## FLORIDA FINANCIAL IMPACT ESTIMATING CONFERENCE

# Right to Competitive Energy Market for Customers of Investor-Owned Utilities; Allowing Energy Choice Serial Number 18-10 March 15, 2019

#### FINANCIAL IMPACT STATEMENT

The final design of the new market system for electricity is unknowable until the Legislature acts. There will be significant costs to state and local governments to transition to a fully operational system. The cost of purchasing electricity by governments may be higher or lower, depending on changes in charges for electricity resulting from the amendment. As currently administered, several government revenues would be reduced, but the legislative response to these effects is unknown.

#### SUMMARY OF INITIATIVE FINANCIAL INFORMATION STATEMENT

The proposed amendment will require transition to a restructured electricity market that profoundly differs from the vertically integrated structure that is in place today. Under the current structure, each investor-owned utility can own and control its own power generation facilities, the transmission and distribution of its electricity, and sales to customers.

The specifics of the restructured system are left to the Legislature to determine after the passage of the amendment. At a minimum, the restructured system will require the design and development of:

- an organized wholesale market or participation in an existing wholesale market;
- requirements for divesting incumbent utility providers of generation assets and the treatment of any stranded assets;
- appropriate regulatory oversight and ownership of transmission and distribution facilities as well as service billing issues;
- the degree of oversight and requirements for retail sales providers;
- an appropriate array of consumer protections; and
- default electric service and back-up generation plans.

Each of these components has multiple sub-issues that also need to be addressed. Because key terms and relationships are undefined by the amendment and in current law—and since the interests of incumbent businesses are at stake—significant litigation and legal expenses are probable, regardless of the final legislative design.

Some parts of the restructured system will result in additional costs that do not exist today and will likely be significant. These include addressing the treatment of stranded assets, transition expenses and the mechanics of divestiture. While most of these costs may ultimately be recovered through additional charges on customer electric bills, some may have to be paid upfront by the State or another entity established for this purpose. More importantly, state and local governments are consumers of electric bills that are higher than they otherwise would be.

The economic theory underlying deregulation is that free market competition either drives down electric prices or staves off increases by providing incentives to keep down costs and pursue operational efficiencies. Academic and case studies of other states where restructuring has occurred are inconclusive with respect to the magnitude of the price change, its timing, and its direction. To the

extent that charges for electricity decrease, state and local governments will experience lower electric bills. The converse is also true.

Compared to the effect on costs, price changes have the opposite budgetary effect from taxes that are based on price. For example, lower prices would lead to decreased Gross Receipts Tax revenue which is bonded for the construction of educational facilities; however, its current collection point (at distribution) will not work under the proposed structure. Legislation will be needed to address the structural changes; however, what the Legislature may do is unknown.

Another impact of the proposal is on local government franchise fees which are in part, based on consideration for the local government's agreement not to provide competing utility services. This part of the fee would be irrelevant under restructuring, and existing collections would be significantly reduced.

#### SUBSTANTIVE ANALYSIS

#### A. Proposed Amendment

## **Ballot Title:**

Right to Competitive Energy Market for Customers of Investor-Owned Utilities; Allowing Energy Choice

## **Ballot Summary:**

Grants customers of investor-owned utilities the right to choose their electricity provider and to generate and sell electricity. Requires the Legislature to adopt laws providing for competitive wholesale and retail markets for electricity generation and supply, and consumer protections, by June 1, 2025, and repeals inconsistent statutes, regulations, and orders. Limits investor-owned utilities to construction, operation, and repair of electrical transmission and distribution systems. Municipal and cooperative utilities may opt into competitive markets.

# Full Text of the Proposed Constitutional Amendment:

ARTICLE AND SECTION BEING CREATED OR AMENDED: Article X, new section

# FULL TEXT OF THE PROPOSED CONSTITUTIONAL AMENDMENT:

(a) POLICY DECLARATION. It is the policy of the State of Florida that its wholesale and retail electricity markets be fully competitive so that electricity customers are afforded meaningful choices among a wide variety of competing electricity providers.

(b) RIGHTS OF ELECTRICITY CUSTOMERS. Effective upon the dates and subject to the conditions and exceptions set forth in subsections (c), (d), and (e), every person or entity that receives electricity service from an investor-owned electric utility (referred to in this section as "electricity customers") has the right to choose their electricity provider, including, but not limited to, selecting from multiple providers in competitive wholesale and retail electricity markets, or by producing electricity themselves or in association with others, and shall not be forced to purchase electricity from one provider. Except as specifically provided for below, nothing in this section shall be construed to limit the right of electricity customers to buy, sell, trade, or dispose of electricity.

(c) IMPLEMENTATION. By June 1, 2023, the Legislature shall adopt complete and comprehensive legislation to implement this section in a manner fully consistent with its broad purposes and stated terms, which shall take effect no later than June 1, 2025, and which shall:

(1) implement language that entitles electricity customers to purchase competitively priced electricity, including but not limited to provisions that are designed to (i) limit the activity of investor-owned electric utilities to the construction, operation, and repair of electrical transmission and distribution systems, (ii) promote competition in the generation and retail sale of electricity through various means, including the limitation of market power, (iii) protect against unwarranted service disconnections, unauthorized changes in electric service, and deceptive or unfair practices, (iv) prohibit any granting of either monopolies or exclusive franchises for the generation and sale of electricity, and (v) establish an independent market monitor to ensure the competitiveness of the wholesale and retail electric markets.

(2) Upon enactment of any law by the Legislature pursuant to this section, all statutes, regulations, or orders which conflict with this section shall be void.

(d) EXCEPTIONS. Nothing in this section shall be construed to affect the existing rights or duties of electric cooperatives, municipally-owned electric utilities, or their customers and owners in any way, except that electric cooperatives and municipally-owned electric utilities may freely participate in the competitive wholesale electricity market and may choose, at their discretion, to participate in the competitive retail electricity market. Nothing in this section shall be construed to invalidate this State's public policies on renewable energy, energy efficiency, and environmental protection, or to limit the Legislature's ability to impose such policies on participants in competitive electricity markets. Nothing in this section shall be construed to limit or expand the existing authority of this State or any of its political subdivisions to levy and collect taxes, assessments, charges, or fees related to electricity service.

(e) EXECUTION. If the Legislature does not adopt complete and comprehensive legislation to implement this section in a manner fully consistent with its broad purposes and stated terms by June 1, 2023, then any Florida citizen shall have standing to seek judicial relief to compel the Legislature to comply with its constitutional duty to enact such legislation under this section.

# B. Effective Date

Article XI, Section 5(e), of the Florida Constitution states that, unless otherwise specified in the constitution or in the proposed amendment, the amendment will become effective on the first Tuesday after the first Monday in January following the election. Assuming the proposed amendment passes in 2020, the effective date will be January 5, 2021.

