,
3 everyone. This is our internal affairs meeting for
4 January 20th. We will start first with the Public
5 Utility Research Center 2021 annual report. Dr.
6 Ted Kury. Mr. Kury, can you speak up and make sure
7 we've got you?

8 DR. KURY: Yes, I'm here, Chairman. Thank
9 you.

10 CHAIRMAN FAY: Okay. Great. We can hear you
11 perfectly. Go ahead.

12 DR. KURY: Thank you. First, I'd like to
13 extend my -- well, all of us, from all of us here
14 at The Public Utility Research Center, we want to
15 extend our gratitude to the Commission for granting
16 us this time today. As you folks know, most of the
17 work that we do here at PURC is with folks from
18 around the world, but we could not do what we do,
19 which is help people around the world the best we
20 can with their utility issues without the
21 relationships that we have with the Public Service
22 Commission, Office of Public Council, and the
23 Florida utilities. So we really appreciate
24 everyone's support and the dialogue that we
25 continue to enjoy with everyone on some of the

1 issues that we face.

2 You have the report in front of you. I'm
3 certainly not going to go through all of it. But
4 I'll just hit a couple of highlights. So the --
5 kind of the summary of our activity for 2021, as
6 you can see we delivered primarily our courses
7 online. We had six online courses over the last
8 year. We did quite a bit of writing in a variety
9 of outlets, ranging from academic journals to the
10 popular media.

11 And as far as our plans going forward, the
12 biggest thing for us, for the state of Florida, is
13 our upcoming annual conference, and that's going to
14 be on February 23rd and 24th. The theme for the
15 conference is unlocking innovation, keys to getting
16 it right. And the idea behind it is that there are
17 a number of things that the utility industry is
18 facing going forward, changes in technology,
19 changes in policy, new opportunities that we have.
20 And with these opportunities come a number of
21 challenges, you know, things that we have to look
22 out for. So, during the annual conference, we'll
23 be covering a wide variety of topics. We'll be
24 looking at, you know, hydrogen programs and
25 distributed energy and electric vehicles, and, you

1 know, the potential impact on consumers, some of
2 the regulatory challenges with some of these
3 considerations. And so we hope that folks will be
4 able to join us. And we especially want to thank
5 Commissioner La Rosa who will be delivering the
6 keynote that kicks off our second day. The last
7 couple years, the keynote on the second day has
8 been, for me, a highlight of the -- a highlight of
9 the conference. And that is due in large part to
10 the efforts of some of our current Commissioners.
11 So, you know, we want to certainly thank the
12 Commissioners for that support and we really look
13 forward to hearing from Commissioner La Rosa.

14 A big milestone for us this past year was that
15 we went back to doing a live course here in
16 Gainesville. You know, that's typically the, kind
17 of, our -- the keystone of our activity is a course
18 that we deliver here in Gainesville, the regulators
19 from primarily Latin America and the Caribbean,
20 Sub-Saharan Africa, Southeast Asia. And we had --
21 we had 30 folks from 12 different countries here in
22 Gainesville in October. That was a big step for
23 us. And we had been online for far too long. And
24 the fact that we were able to get folks in and
25 facilitate the travel and everything else is a big

1 step, and we'll be continuing that in June with our
2 next delivery. And, you know, we hope to have more
3 of a usual group for us. Thirty folks from 12
4 countries is a bit light. You know, typically
5 we're at 60 to 80 folks from 30 countries, and
6 we're hoping that in June, we'll start ramping back
7 up to what's normal for us.

8 A lot of research over the past year. I just
9 want to highlight in two areas. I'm going to just
10 talk a little bit more about energy, because that's
11 my field, but I'd like to start out in telecom with
12 some stuff that our Director, Mark Jamison, has
13 done: A really interesting study this past year
14 looking at broadband adoption in different areas.
15 The typical idea behind gaps in broadband adoption
16 tend to be that there are either population density
17 issues or issues with income distribution. And
18 what Mark and his group did this past year was kind
19 of challenged some of those assumptions, found that
20 gaps in broadband adoption are a lot more
21 complicated than that. You know, there are plenty
22 of places with lower incomes and low population
23 density where the broadband coverage is just fine.

