

The Perryman Group was recently asked to examine the potential economic benefits of statewide competition in the Florida electric power market. Outcomes in other areas which have increased competition (fully adjusted for Florida economic and demographic patterns) were used as a basis for estimating the potential benefits.

As an initial phase of this analysis, The Perryman Group estimated the direct savings by customer class which could be expected under statewide electric power competition. The Perryman Group's US Multi-Regional Impact Assessment System was then used to quantify the potential overall economic benefits of statewide competition.

Summary results from The Perryman Group's preliminary assessment are presented below, with additional detail (including results by sector) in the Appendices.

Direct Savings

In order to determine the direct effects for use in the impact analysis, it is necessary to estimate the likely outcomes from the implementation of an orderly and effective competitive framework for the Florida retail electric market. For purposes of illustration, estimates are derived for both 2016 (the latest year for which all relevant electric price and usage data is available) and 2030. The 2016 analysis examines the counterfactual scenario in which a competitive framework is already in place and mature. The purpose of this segment is to illustrate the benefits that would be currently occurring if competition presently existed. The 2030 analysis provides an assessment of the reasonable outcomes assuming that competition is implemented in the near future and has an opportunity to mature.

As an initial point of departure, an analysis was conducted to determine the relative savings achieved in Texas from an effective competitive framework. While attempts at competitive markets have occurred in numerous states (and countries throughout the world), the Texas model is widely regarded as the most successful.¹ The Texas case should be representative

¹ Hartley, Peter R., Kenneth B. Medlock III, and Olivera Jankovska, Electricity Reform and Retail Pricing in Texas, Center for Energy Studies, Baker Institute, Rice University, June 2017; Michaels, Robert J., Competition in Texas Electric Markets: What Texas Did Right & What's Left to Do, Texas Public Policy Foundation, March 2007; Why is

of the potential in Florida in that (1) it is reasonable to assume that any state embarking on a competitive framework would be influenced by the best practices that have emerged over the past two decades and (2) both states are large enough to achieve reasonable scale and derive a substantial portion of their generation from natural gas facilities.²

Two methods were used in this process, both of which seek to compare the current pricing in competitive regions with what it would likely be if providers had remained subject to traditional rate-of-return regulation. One method, which is used on an ongoing basis by the Public Utility Commission of Texas (PUCT), compares current average retail rates with those that would likely prevail in a regulated framework. The regulated rates are estimated by adjusting the rates that prevailed at the time competition was introduced for subsequent inflation. Using this approach, the average savings is determined to be about 27.1%, although many consumers receive much larger reductions.

The second method compares the change in average retail prices that has occurred in competitive regions to those observed in the regulated areas. This approach was recently adopted in an analysis by the Center for Energy Studies at the Baker Institute for Public Policy at Rice University.³ Depending on the region examined, the relative reduction ranges from about 23.3% to 27.9% (for an average of 25.6%). This finding is virtually identical to that in a 2009 study by The Perryman Group which used a similar methodology and determined average direct savings at the time to be 25.1%.⁴ For purposes of the present

Texas the Model for Energy Deregulation?, Bounce Energy, (n.d.), <https://www.bounceenergy.com/articles/texas-electricity/why-is-texas-the-model-for-energy-deregulation>.

² Table 55.1 Texas Regional Entity, Electric Power Projections for Electricity Market Module Regions, Annual Energy Outlook 2017, U.S. Energy Information Administration, January 5, 2017; Table 55.2 Florida Reliability Coordinating Council, Electric Power Projections for Electricity Market Module Regions, Annual Energy Outlook 2017, U.S. Energy Information Administration, January 5, 2017.