However, the amendment will not be implemented immediately. The language of the proposed amendment states that "by June 1, 2023, the Legislature shall adopt complete and comprehensive legislation to implement this section in a manner fully consistent with its broad purposes and stated terms, which shall take effect no later than June 1, 2025..." It also states "If the Legislature does not adopt complete and comprehensive legislation to implement this section in a manner fully consistent with its broad purposes and stated terms by June 1, 2023, then any Florida citizen shall have standing to seek judicial relief to compel the Legislature to comply with its constitutional duty to enact such legislation under this section."

### C. Substantive Effect of Proposed Amendment

### Input Received from Proponents and Opponents

The Conference sought input from those groups who were on record as supporting or opposing the petition initiative. The sponsor, Citizens for Energy Choices, had representatives present at the Conference. Approximately, 14 representatives of the opponents also spoke at the workshops held by the FIEC. All of the written comments, presentations, and supporting materials can be found at: <a href="http://edr.state.fl.us/Content/constitutional-amendments/2020Ballot/EnergyChoiceAdditionalInformation.cfm">http://edr.state.fl.us/Content/constitutional-amendments/2020Ballot/EnergyChoiceAdditionalInformation.cfm</a>.

In addition, the Florida Public Service Commission (PSC), Florida Department of Revenue, Florida Department of Management Services, Florida League of Cities, and Florida Association of Counties provided information at the Conference's request. Further, the Conference reviewed research, both governmental and academic articles, regarding the implementation of electricity deregulation in other states, primarily focusing on Texas, as both the wholesale and retail markets were deregulated in that state. This information can also be found at the above link.

## D. Background

The structure of Florida's electricity industry, current state oversight, and definitions are described below. As the third largest state in the nation, Florida has significant generation activity. According to the U.S. Energy Information Administration, "Florida was second only to Texas in 2017 in net electricity generation, and it is typically third in the nation in electricity consumption, behind Texas and California."<sup>1</sup>

#### Public Service Commission (PSC)

The Florida Public Service Commission (PSC) is an arm of the legislative branch of government. It is responsible for regulating the electric, natural gas, water and wastewater, and telecommunications industries in the state. The PSC consists of five commissioners who are appointed by the Governor to four-year terms.<sup>2</sup>

The PSC has regulatory authority over each public utility. "Public utility" is defined to mean every person or legal entity supplying electricity to or for the public within this state, but expressly excludes a rural electric cooperative and a municipality or any agency thereof.<sup>3</sup> "Electric utility" is defined as "any municipal electric utility, investor-owned electric utility, or rural electric cooperative which owns, maintains, or operates an electric generation, transmission, or distribution system within the state."<sup>4</sup> The term "investor-owned utility" is not defined, although it is widely used within the industry.

The PSC oversees and regulates investor-owned electric companies' rates and charges, meter and billing accuracy, electric lines up to the meter, reliability of the electric service, new construction safety code compliance for transmission and distribution, territorial agreements and disputes, and determination of needed additional power plants and transmission lines. The public goal of this regulatory oversight is to ensure that generation, transmission and distribution facilities are planned and constructed efficiently to provide adequate, reliable and reasonably-priced electric services to customers as a substitute for market competition.

<sup>&</sup>lt;sup>1</sup> U.S. Energy Information Administration, Florida State Energy Profile, <u>https://www.eia.gov/state/print.php?sid=FL</u>

<sup>&</sup>lt;sup>2</sup> Chapter 350, Florida Statutes.

<sup>&</sup>lt;sup>3</sup> Section 366.02(1), F.S.

<sup>&</sup>lt;sup>4</sup> Section 366.02(2), F.S.

The PSC does not regulate rates or adequacy of services provided by municipally-owned and rural cooperative electric utilities, except for safety oversight; electrical wiring inside the customer's building; taxes on the electric bill; physical placement of transmission and distribution lines; damage claims; right of way; and physical placement or relocation of utility poles.<sup>5</sup>

## Electric Utilities

Pursuant to Chapter 366, F.S., the PSC has regulatory authority, in varying degrees, over 5 investorowned electric companies, 35 municipally owned electric utilities, and 18 rural electric cooperatives.<sup>6</sup> According to the PSC's October 2018 publication entitled "Statistics of the Florida Electric Utility Industry," for each year between 2008 and 2017 investor-owned utilities averaged 78.8 percent of the total statewide gigawatt-hours while the municipal, rural electric cooperative, and federally-owned utilities averaged 21.2 percent.<sup>7</sup>

## Municipal Electric Utilities

There are 35 generating and non-generating municipal electric utilities in Florida.<sup>8</sup> According to the Florida Municipal Electric Association, municipal utilities collectively serve 14 percent of Florida's customers.<sup>9</sup>

## Rural Electric Cooperatives

Rural electric cooperatives were created as the result of the Rural Electrification Act of 1936. At the time, electric utilities did not provide service in large portions of Florida since the cost of providing such service in the non-urban areas was prohibitive. The cooperatives were formed to make electricity available in rural areas. Today these electric cooperatives are still not-for-profit electric utilities that are owned by the members they serve and provide at-cost electric service to their members. Each cooperative is governed by a board of cooperative members that is elected by the membership. Florida has 16 distribution cooperatives and 2 generation and transmission cooperatives that serve 10 percent of the state's population.<sup>10</sup>

#### Investor-Owned Electric Utilities

Currently, five investor-owned utilities (Florida Power & Light Company, Duke Energy Florida, Tampa Electric Company, Gulf Power Company, and Florida Public Utilities Corporation) operate in Florida.<sup>11</sup> The PSC has regulatory authority over all aspects of operations, including rates, reliability and safety.

Today, investor-owned utilities (IOUs) are vertically integrated, owning generation, transmission, and distribution assets. They also sell the electricity to end-use customers. The IOUs are subject to regulation and rate-setting by the Florida Public Service Commission (PSC).

<sup>&</sup>lt;sup>5</sup> Florida Public Service Commission, "When to Call the Florida Public Service Commission" available at <u>http://www.psc.state.fl.us/Files/PDF/Publications/Consumer/Brochure/When to Call the PSC.pdf</u>

<sup>&</sup>lt;sup>6</sup> Florida Public Service Commission, "Facts & Figures of the Florida Utility Industry" May 2018 available at <a href="http://www.psc.state.fl.us/Files/PDF/Publications/Reports/General/Factsandfigures/May%202018.pdf">http://www.psc.state.fl.us/Files/PDF/Publications/Reports/General/Factsandfigures/May%202018.pdf</a>, p.1.

<sup>&</sup>lt;sup>7</sup> Florida Public Service Commission, "Statistics of the Florida Electric Utility Industry" October 2018 available at <u>http://www.floridapsc.com/Files/PDF/Publications/Reports/Electricgas/Statistics/2017.pdf</u>, Table 6, p.17.

<sup>&</sup>lt;sup>8</sup> Florida Public Service Commission, "Facts & Figures of the Florida Utility Industry" May 2018 available at <u>http://www.psc.state.fl.us/Files/PDF/Publications/Reports/General/Factsandfigures/May%202018.pdf</u>, p.11.