24 So what Mark and his team did was went a
25 little bit deeper into that and found that there

1 are a number of issues that may be specific to
2 certain areas, and we can't rely on some of those
3 old truisms for addressing some of the gaps in
4 broadband. So, as the state looks at expanding its
5 broadband network into areas that are less served,
6 there are a lot of questions to answer. And so
7 Mark's study helped to drive some of those
8 questions that we can ask.

9 On my front, boy, over the past year most of
10 the time when I get contacted by regulators, other
11 interested stakeholders, the media, most of it
12 revolves around storm preparedness and storm
13 readiness. So, you know, I don't know how many
14 times over the last year I talked with folks in
15 California, Texas, Louisiana, about what Florida
16 does to help prepare for these types of events.
17 And I'll tell you, I think we maybe take for
18 granted a little bit, because this is something
19 we've been actively doing for the last 15 years,
20 you know, in a formal setting. Certainly, we were
21 addressing it beforehand, but really since the
22 Commission put together those series of workshops
23 in 2006, and issued the order that enabled kind of
24 what we think of as our modern framework for storm
25 readiness -- you know, I continue to talk to folks

1 who say, wow, you know, that'd be great if we can
2 do something like this here, but it's just so hard
3 to have these conversations. And I tell them that,
4 well, it's hard to do in Florida, too. But it's
5 important and we make the effort.

6 So, you know, I think here in the state we
7 kind of take all the work that the Commission and
8 the utilities and all the other stakeholders do to
9 make our grid more resilient to storms. But we
10 still -- we're still special in that regard. You
11 know, a lot of folks aspire to do what Florida
12 does, what you guys do, and they can't manage it.

13 So I just -- I don't know if you're aware of
14 the impact that you have on, you know, states and
15 countries, you know, beyond our borders, but you
16 do.

17 The other thing I want to talk a little bit
18 about, and here -- and I don't want to get myself
19 in trouble go a little bit off script, but some of
20 what we've been dealing with is we've been looking
21 at some of the impacts of distributed generation.
22 And something that -- it's not in the annual
23 report, because I don't have a formal working
24 paper, but I just wanted to talk a little bit about
25 some current research that I'm working with.

1 Unregulated solar installations are not a big
2 problem in North America, or in the United States,
3 but they are in the rest of the world. So the
4 Dutch grid operator estimates that 40 percent of
5 the household solar installations are unregistered
6 in the Netherlands. A recent study from South
7 Africa showed that there may be 60 to 70 percent of
8 the residential installations are unregistered in
9 Cape Town, South Africa. In the Philippines, there
10 are estimates that 80 percent of the residential
11 solar installations are -- the utility -- nobody
12 knows about them. The regulator doesn't know, the
13 utilities don't know. And, as you realize, or I
14 hope you appreciate, that poses a threat to folks'
15 safety.

16 And so what I've been working on is most of
17 the detection mechanics for unregistered solar
18 installations involve aerial photographs and then
19 image-processing software, but that's really
20 expensive and the error rate on it is just huge.
21 So what I've been working on is an AI machine
22 learning algorithm that uses commonly available
23 billing data for the utilities to try to detect
24 changes in consumer behavior. And -- now, one of
25 the big obstacles is there's lots of things that

1 change consumer behavior, you know, child moves
2 out, child moves back in, you know, change out of
3 an HVAC system, or, you know, even a pool pump,
4 other appliances. And so right now the obstacle
5 here is training the learning algorithm, the neural
6 net, to assign basically a probability that a
7 change in behavior is -- that observed through the
8 billing data is associated with a solar
9 installation.

10 But the research itself has a lot of promise.
11 And I understand that in North America, you might
12 be saying, well, why are we -- why are we worried
13 about that? It's really not a problem here. And
14 that's true, but as more states transition away
15 from net metering as a compensation mechanism for
16 distributed solar, an unintended consequence of
17 that -- and I am not going to -- I'm not going to
18 step into the whole net metering yes or no, but
19 it's important to note that an unintended
20 consequence of moving away from net metering, as
21 more states do it, is creating an incentive for
22 unregistered solar installations. You know,
23 effectively -- if you have a solar installation and
24 nobody knows about it, you basically get net
25 metering.