³ Hartley, Peter R., Kenneth B. Medlock III, and Olivera Jankovska, Electricity Reform and Retail Pricing in Texas, Center for Energy Studies, Baker Institute, Rice University, June 2017. Results in other states have also illustrated notable benefits from retail competition. See, for example, Simeone, Christina and John Hanger, A Case Study of Electric Competition Results in Pennsylvania: Real Benefits and Important Choices Ahead, Kleinman Center for Energy Policy, University of Pennsylvania, October 28, 2016; Thomas, Andrew R., William M. Bowen, Edward W. Hill, Adam Kanter, and Taekyoung Lim, Electricity Customer Choice in Ohio: How Competition Has Outperformed Traditional Monopoly Regulation, Energy Policy Center, Cleveland State University, November 2016. In addition, numerous studies have demonstrated the economic gains from greater efficiencies in power allocation and investment. See, for example, Cicala, Steve, Imperfect Markets versus Imperfect Regulation in U.S. Electricity Generation, NBER Working Paper No. 23053, January 2017; Hibbard, Paul, Susan Tierney, and Katherine Franklin, Electricity Markets, Reliability and the Evolving U.S. Power System, Analysis Group, June 2017; Putting Competitive Power Markets to the Test, The Benefits of Competition in America's Electric Grid: Cost Savings and Operating Efficiencies, Global Energy Decisions, July 2005.

⁴ Power to the People!!! A Retrospective on Ten Years of Electric Competition in Texas and Considerations for Future Success, The Perryman Group, April 2009.

analysis, The Perryman Group used 23.3% as the Low Case (the lower value in the Rice University study) and 27.1% in the High Case (the estimate from the PUCT).

The next phase of the analysis involves estimation of the incremental electricity consumption that would occur as a result of lower prices. While the demand for electricity is inelastic (less than proportionate response to price changes), reductions of this magnitude would induce additional purchases in the residential, commercial, and industrial sectors. This segment of the analysis involves the determination of demand elasticity estimates for each major usage category. Dynamic logarithmic multiple regression models were specified and estimated which related consumption to real prices and relevant economic and demographic control variables. The requisite data series were obtained from the Energy Information Administration, the US Department of Commerce, and the US Department of Labor. All of these equations exhibited excellent statistical properties and all of the elasticity coefficients were statistically significant. The estimated elasticities for residential, commercial, and industrial usage were determined to be, respectively, -0.117, -0.094, and -0.118. The resulting induced increases in electricity consumption are found to be approximately 2.73% for residential, 2.19% for commercial, and 2.74% for industrial consumption in the Low Case Scenario, with the High Case gains being modestly higher.

Once this determination is completed, the direct savings can be computed for 2016 by calculating the savings associated with the estimated percentage reductions as applied to actual annual consumption and the incremental induced purchases determined above. The same method is used to project the savings in 2030, with the baseline values for usage and prices by major market segment being based on the projections generated and maintained by Energy Information Administration.⁵ These results are displayed in the following table. All monetary values are given in constant (2016) dollars.

⁵ Table 55.2 Florida Reliability Coordinating Council, Electric Power Projections for Electricity Market Module Regions, Annual Energy Outlook 2017, U.S. Energy Information Administration, January 5, 2017, <https://www.eia.gov/outlooks/aeo/data/browser/#/?id=62-AEO2017®ion=3-2&cases=ref2017>.

Potential Direct Savings from the Introduction of Statewide Electric Competition in Florida (Dollar Amounts in Millions of 2016 Dollars)				
LOW CASE¹				
	Residential	Commercial	Industrial	TOTAL
2016 ²	\$2,944.320	\$1,972.683	\$238.577	\$5,155.580
2030 ³	\$3,621.705	\$2,455.634	\$374.486	\$6,451.825
HIGE CASE⁴				
2016 ²	\$3,430.953	\$2,298.724	\$278.009	\$6,007.686
2030 ³	\$4,220.294	\$2,861.498	\$436.380	\$7,518.172
Notes: (1) The Low Case is based on results achieved in Texas based on lower end of range based on relative change in retail prices for regulated and unregulated regions in Texas following the introduction of competition in portions of Texas. See Hartley, Peter R., Kenneth B. Medlock III, and Olivera Jankovska, <i>Electricity Reform and Retail Pricing in Texas</i> , Center for Energy Studies, Baker Institute, June 2017. (2) The 2016 values represent the estimated direct savings that would have occurred in Florida had competition been fully implemented and mature in 2016. (3) The 2030 values represent the estimated direct savings that will occur in Florida assuming statewide competition is introduced and reaches maturity by that time. Future usage by segment and baseline prices were obtained from projections provided by the energy Information Administration. See Table 55.2 Florida Reliability Coordinating Council, <i>Electric Power Projections for Electricity Market Module Regions</i> , Annual Energy Outlook 2017, U.S. Energy Information Administration, January 5, 2017. (4) The High Case is based on the differential between the estimated rates that would exist if the Texas competitive markets had remained regulated (which are also consistent with current US average rates) relative to current rates as determined by the Public Utility Commission of Texas. See <i>Scope of Competition in Electric Markets in Texas</i> , Report to the 85 th Texas Legislature, Public Utility Commission of Texas, January 2017. Source: The Peryman Group				