<sup>&</sup>lt;sup>9</sup> Florida Municipal Electric Association, available at <u>https://www.publicpower.com/</u>

<sup>&</sup>lt;sup>10</sup> Florida Electric Cooperatives Association, "About Us" webpage, available at <u>http://www.feca.com/about.html</u>

<sup>&</sup>lt;sup>11</sup> Florida Public Service Commission, "Facts & Figures of the Florida Utility Industry" May 2018 available at <u>http://www.psc.state.fl.us/Files/PDF/Publications/Reports/General/Factsandfigures/May%202018.pdf</u>, p.10.

### Comparison to Texas

Parties on behalf of the sponsor of the proposed amendment testified that the state should look to Texas as a model for implementing the utility structure. The structural changes that occurred in Texas were the result of legislative action, rather than a constitutional amendment. They had the express purpose of ensuring that "power generation and the provision of retail electric service were subject to the normal forces of competition and customer choice."<sup>12</sup> According to a report from the Texas Coalition for Affordable Power, the Texas statute requires that the operations of each monopoly provider be split into the three segments identified below: <sup>13</sup>

- A power generating company owns and operates the electric power plants and sells its electricity into the deregulated wholesale power market.
- A regulated transmission and distribution company owns and operates the wires to transport power from the plant to all customers within a certain geographical area.
- A deregulated retail electric provider purchases wholesale power from power-generating companies and re-sells the electricity to customers. A retail provider is responsible for most of the interaction with the customer, including billing the customer for transmission and distribution services and for the electricity purchases; however, a retail provider may not own generation.

In Florida, the proposed amendment requires the establishment of a competitive wholesale market. There are two basic models for establishing a separate wholesale market for the generation of electricity. According to the 2018 report by the Nevada Governor's Committee on Energy Choice: "Each state that has deregulated has either established its own organized wholesale market or joined an existing one. These markets are managed by operators known technically as Independent Service Operators (ISOs) or Regional Transmission Organizations (RTOs) which are set up independently of the market participants to ensure the daily functioning, reliability and planning aspects of market operations."<sup>14</sup>

Texas has an independent system operator that operates exclusively within the state. The Electric Reliability Council of Texas (ERCOT), is a 501(c)(4) nonprofit corporation that is "governed by a board of directors and is subject to oversight by the Public Utility Commission of Texas and the Texas Legislature."<sup>15</sup> According to ERCOT, it has the following four primary areas of responsibility: <sup>16</sup>

- System reliability planning and operations
- Wholesale market settlement for electricity production and delivery
- Retail switching process for customer choice
- Open access to transmission

A separate Public Utility Commission continues to exist in Texas. Its primary function is to regulate transmission and distribution services in Texas; however, the Commission also "engages regularly with

<sup>13</sup> Ibid.

<sup>&</sup>lt;sup>12</sup> Deregulated Electricity in Texas, A Market Annual 2018 Edition, Appendix A: Senate Bill 7 – Key Components, P93.

<sup>&</sup>lt;sup>14</sup> Nevada: The Governor's Committee on Energy Choice, Report of Findings and Recommendations to the Governor, July 1, 2018.

<sup>&</sup>lt;sup>15</sup> ERCOT, Inc., Quick Facts, February 2019.

<sup>&</sup>lt;sup>16</sup> Ibid.

ERCOT to oversee market developments and ensure system supply, reliability, security, improved price formation and market outcomes."<sup>17</sup>

In addition to an independent system operator, Texas also has a separate, statutorily-required, independent market monitor (IMM) for the wholesale market. The role of the independent market monitor is "to detect and prevent market manipulation strategies, as well as to identify potential design improvements for the ERCOT wholesale electric market."<sup>18</sup>

#### Competitive Wholesale Market

Generation is the process of producing electricity from coal, nuclear, natural gas, solar, geothermal, wind, or other sources of energy. The wholesale market encompasses this generation activity.

According to Nevada's Governor's Committee on Energy Choice, regulatory authority over electric service is "divided between the federal government and the states, with the federal government responsible for regulating the interstate transmission of electricity and the wholesale purchase and delivery of electricity."<sup>19</sup> Currently, Florida's energy market is largely characterized by "sale at retail" of electricity to the end consumer, be it residential, commercial, or industrial. "Sale at retail" is defined as sales by IOUs of the power they generate themselves directly to the end consumer, using the IOUs' own transmission systems. The Federal Energy Regulatory Commission (FERC) does not have jurisdiction over these sales; they are left to the state public utility commission to regulate. When the sale of electricity is unbundled, e.g., there is a "sale for resale," the transaction comes under FERC jurisdiction. The enactment of competitive wholesale and retail markets as envisioned by the proposed constitutional amendment will cause unbundling of the electricity market in Florida.

FERC regulates rates and services associated with electric wholesale power sales, principally under Parts II and III of the Federal Power Act of 1992. FERC has exclusive jurisdiction over the "transmission of electric energy in interstate commerce," and over the "sale of electric energy at wholesale in interstate commerce," and over the "sale of electric energy", as per FPA 201(b) (16 USC 824(b)). Specifically, FERC's jurisdiction covers: <sup>20</sup>

- Transmission of electric energy in interstate commerce by public utilities, i.e., the rates, terms & conditions of interstate electric transmission by public utilities –FPA 201, 205, 206 (16 USC 824, 824d, 824e). The "traveling electrons," which cross state lines and "commingled electrons," which join the stream of commerce practically make every sale for resale transaction, even within a single state, an interstate transaction.
  - That sellers and buyers may be located within a single state, and that there may be lines between them located within that same state, does not divest FERC of jurisdiction given the interconnected nature of the electric grid: "interstate commerce" has been interpreted to give FERC jurisdiction when the transmission system "is interconnected and capable of transmitting [electric] energy across the State boundary, even though the contracting parties and the electrical pathway between them are within one State," i.e., if the transaction is made over the "interconnected interstate transmission grid."

<sup>&</sup>lt;sup>17</sup> Scope of Competition in Electric Markets in Texas, Report to the 86<sup>th</sup> Legislature, Public Utility Commission of Texas, January 2019, Page 5.

<sup>&</sup>lt;sup>18</sup> Ibid.

<sup>19</sup> Ibid.

<sup>&</sup>lt;sup>20</sup> Federal Energy Regulatory Commission, An Overview of the Federal Energy Regulatory Commission and Federal Regulation of Public Utilities, <u>https://www.ferc.gov/about/ferc-does/ferc101.pdf</u>, accessed 2/26/2019.

- Sales of electric energy at wholesale in interstate commerce by public utilities, i.e., the rates, terms & conditions of wholesale electric sales by public utilities as per FPA 201, 205, 206 (16 USC 824, 824d, 824e). This includes a sale to "any person ... for resale."
- In addition to its market oversight functions, FERC is charged with ensuring the reliability of the electric system.