1 And so, you know, I don't expect that North
2 America is going to see, you know, Dutch levels, or
3 certainly not Philippine levels of undetected solar
4 installations, but, you know, it's something to be
5 aware of over the next couple of years. And my
6 hope is that this algorithm will be an extremely
7 cost effective way of addressing some of these
8 concerns.

9 So, you know, you see a lot of the papers, the
10 other -- the other initiatives that we've had
11 through the annual report. I'm certainly willing
12 to take questions on anything in there. Some of it
13 I'll be more conversant than others. But I just
14 wanted to say thank you very much for the
15 opportunity. We appreciate everyone's continued
16 support. And that's what we've been up to at The
17 Public Utility Research Center.

18 CHAIRMAN FAY: Great. Thank you, Dr. Kury. I
19 appreciate all the information. I will turn it
20 over to my colleagues to see if they have any
21 questions or discussion at this time.

22 Seeing none, may I have a quick question for
23 you. Has anyone approached you on using that
24 consumer spending algorithm on a spouse? Is that
25 something that's discussed with anybody?

1 (Laughter.)

2 DR. KURY: The question, actually -- the
3 question actually first came up when Mark and I did
4 a course in the Philippines in the Fall of 2019
5 where it's -- it's a huge problem. And so, you
6 know, we've been very fortunate to have the support
7 of the folks at Meralco in, you know, kind of
8 phasing that out. And, certainly, I realize that
9 your question, it actually points to a larger
10 issue, that there are a lot of different ways to
11 use this algorithm. And I certainly understand,
12 you know, folks' concerns, you know, regarding
13 privacy. You know, we actually don't have -- one
14 of the challenges we have is we don't have any kind
15 of personal information set up. We just have, you
16 know, aggregated data. But certainly, I am aware
17 that the research could be misused. And so we're
18 working very hard as we go through to make sure
19 that we're not imposing additional costs on
20 consumers.

21 CHAIRMAN FAY: Great. Thank you. And I will
22 have to say -- and I always joke as a FSU grad or
23 Seminole, that, you know, you're one of the better
24 things at the University of Florida, but we do now
25 have a Gator on the Commission with us, so I'll be

1 mindful of my critiques. But I was very impressed
2 that at a very challenging time, especially with
3 some of the international programs and participants
4 that you have, how active you were able to stay
5 during the pandemic and how busy that your office
6 was. So I appreciate that, appreciate you being
7 here today to present to us and hopefully a
8 continuing relationship with PURC within the
9 Commission and the education that you provide. So
10 thank you again for your time today.

11 DR. KURY: No, thank you. I appreciate that.
12 And my daughter goes to FSU. So certainly I have a
13 great appreciation for the folks at FSU, as well.

14 CHAIRMAN FAY: Great. Thank you. There's a
15 lot of houses divided in this state, no doubt about
16 it. Well, thank you again.

17 With that, I'll move on from Dr. Kury to
18 implementations of Sections 40104 and 40431 of the
19 Infrastructure Investment and Jobs Act. Staff,
20 would you like to present a brief summary?

21 MS. EICHLER: Good morning, Commissioners.
22 The Infrastructure Investment and Jobs Act was
23 passed November 15th, 2021. What you have in front
24 of you today as Attachment A is a summary that
25 staff prepared of key provisions of the Act that

1 could impact Florida utilities. The memo itself
2 addresses in more detail two of those provisions
3 that may require actions specifically by the
4 Commission and staff's recommendation on how the
5 Commission should address those provisions.
6 Amending the Public Utility Regulatory Policies
7 Act, Section 40104, addresses utility demand
8 response, and Section 40431 addresses measures to
9 promote greater electrification of the
10 transportation sector.

11 There is a requirement for the state
12 regulatory authority to begin consideration of the
13 new standards detailed under each section, but
14 there is also a self-executing exemption based upon
15 prior state action. After researching the language
16 carefully within each of the two amendments to
17 PURPA, staff believes no further action is required
18 by the Commission to consider either of the
19 standards. Staff believes the Commission is exempt
20 from consideration of the standards of Section
21 40104, utility demand response, due to its
22 well-established rules and procedures stemming from
23 FICA regarding the approval of demand-response
24 programs and by allowing utilities to annually
25 recover demand-side management program costs

1 through the Energy Conservation Cost Recovery
2 Clause.