FERC has an annual appropriation from Congress but it collects funds equal to that appropriation through filing fees assessed to the filing entity and annual charges assessed generally to the regulated industries.<sup>21</sup> These fees are already paid by the Florida utilities, and they will not represent a new cost of being under FERC jurisdiction, but they may be marginally higher as the number of transactions subject to the federal fees is expected to increase significantly.<sup>22</sup>

Conceptually, there are two models to operate competitive wholesale markets in compliance with FERC's rules.<sup>23</sup>

- The first model establishes cost-based rates in lieu of market-based rates. FERC reviews each power generator's rates to ensure these rates are market-based. FERC grants approval for individual rates, while allowing for reasonable profit. In this case, each market participant will have to manage its contracts, purchases and sales and manage and arrange electricity commitment and dispatch. Similarly, each transmission owner or operator will have to manage its transmission grid on its own. In this situation, it is not clear what entity will balance the statewide market. The electricity market must be in balance (supply equals demand) continuously as electricity is generally produced at the moment of consumption.
- The second model ensures competition by allowing for market-based rates to be determined through the operation of wholesale markets. This is practically accomplished by joining or creating a Regional Transmission Organization (RTO) or an Independent System Operator (ISO). The existence of an RTO or an ISO would likely satisfy FERC's rules for sufficient wholesale competition in market rates. Ultimately, the RTO or ISO would need to go through a formal approval process by FERC. The RTO or ISO is an independent entity that balances the market, facilitates all market transactions, and handles the dispatch. According to FERC, the greatest benefits of participating in an RTO are realized when there are multiple members and states. The existence of an RTO, especially where multiple states from varied geographic and climatic regions and resources are pooled, enables members to fully leverage the generating resources of the entire network and thus minimize the need to invest in new generating resources at the state level to meet peak load and reliability needs.

Even though both models are possible in theory and would likely satisfy FERC's requirements for a competitive market, all states (and the District of Columbia) with a restructured wholesale market currently operate via the second model. This is mainly due to the more efficient operating model that an RTO or ISO represents in terms of market-clearing, balancing, and transaction costs. All US states with deregulated wholesale markets belong to an RTO, except California, New York, and Texas, which have their own ISOs<sup>24</sup>. There are four RTOs in the US: the Midcontinent ISO (MISO), the New England

<sup>&</sup>lt;sup>21</sup> Federal Energy Regulatory Commission, An Overview of the Federal Energy Regulatory Commission and Federal Regulation of Public Utilities, <u>https://www.ferc.gov/about/ferc-does/ferc101.pdf</u>, accessed 2/26/2019.

<sup>&</sup>lt;sup>22</sup> GRIDFlorida report, ICF Consulting, GridFlorida Companies' Motion to Withdraw Compliance Filing and Petition and Close Docket, Florida Public Service Commission Docket No. 020233-E1, January 27, 2006, <u>http://www.floridapsc.com/library/filings/2006/00837-2006/00837-2006.pdf</u>, accessed on 3/7/2019.

<sup>&</sup>lt;sup>23</sup> E-mail correspondence from FERC dated 2/19/2019 and a phone call dated 2/25/2019.

<sup>&</sup>lt;sup>24</sup> States themselves are not members of an RTO, the market participants (transmission owner, generation owner, other supplier, electric distributor, or end-use customer) are members of the RTO.

ISO (ISO-NE), PJM, and the Southwest Power Pool (SPP). There are three ISOs: California, New York, and Texas.

GRIDFlorida, the RTO formed by Florida Power & Light, Progress Energy Florida, and Tampa Electric Company in 2002, conducted a cost and benefit analysis of deregulating the wholesale market in peninsular<sup>25</sup> Florida.<sup>26</sup> GRIDFlorida analyzed two models of restructuring Florida's wholesale market and estimated costs and benefits in year 2004 Net Present Value Dollars over a period of 13 years.

- The first model is a Day-1 market. GRIDFlorida estimated that the quantitative startup and operating costs of a "greenfield" Day-1 RTO with wholly new physical facilities, systems, and personnel was \$775 million, while the quantitative benefits were estimated at \$71 million over this period.
- The second model creates a Delayed Day-2 RTO with a single statewide transmission tariff, so it fully integrates the entire peninsular Florida wholesale market. This model was estimated to cost \$1.25 billion and bring benefits of \$0.97 billion over a period of 13 years.

If the Legislature chooses to set up an ISO after passage of the proposed constitutional amendment, there are two options that are mentioned the most often:<sup>27</sup>

- Option 1: Set up a stand-alone ISO to run the Florida market as a greenfield operation.
  - All costs will be proportioned to and recovered from members over time over multiple years. The startup cost would likely be in the range of \$185<sup>28</sup> to \$250<sup>29</sup> million and the operating cost would be approximately \$100 million to \$150 million per year<sup>30</sup>. This translates to an RTO rate of approximately \$0.60/MWH charged on sales through the RTO.
  - The startup costs are accumulated from members. The operation commences and the systems are built once the necessary funds are accumulated.
  - The implementation time, including FERC and stakeholder approvals will be extensive.
- Option 2: Join an RTO but be structured as a stand-alone entity due to the technical limitations of the transmission interconnection between Florida and existing RTOs. This option may reduce the startup costs by sharing infrastructure and systems and using the RTO's existing tariffs; however, this will depend on the options that are selected (local Florida operations center or operations out of the RTO's centers, etc.).
  - The startup cost could be in the range of \$150 million but it depends on the setup selected, such as borrowing the RTO's existing tariff or creating a tariff unique to Florida, using the RTO's existing systems or purchasing a new system, setting up physical facilities in or outside Florida, hiring personnel in or outside of Florida, etc. The operating cost would not be different from Option 1. This translates to an RTO rate somewhere in the range of \$0.60/MWH. It is possible the accumulation of startup costs could be avoided at the front-end. In this case, the startup costs, along with the operating costs, would be included in the RTO rate recovered from members.

<sup>&</sup>lt;sup>25</sup> Peninsular Florida is the area covered by the Florida Reliability Coordinating Council.

<sup>&</sup>lt;sup>26</sup> ICF Consulting report, commissioned y GRIDFlorida, GridFlorida Companies' Motion to Withdraw Compliance Filing and Petition and Close Docket, Florida Public Service Commission Docket No. 020233-E1, January 27, 2006, <u>http://www.floridapsc.com/library/filings/2006/00837-2006/00837-2006.pdf</u>, accessed on 3/7/2019.

<sup>&</sup>lt;sup>27</sup> Phone conversations with FERC dated 2/25/2019, MISO dated 3/6/2019, and PJM dated 3/8/2019.

<sup>&</sup>lt;sup>28</sup> PJM constructed a second control center for redundancy purposes for \$185 million.

<sup>&</sup>lt;sup>29</sup> Estimated by MISO, phone conversation dated 3/6/2019.

<sup>&</sup>lt;sup>30</sup> Estimated by MISO and PJM, phone conversations dated 3/6/2019 and 3/8/2019.

According to FERC, Florida will realize larger benefits and incur lower costs from joining with another RTO, even if it is run as a stand-alone RTO, rather than setting up its own ISO. The benefits stem mainly from the extent to which Florida uses already developed systems, infrastructure, and tariffs. Most likely, Florida will not be able to immediately take advantage of the generation resources in the rest of the RTO, and therefore will not easily achieve geographic diversity of load and access to additional generation capacity through this approach. Because of this, the creation of a Florida RTO under this model would not realize benefits as large as those currently realized by members of other RTOs. More than likely, Florida's geography and limited physical transmission interconnection with the rest of the US grid would prevent it from fully integrating into a larger RTO.