3 Similarly, staff believes the Commission is
4 exempt from considering the standards in Section
5 40431, measures to promote greater electrification
6 of the transportation sector, due to its approval
7 of multiple IOU EV charging pilot programs, and,
8 specific EV charging rates and tariffs.

9 Staff also believes its work with DOT, as
10 directed by the legislature to develop the EV
11 infrastructure master plan in 2020 further supports
12 exemption. Staff notes that Section 40431 requires
13 action by the state, not just by the regulatory
14 authority. As such, staff believes the actions
15 taken by the legislature, the Commission and other
16 State agencies show that Florida has given proper
17 consideration for the electrification of the
18 transportation sector. Staff believes Florida has
19 satisfied the requirements of the standards
20 detailed in sections 40104 and 40431. Therefore,
21 the Commission need not initiate any additional
22 proceeding to consider or determine whether it is
23 appropriate to implement the new PURPA standards.
24 Staff seeks Commission guidance on the matter.

25 CHAIRMAN FAY: Great. Thank you. Very good

1 summary.

2 Commissioners, do we have any questions or
3 comments at this time? Commissioner Passidomo. Go
4 ahead.

5 COMMISSIONER PASSIDOMO: So, first off, I just
6 really want to thank staff for your, you know, hard
7 work, expediency on this. I know this bill was,
8 like, over 1000 pages and it was just finalized
9 about, like, nine weeks ago. So you know, Shelby
10 and Ben and Casey's group and Ms. Wise, and GCL
11 seriously, major kudos. It was -- it's quite a
12 monster.

13 I just kind of wanted -- just to kind of
14 follow up the self-executing nature of it. What do
15 we think the time line for that? We just -- kind
16 of wait-and-see approach?

17 CHAIRMAN FAY: You're recognized. Go ahead.

18 MS. TAN: Thank you. In regards to the
19 self-executing, we believe that the time line to
20 actually take any action if we needed to do any
21 consideration of the standards is two years. But
22 if we feel that we are self-certified, there is no
23 time line that is needed.

24 COMMISSIONER PASSIDOMO: Okay. I just have
25 one --

1 CHAIRMAN FAY: Follow up? Go ahead.

2 COMMISSIONER PASSIDOMO: So for -- in regards
3 to maybe, once more information on the bill is
4 available, are we going to maybe have another
5 opportunity at a future IA to discuss other
6 provisions? I know that there's a lot of federal
7 grants and funding that could be available to --
8 you know, that Florida can take advantage of, our
9 utilities can take advantage of, can we plan to
10 discuss that in the future?

11 MS. EICHLER: If that's something that
12 Commission is interested in, we can certainly keep
13 monitoring, and we intend to. We're in contact
14 with NARUC and DOT. Casey has a contact there.
15 And, at this time, it's only been, you know, like
16 you said, about nine weeks, though. There's no
17 announcement of any grants. There's some
18 structuring being discussed, at least on the
19 Federal Register, but, other than that, at this
20 time, there's no announcement of grants available,
21 but certainly we can keep in contact with NARUC and
22 keep monitoring the Federal Register and come back,
23 if that's something that you guys are interested in
24 knowing more about as it progresses.

25 CHAIRMAN FAY: Yeah, I think it's a great

1 idea, Commissioner Passidomo. I mean, this is so
2 fresh, but there's so much we're going to want to
3 know at some point, it makes sense for staff to
4 come back and give us an update. And I don't know
5 if that will require a publication at that time, or
6 just coming back to sort of update us as an agency
7 where we fall into some of the implementation. So
8 I think it's a great idea. Thanks so much.

9 Anybody else? With that, I think that would
10 conclude this report. We will now move on to the
11 legislative update.

12 Real quick, let me check with legal. Do I
13 need to accept that report, Mary Anne? I'm happy
14 to do so.

15 MS. HELTON: I think that would probably be
16 better, because then, in effect, you'll be
17 acknowledging the self-certification or --

18 CHAIRMAN FAY: Sure. I'll see if I can lure
19 someone into moving that into the record. Motion?

20 COMMISSIONER CLARK: Move.

21 CHAIRMAN FAY: Second?

22 COMMISSIONER GRAHAM: Second.

23 CHAIRMAN FAY: All that approve?

24 (Chorus of ayes.)