The ongoing operating cost of running a control center does not vary much by the size of its electricity market. All of the startup and operating costs are borne by the end consumer through a rate charge. In this case, the magnitude of the rate charge depends on the size of the electricity market. For example, Florida's market is much smaller than PJM or MISO, so Florida ratepayers might pay operating costs for an RTO in the range of \$0.60/MWH as the state is similar in market size to the SPP RTO. MISO's current operating cost charge is \$0.40/MWH,<sup>31</sup> while PJM's is 0.34/MWH.

According to FERC and two RTOs, the greatest benefits to Florida consumers of restructuring electricity markets will be realized if Florida is fully interconnected with a large RTO, so electricity can be shared across the entire RTO region. However, Florida currently has no physical transmission interconnection with any existing RTO and has limited existing interconnection to the grid outside of Florida. Building a transmission interconnection to link to existing RTOs or to increase the transmission capacity in and out of the state represents a major capital investment. The incentives and market signals to build such infrastructure may be even more unclear in a restructured market.

#### Transmission and Distribution Systems

Transmission and distribution refer to two different aspects of transporting electricity to customers. The transmission system provides high-voltage transportation of electricity to load centers. The distribution system provides lower-voltage transportation to end-use customers.

The amendment does not require that the transmission and distribution systems be regulated or combined into one system with both components controlled by owner-operators. Further, there was no consensus among the presenters as to whether the IOUs could continue to own these systems. The proposed amendment requires that investor-owned electric utilities be limited to the construction, operation, and repair of the electrical transmission and distribution systems. If they can no longer own these systems, it would result in additional stranded costs (discussed later). Presumably, these are decisions left to the Legislature.

# Retail Market

Finally, the proposed amendment requires a competitive retail electricity market with multiple providers, but provides no details about how this would look. It does, however, allow electricity customers to produce electricity themselves or in association with others without going through a

<sup>&</sup>lt;sup>31</sup> MISO Annual Revenue Requirement 2019-2023 Budget, <u>https://cdn.misoenergy.org/2019-2023%20Rate%20Table314716.pdf</u>, accessed on 3/6/2019 and phone conversation with PJM dated 3/8/2019.

provider. In Texas, the retail providers interface with the customer, develop the service package and provide final billing.

### Envisioned Structure

The chart below details the structure that the Conference used to envision the system that may result from the proposed amendment. The Conference recognized that there are many decision points for the Legislature to address, but used this general form as a guide for discussion. The dotted lines indicate a few of the unknown processes and linkages that may result from legislative implementation of the proposed amendment.



#### E. Fiscal Analysis of Proposed Amendment

Section 100.371(5)(a), F.S., requires that the Financial Impact Estimating Conference "...complete an analysis and financial impact statement to be placed on the ballot of the estimated increase or decrease in any revenues or costs to state or local governments resulting from the proposed amendment."

As part of determining the fiscal impact of this proposed amendment, the Conference held five public meetings:

- Public Workshop on February 11, 2019
- Principals' Workshop February 21, 2019
- Principals' Workshop March 4, 2019

- Formal Conference on March 11, 2019
- Continuation of Formal Conference on March 15, 2019

## **Electricity Prices**

Price changes are an important element in determining the fiscal effect of the proposed amendment. The literature on the effect of restructuring on electricity prices is inconclusive. Borenstein and Bushnell (2015) find no statistically significant effect of restructuring on average retail rates over 1997-2012 but rather that restructuring causes the average retail rate to be more sensitive to changes in the price of natural gas.<sup>32</sup> Other papers, referenced below, estimate separately the effect on electricity prices for residential, commercial, and/or industrial customers.

Joskow (2006) and Ros (2017) find that restructuring causes a price decrease for residential customers of 5-10% and 4.3% (over 1998-2009) respectively.<sup>33,34</sup> However, Swadley and Yucel (2011) do a state-by-state analysis and find that, for most states, the effect of restructuring on residential rates was to increase prices over time. Their evidence "suggests that higher rates of participation in the retail market are necessary to successfully lower residential electric rates."<sup>35</sup> Su (2014) finds a short-term residential price decrease, due to government imposed price controls, but no statistically significant long-term effect.<sup>36</sup>

Ros (2017) finds an 8.2% price decrease for commercial customers due to restructuring whereas Su (2014) finds, in general, no statistically significant effect.

For industrial customers, Joskow (2006) and Ros (2017) find that restructuring causes a price decrease of 5-10% and 11.1%, respectively. However, Apt (2005), Fagan (2006), and Su (2014) find no statistically significant effect.<sup>37,38</sup>

In summation, the academic literature does not consistently find either a statistically significant price decrease or a statistically significant price increase as a result of restructuring.

#### State and Local Revenues

The proposed constitutional amendment provides that "Nothing...shall be construed to limit or expand" state and local governments' existing authority "to levy and collect taxes, assessments, charges or fees related to electricity service." This language does not mean that state and local governments will collect the same level of revenues as they would have under current law. With this in mind, the Conference reviewed the following state tax and fee sources to determine if they could be affected by the proposed amendment:

- Gross Receipts Tax
  - Pursuant to ch. 203, F.S., the Gross Receipts Tax is price sensitive. It is levied against the total amount of gross receipts received by a distribution company for its sale of utility

<sup>&</sup>lt;sup>32</sup> Borenstein and Bushnell (2015). The U.S. Electricity Industry After 20 Years of Restructuring. Annual Review of Economics. 7: 437-463.

<sup>&</sup>lt;sup>33</sup> Joskow (2006). Markets for Power in the United States: An Interim Assessment. The Energy Journal. 27: 1-36.

<sup>&</sup>lt;sup>34</sup> Ros (2017). An Econometric Assessment of Electricity Demand in the United States Using Utility-specific Panel Data and the Impact of Retail Competition on Prices. Energy Journal. 38: 73-99.

<sup>&</sup>lt;sup>35</sup> Swadley and Yucel (2011). Did Residential Electricity Rates Fall After Retail Competition? A Dynamic Panel Analysis: Energy Policy. 39: 7702-77011.

<sup>&</sup>lt;sup>36</sup> Su (2015). Have Customers Benefited from Electricity Retail Competition? Journal of Regulatory Economics. 47: 146-182.

<sup>&</sup>lt;sup>37</sup> Apt (2005). Competition Has Not Lowered U.S. Industrial Electricity Prices. The Electricity Journal. 18(2): 52-61.

<sup>&</sup>lt;sup>38</sup> Fagan (2006) Measuring and Explaining Electricity Price Changes in Restructured States. The Electricity journal. 19(5): 35-42.

services at a rate of 2.5 percent. In addition, a rate of 2.6 percent is levied on sales of electricity to non-residential customers not otherwise exempt.

- The gross receipts "use tax" in ss. 203.01(1)(h)&(i), F.S., applies to electricity produced and used by a person, cogenerator, or small power producer.
- All Gross Receipts Tax revenues are deposited in the Public Education Capital Outlay (PECO) Trust Fund, which is administered by the Department of Education (DOE). These revenues are first used to pay debt service on outstanding PECO bonds, but may be used for additional education-related purposes if any revenues are available after debt service is paid.
- The current statute needs to be revised to reflect the reorganized structure. Collections are ultimately related to price. Studies are inconclusive regarding whether prices will fall, increase or stay approximately the same, and how those effects differ over time and between types of customers. Consequently, the net impact on revenue collections is unknown.
- Sales Tax on Electricity
  - Pursuant to s. 212.05, F.S., Sales Tax on Electricity is price sensitive. It is levied at a 4.35 percent tax rate on the sale of electricity to nonresidential consumers.
  - It is unclear whether sales tax will apply to the unbundled sale of electricity.
     Consequently, whether charges for the transmission and distribution of electricity will be subject to sales tax is unclear.
  - The current statute needs to be revised to reflect the reorganized structure. Collections are ultimately related to price. Studies are inconclusive regarding whether prices will fall, increase or stay approximately the same, and how those effects differ over time and between types of customers. Consequently, the net impact on revenue collections is unknown.
- Regulatory Assessment Fee
  - Section 366.14, F.S., provides that each regulated company under the jurisdiction of the PSC must pay a fee based on its gross operating revenues derived from intrastate business, excluding sales for resale between public utilities, municipal electric utilities, and rural electric cooperatives, or any combination. Statutorily, the rate for investorowned utilities that supply electricity can be no greater than 0.125 percent, and the rate for municipal electric utilities and rural electric cooperatives can be no greater than 0.015625 percent. PSC Rule 25-6.0131, F.A.C., establishes the fee on investor-owned electric utilities at 0.072 percent and municipal and rural electric cooperative utilities at the statutory maximum 0.015625 percent.
  - The current statute needs to be revised to reflect the reorganized structure; however, the applicable functions the PSC will provide under the restructured system and their costs are currently unknown, making the net impact on collections unknown.
- Corporate Income Tax
  - The Corporate Income Tax is 5.5 percent of net income minus a \$50,000 exemption. Section 220.15, F.S., defines net income as the share of adjusted federal income which is apportioned to this state for any given year. Apportionment is weighted by factors of sales (50 percent), property (25 percent) and payroll (25 percent). All business income is apportioned. Nonbusiness income is allocated to a single jurisdiction, generally the state of commercial domicile.
  - There may be a reduction in the amount of corporate income tax paid by investorowned utilities collectively; however, other corporations may come into existence that

provide an offset to the impact on corporate income tax collections. The net impact on collections is unknown.

In addition, the Conference reviewed the following local government revenue sources to determine if they are affected by the proposed amendment:

- Ad Valorem Tax
  - The Ad Valorem Tax is an annual tax levied by local governments based on the value of real and tangible personal property as of January 1 of each year. Florida's constitution prohibits the state government from levying an ad valorem tax except on intangible personal property. The taxable value of real and tangible personal property is the just value (i.e., the fair market value) of the property adjusted for any exclusion, differential, or exemption allowed by the Florida Constitution or the statutes. The Florida Constitution strictly limits the Legislature's authority to provide exemptions or adjustments to fair market value. Also, with certain exceptions for millage levies approved by the voters, the Florida Constitution limits county, municipal and school district levies to ten mills each.
  - On the 2018 tax roll, the five investor-owned electric utilities (Duke Energy, Florida Power and Light, Florida Public Utilities, Gulf Power, and Tampa Electric) showed nearly \$2.2 billion in real property just value and nearly \$42.8 billion in tangible personal property just value across the state.<sup>39</sup>
  - It is possible that there will be a reduction in the value of divested assets and a potential loss of some generation facilities such as nuclear power plants; however, the extent to which this will occur (for assets related to generation only or all assets related to generation, transmission and distribution) is unknown. Further, there may be new assets prompted by the amendment that would provide an offset. In the end, each individual property appraiser will have some discretion on how to set the just values, and most local governments may have the ability to adjust their tax rates to varying degrees.
- Franchise Fees on Electric Utilities<sup>40</sup>
  - Local governments may exercise their home rule authority to impose a franchise fee upon a utility for the grant of a franchise and the privilege of using a local government's rights-of-way to conduct the utility business. A franchise fee is fair rent for the use of such rights-of-way and consideration for the local government's agreement not to provide competing utility services during the term of the franchise agreement. The fee's imposition requires the adoption of a franchise agreement, which grants a special privilege that is not available to the general public. Typically, the franchise fee is calculated as a percentage of the utility's gross revenues within a defined geographic area. A fee imposed by a municipality is based upon the gross revenues received from the incorporated area while a fee imposed by a county is generally based upon the gross revenues received from the unincorporated area.
  - In local fiscal year 2016-17, 334 municipal governments reported \$733.5 million in franchise fee revenues, of which \$570.3 million, or 77.7 percent, was electric utility service-related. Electricity franchise fee revenues accounted for 1.5 percent of total municipal government revenues. That same year, 15 county governments reported

<sup>&</sup>lt;sup>39</sup> Document provided by the Florida Department of Revenue.

<sup>&</sup>lt;sup>40</sup> The discussion of franchise fees is based, in part, on materials contained in Nabors, Giblin & Nickerson, P.A., *Primer on Home Rule & Local Government Revenue Sources* (June 2014).

\$173.9 million in franchise fee revenues, of which \$151.1 million, or 86.9 percent, was electric utility service-related. Electric franchise fee revenues accounted for 0.4 percent of total county government revenues. Summaries of prior years' franchise fee revenues reported by county and municipal governments are available on the Office of Economic and Demographic Research's (EDR) website.<sup>41</sup>

- In part, franchise fees provide consideration for the local government's agreement not to allow competing utility services. Since this portion of the fee would no longer be applicable, franchise fee revenues are expected to be reduced by an unknown amount.
- Public Service Tax on Electric Utility Service
  - Municipalities and charter counties may levy a public service tax on the purchase of electricity, metered natural gas, liquefied petroleum gas either metered or bottled, manufactured gas either metered or bottled, and water service.<sup>42</sup> The tax is levied only upon purchases within the municipality or within the charter county's unincorporated area and cannot exceed 10 percent of the payments received by the seller of the taxable item. Services competitive with those listed above, as defined by ordinance, can be taxed on a comparable base at the same rates; however, the tax rate on fuel oil cannot exceed 4 cents per gallon.<sup>43</sup> The tax proceeds are considered general revenue for the municipality or charter county.
  - In local fiscal year 2016-17, 329 municipal governments reported \$967.9 million in public service tax revenues, of which \$780.4 million, or 80.6 percent, was electric utility service-related. Electricity public service tax revenues accounted for 2.1 percent of total municipal revenues. That same year, 14 county governments reported \$298.8 million in public service tax revenues, of which \$259.3 million, or 86.8 percent, was electric utility service-related. Electricity public service taxes accounted for 0.6 percent of the total county government revenues. Summaries of prior years' public service tax revenues reported by county and municipal governments are available on EDR's website.<sup>44</sup> Additionally, the Florida Department of Revenue gathers public service tax data from local governments imposing the tax.<sup>45</sup>
  - The current statute needs to be revised to reflect the reorganized structure. Collections are ultimately related to price. Studies are inconclusive regarding whether prices will fall, increase or stay approximately the same, and how those effects differ over time and between types of customers. Consequently, the net impact on revenue collections is unknown.
  - The reorganized structure is likely to significantly increase overall local government administration and enforcement cost for this tax given the larger statewide universe of providers.