25 CHAIRMAN FAY: Any nays?

1 (No comments made.)

2 CHAIRMAN FAY: The report is moved into the
3 record. Thank you. Okay. Kaley, you're up.

4 MS. SLATTERY: Good morning. Shifting to
5 state legislation, our legislative team has been
6 busy since session started last week. We have a
7 few bills to update you on today. First, House
8 Bill 789 and Senate Bill 7036 of the Lifeline
9 bills, language was offered by staff. Both bills
10 are seeking to conform Florida state laws to the
11 FCC's Lifeline Modernization Order released in
12 2016. The House Bill passed its final committee
13 this week and is ready for the floor. And the
14 Senate bill actually filed its PCB in its first
15 committee of the regulated industries committee
16 this week. Can you hear me?

17 CHAIRMAN FAY: Yes.

18 MS. SLATTERY: Senate Bill 920, titled
19 Electric Vehicle Transportation Electrification
20 Plan, by Senator Perry, also requires the PSC to
21 adopt the proposed rules for an EV plan that
22 facilitates the deployment of an EV charging
23 infrastructure in a competitively neutral manner.
24 The bill passed its first committee in the Senate
25 this week and the House companion has had no

1 movement yet.

2 And then, finally, House Bill 741 and Senate
3 Bill 1024, formerly known as the net metering bills
4 are actually now titled Renewable Energy
5 Generation. Senate bill passed its first committee
6 last week, and the House bill is still waiting to
7 be heard in its first committee. No budget
8 conversations happening right now. That's just
9 kind of -- its legislation moving, but we will
10 continue to keep your offices updated. And if you
11 have any questions, please reach out to me or
12 Catherine.

13 CHAIRMAN FAY: Great. Thanks for the update.
14 Any questions?

15 With that, we will move on to the General
16 Counsel's report.

17 MR. HETRICK: Good afternoon, Mr. Chairman and
18 Commissioners. Happy New Year. We're often
19 running on a -- at the start of this year in a lot
20 of areas right now, and I've got nothing particular
21 to report. But, Mr. Chairman, you and I can talk
22 about, you know, how you'd like these reports going
23 forward. But we do have quite a few things going,
24 including responding to legislative requests.
25 We've got a couple of appellate decisions and oral

1 argument on the horizon. We've got a couple
2 hearings coming up, and we've got the ever-evolving
3 fall rule materials being developed. So, thank you
4 very much.

5 CHAIRMAN FAY: We saw today how much we love
6 rules. Next, we'll move on to the Executive
7 Director's report.

8 MR. BAEZ: We will speak no more of
9 rulemaking. Not a whole lot to report. I'll just
10 reiterate what Dr. Kury had mentioned about the
11 PURC conference coming up that's scheduled for
12 February 23 and 24. That will be live, and I, too,
13 am looking forward to Commissioner's La Rosa's
14 keynote, and I thank you for your support of PURC.

15 The next IA is scheduled February 22nd. And
16 as far as legislative session, I just wanted to add
17 that we continue to monitor the budget process.
18 That really hasn't begun in earnest. I see some --
19 there's bills that are of interest to the agency,
20 generally, that are moving through the process, but
21 no real work has begun on the -- on the -- no real
22 public works, let's say, has begun on the budget.
23 We'll keep you updated as that moves forward, as
24 well.

25 I would reiterate Kaley's invitation. If

1 there's any specific issues that any of you want to
2 discuss, we'd be happy to set up a meeting and go
3 over whatever questions you may have. So, that
4 concludes my reporting.

5 CHAIRMAN FAY: Thank you for that, Mr. Baez.
6 Any questions for the Director?

7 Seeing none, any other matters?

8 With that, the Internal Affairs meeting is
9 adjourned.

10 (Proceedings concluded.)

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CERTIFICATE OF REPORTER

STATE OF FLORIDA)
COUNTY OF LEON)

I, DANA W. REEVES, Professional 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 3rd day of February, 2022.



DANA W. REEVES
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