#### State and Local Government Costs

There will be a variety of startup and transition costs, some of which may be built into the electric charges that all customers, including governments, pay. These may include, but are not limited to, stranded costs, the mechanics of divestiture, etc. However, to a certain extent, the Legislature may

<sup>&</sup>lt;sup>41</sup> http://edr.state.fl.us/Content/local-government/data/data-a-to-z/index.cfm

<sup>&</sup>lt;sup>42</sup> Section 166.231(1), F.S.

<sup>&</sup>lt;sup>43</sup> Section 166.231(2), F.S.

<sup>44</sup> http://edr.state.fl.us/Content/local-government/data/data-a-to-z/index.cfm

<sup>&</sup>lt;sup>45</sup> <u>http://floridarevenue.com/taxes/governments/Pages/mpst.aspx</u>

choose to mitigate some of these customer-based costs by paying a portion of them directly. The most significant of these costs are explained below.

#### Stranded Costs

Stranded costs are investments that a utility has incurred with an expectation of cost recovery through rates, but which may no longer be recoverable due to restructuring. From an accounting standpoint, an asset's stranded cost is measured as the difference between its book value and its market value. The proposed constitutional amendment does not address how stranded costs should be treated. In all restructured states, to date, utilities were compensated for these costs. The most common mechanism for recovering stranded costs is to apply a portion of the retail electricity rate to repayment. Among other strategies, Texas has used a separate, non-bypassable charge to customers.

Estimates of stranded costs tend to be sensitive to the statistical approach used to determine costs and to the forecasted values of variables such as the price of electricity in the newly competitive market, the operating costs of various types of plants, and the exact timing of plant sales.<sup>46</sup> Fuel prices alone have a powerful impact on estimates of stranded costs and are notoriously difficult to predict, especially several years into the future.<sup>47</sup> Different estimation methods cited by other states reached substantially different results for those states.<sup>48,49</sup> There is also evidence that estimates tend to be far from the realized values.<sup>50,51</sup> The estimates of stranded costs solely for the electricity generation assets in Florida, provided for this Conference, also differed substantially and depended heavily on certain assumptions. Further uncertainty over the total value of stranded costs in Florida derives from the uncertainty over whether or not investor-owned utilities will be forced to divest their transmission and distribution assets.

The manner in which the Florida Legislature, courts, and regulatory agencies will address these costs, including their magnitude, is unclear. While the proposed amendment does not require that stranded costs be addressed in the implementing legislation, it is possible that the state could face litigation related to inverse condemnation if it did not.

#### Litigation, Legal and Regulatory Costs

Because key terms and relationships are undefined by the amendment and in current law—and since the interests of the incumbent IOUs are at stake—significant litigation and legal expenses are probable, regardless of the final legislative design of the new system. Legislative, regulatory, and likely judiciary resources will be required to unwind existing policies from the current regulatory environment. Upfront costs are likely to be a direct expense of the state.

In addition, while many of the issues below are discussed in other sections, they have a specific impact on the regulatory proceedings of the PSC or other state entity charged with implementation (Regulatory Agency) that is detailed below. At a minimum, the state will need to ensure that the Regulatory Agency has the necessary expertise and resources to handle any proceedings that result from the implementation of the proposed amendment.

<sup>&</sup>lt;sup>46</sup> 1997 Scope of Competition in Electric Industry of Texas – Volume III.

<sup>&</sup>lt;sup>47</sup> Florida Energy 2020 Study Commission Final Report (2001).

<sup>&</sup>lt;sup>48</sup> 1997 Scope of Competition in Electric Industry of Texas – Volume III.

<sup>&</sup>lt;sup>49</sup> Guinn Center, Technical Report: Restructuring the Electricity Market in Nevada? Possibilities, Prospects, and Pitfalls.

<sup>&</sup>lt;sup>50</sup> Hammond and Rossi (2017). Stranded Costs and Grid Decarbonization. Brooklyn Law Review. 82(2).

<sup>&</sup>lt;sup>51</sup> Public Sector Consultants. 2014. "Electric Industry Deregulation: A Look at the Experience of Four States.", prepared on Behalf of Consumers Energy and DTE Energy.

- The limitation on the activity of investor-owned electric utilities raises several of these issues.
  - Whether or not implementing legislation specifically provides for it, the activity limitation on IOUs will almost certainly lead to extensive proceedings and/or litigation before the Regulatory Agency (and potential appeals) concerning the proper calculation and treatment of the unrecovered costs of IOUs' divested generation assets. See the discussion on <u>Stranded Costs</u> above.
  - By its omission of the term "ownership," the proposed amendment leaves open the issue of whether the state's current IOUs must divest their transmission and distribution assets, almost certainly leading to extensive proceedings and/or litigation before the Regulatory Agency (and potential appeals). See the discussion on *Transmission and Distribution Systems* in Section D.
  - Since the term "investor-owned electric utilities" is not defined, it is not clear if other non-incumbent entities could participate if they had a corporate structure that is "investor-owned". This lack of clarity would almost certainly lead to extensive proceedings and/or litigation before the Regulatory Agency (and potential appeals).
- States that have restructured their electricity markets have expended significant time and resources (typically through each state's public utilities commission) to oversee development of the processes and institutions that will govern electricity markets, such as transmission operators. Similarly, in Florida, the amendment will likely lead to extensive administrative proceedings before the Regulatory Agency, as the various market participants advocate for processes and institutions that favor their strategic interests. Though it is the agency best suited to handle these issues, the PSC may not have the inhouse expertise to identify and address all of the issues involved in creating these processes and institutions. Given the deadline provided in the amendment, these proceedings may need to be expedited, putting additional stress on state resources.
- Given the interaction with FERC and FERC's ultimate authority to approve matters related the competitive wholesale market, the state will have responsibility for advocating before FERC for approval of its proposed processes and institutions, as well as more closely monitoring related FERC proceedings that could affect these processes and institutions. This will require both an initial and ongoing commitment of state resources. See the discussion on *Competitive Wholesale Market* in Section D.

# Consumer Protection and Information Costs

Deregulation will likely result in additional startup and ongoing costs to help educate and inform the public and businesses on their choices and to ensure transparency. This could manifest itself in a number of forms, from websites with prices, informational literature, educational forums, etc. In addition, new avenues for consumer protection may need to be developed as well as a complaint system. Today, the PSC addresses a more limited set of electric utility customer service issues, such as billing issues, metering issues, and connection and disconnection of service. Additional resources may be necessary for the expanded function. The responsibility and costs related to this may fall directly on government and outside of billings.

#### Charges for Electricity

To the extent that electric prices change due to restructuring, this could impact both state and local government costs. State and local governments are consumers of electricity just like other

customers and, as such, would directly bear any added expense of electric bills that are higher than they otherwise would be. Recent annual electricity costs borne by the State of Florida have ranged from \$109.6 million to \$117.1 million.<sup>52</sup> School districts have incurred electricity costs of almost \$500 million in FY 2016-17.<sup>53</sup> Even a one percent increase or decrease in these costs would have an impact in excess of \$1 million for the State of Florida and \$5 million for the school districts.

#### Renewable Energy Market

• The amendment allows electricity customers to produce electricity themselves or in association with others without going through a provider. In 2015, a Financial Impact Estimating Conference prepared a financial impact statement for the initiative petition entitled *Limits or Prevents Barriers to Local Solar Electricity Supply*, Serial Number 14-02. The proposed Solar Amendment appears to address only a subset of the activity authorized by the proposed amendment now under review. The Solar Amendment allows a narrowly defined category of local solar electricity suppliers to sell directly to customers at the same or contiguous property as a solar energy generating facility rated up to 2 megawatts. Based on its review of the Solar Amendment, the prior Conference found as follows:

The amendment prohibits state and local government regulation of local solar electricity suppliers with respect to rates, service, or territory, and prohibits electric utilities from discriminating against customers of local solar electricity suppliers with respect to rates, charges, and terms of service. The amendment limits or prevents barriers to the sale of electricity by local solar electricity suppliers directly to customers. The Financial Impact Estimating Conference believes that the amendment will induce more solar electricity generation than would have occurred in its absence.

Based on information provided at public workshops and information collected through staff research, the conference expects the amendment will have several financial effects.

- Revenues from the following sources will be lower than they otherwise would have been as sales by local solar electricity suppliers displace sales by traditional utilities:
  - State regulatory assessment fees;
  - Local government franchise fees;
  - Local Public Service Tax;
  - State Gross Receipts Tax;
  - State and local Sales and Use Tax; and
  - Municipal utility electricity sales.
- At current millage rates, Ad Valorem Tax revenues will increase as a result of the installation of more solar energy systems than would have occurred in the amendment's absence. The increase in Ad Valorem Tax revenues is not expected to offset the reductions in other revenue sources. Over time, the Ad Valorem Taxes paid by electric utilities may be lower than otherwise as their need for additional generating capacity is reduced by expanded solar electricity production.
- Implementation and compliance costs will likely be minimal and include the following:

<sup>&</sup>lt;sup>52</sup> State Energy Management Plan, Annual Summary Report, Fiscal Year 2016-17,

https://www.dms.myflorida.com/content/download/141154/910126/SEMP\_FY2016-17\_Report\_(20180315).pdf

<sup>&</sup>lt;sup>53</sup> Florida Department of Education, Annual Energy Reports, 2016-17; http://www.fldoe.org/core/fileparse.php/5599/urlt/1617AnnualEnergy.pdf

- The Public Service Commission will incur one-time administrative costs related to the implementation of the amendment, particularly in regard to rule-making activities.
- The Department of Revenue will incur administrative costs related to the implementation of the amendment, particularly in regard to rule-making, enforcement and compliance activities.
- To the extent that current administrative practices are changed, local governments will incur costs related to the implementation of and compliance with the amendment. Some of these costs will likely be offset by fees.

There are numerous favorable and unfavorable factors affecting the adoption of solar technology to produce electricity in Florida. The magnitude of the revenue reductions cannot be determined because the following factors are uncertain: the extent and timing of the shift in electricity production from electric utilities to solar producers; continuation of federal solar investment tax credits; the methodology for determining the basis for the use tax on solar electricity; the pace of decline in solar energy production costs; the removal of technological barriers to greater deployment; and future legislative or administrative actions by state and local governments to mitigate the revenue reduction.

- While that amendment dealt with electricity customers' ability to produce and sell solargenerated electricity and appears to be more limited than this amendment, the analysis of its effects on state and local governments' revenues and costs is similarly applicable to the amendment currently under consideration.
- The proposed amendment provides that all statutes, regulations, or orders in conflict with the
  amendment are deemed void. The amendment also provides that it should not be construed to
  invalidate the state's public policies on renewable energy, energy efficiency, and environmental
  protection, or to limit the Legislature's ability to impose such policies on market participants.
  These two provisions appear to conflict, as the state's renewable energy and energy efficiency
  policy is tied into the current regulatory scheme for monopoly electric utility service.
  Legislative, regulatory, and likely judiciary resources will be required to unwind these policies
  from the current regulatory scheme and determine how they can be applied to the restructured
  industry envisioned by the amendment without running afoul of the amendment's conflicting
  requirements.

# F. Discussion of Fiscal Impact of Proposed Amendment

The proposed amendment will require transition to a restructured electricity market that profoundly differs from the vertically integrated structure that is in place today. Under the current structure, each investor-owned utility can own and control its own power generation facilities, the transmission and distribution of its electricity, and sales to customers.

The specifics of the restructured system are left to the Legislature to determine after the passage of the amendment. At a minimum, the restructured system will require the design and development of:

- an organized wholesale market or participation in an existing wholesale market;
- requirements for divesting incumbent utility providers of generation assets and the treatment of any stranded assets;

- appropriate regulatory oversight and ownership of transmission and distribution facilities as well as service billing issues;
- the degree of oversight and requirements for retail sales providers;
- an appropriate array of consumer protections; and
- default electric service and back-up generation plans.

Each of these components has multiple sub-issues that also need to be addressed. Because key terms and relationships are undefined by the amendment and in current law—and since the interests of incumbent businesses are at stake—significant litigation and legal expenses are probable, regardless of the final legislative design.

Some parts of the restructured system will result in additional costs that do not exist today and will likely be significant. These include addressing the treatment of stranded assets, transition expenses and the mechanics of divestiture. While most of these costs may ultimately be recovered through additional charges on customer electric bills, some may have to be paid upfront by the State or another entity established for this purpose. More importantly, state and local governments are consumers of electric bills that are higher than they otherwise would be.

The economic theory underlying deregulation is that free market competition either drives down electric prices or staves off increases by providing incentives to keep down costs and pursue operational efficiencies. Academic and case studies of other states where restructuring has occurred are inconclusive with respect to the magnitude of the price change, its timing, and its direction. To the extent that charges for electricity decrease, state and local governments will experience lower electric bills. The converse is also true.

Compared to the effect on costs, price changes have the opposite budgetary effect from taxes that are based on price. For example, lower prices would lead to decreased Gross Receipts Tax revenue which is bonded for the construction of educational facilities; however, its current collection point (at distribution) will not work under the proposed structure. Legislation will be needed to address the structural changes; however, what the Legislature may do is unknown.

Another impact of the proposal is on local government franchise fees which are in part, based on consideration for the local government's agreement not to provide competing utility services. This part of the fee would be irrelevant under restructuring, and existing collections would be significantly reduced.