Impact Assessment

The final element of the determination of direct inputs to the impact assessment involves allocating the savings identified above across appropriate appreciate categories of spending. For the residential sector, it was assumed that the incremental funds would be expended in accordance with typical patterns as determined by the *Consumer Expenditure Survey* compiled by the US Department of Labor and the *Cost of Living Index* maintained by the Council for Community and Economic Research. The estimated cost savings is apportioned across these sectors in both the Low Case and High Case Scenarios for both 2016 and 2030.

For the commercial and industrial segments, the requirements coefficients for electric service as an input were obtained from the US Multi-Regional Impact Assessment System (described below) for each of more than 500 detailed sectors to provide estimates of the outlays per dollar of total spending. These parameters were then multiplied by total spending in each detailed sector to estimate total electric spending, partitioned between commercial and industrial categories, and calibrated with respect to the total revenues to provide a reasonable allocation of outlays for electric service. These savings for the Low Case and High Case Scenarios derived above are allocated in this manner for both the 2016 and 2030, with adjustment for the induced purchases resulting from the reduced retail costs of electricity. The result of this process is a set of expenditure vectors which provide the direct inputs for the impact analysis.

Multiplier effects were then measured using The Perryman Group's input-output assessment model (the US Multi-Regional Impact Assessment System), which is described in further detail in the Appendices to this report. The system has been consistently maintained and updated since it was developed by the firm about 35 years ago, has been peer-reviewed on many occasions, and has been used in hundreds of analyses for clients ranging from major corporations to government agencies. In particular, it has been implemented on dozens of occasions to measure the effects of electric generation and transmission projects, including many related to wind development. It uses a variety of data (from surveys, industry information, and other sources) to describe the various goods and services (known as resources or inputs) required to produce another good/service. This process allows for estimation of the total economic impact (including multiplier effects) of construction and operations of the performing arts facility. The models used in the current analysis reflect the specific industrial composition and characteristics of Florida.

These total economic effects are quantified for key measures of business activity:

- **Total expenditures** (or total spending) measure the dollars changing hands as a result of the economic stimulus.
- **Gross product** (or output) is production of goods and services that will come about in each area as a result of the activity. This measure is parallel to the gross domestic product numbers commonly reported by various media outlets and is a subset of total expenditures.
- **Personal income** is dollars that end up in the hands of people in the area; the vast majority of this aggregate derives from the earnings of employees, but payments such as interest and rents are also included.

- **Job gains** are expressed as permanent jobs.

Summary results are reported in the body of this report, with other measures and industry-level detail in the Appendices. Monetary values were quantified on a constant (2016) dollar basis to eliminate the effects of inflation. See the Appendices to this report for additional information regarding the methods and assumptions used in this analysis.

Economic Benefits

The Perryman Group estimated the economic benefits stemming from the potential direct savings described above. Under the Low Case Assumptions, gains in Florida business activity associated with the introduction of statewide competition in the market for electric power were estimated to include (when multiplier effects are considered)

- \$6.6 billion in gross product and over 72,000 permanent jobs if statewide competition had been in place in 2016 and
- \$8.3 billion in gross product and approximately 90,000 permanent jobs by 2030 if statewide competition is soon implemented.

Potential Economic Benefits of Statewide Competition in the Florida Market for Electric Power: Low Case (Dollar Amounts in Billions of 2016 Dollars and Permanent Jobs)				
2016: If statewide competition had been in place				
	Residential	Commercial	Industrial	TOTAL
Total Expenditures	\$7.850	\$4.972	\$0.682	\$13.503
Gross Product	\$3.909	\$2.442	\$0.290	\$6.641
Personal Income	\$2.291	\$1.385	\$0.173	\$3.848
Employment	43,036	26,202	2,842	72,080
2030: If statewide competition is soon implemented				
Total Expenditures	\$9.655	\$6.189	\$1.070	16.915
Gross Product	\$4.808	\$3.040	\$0.456	8.304
Personal Income	\$2.818	\$1.724	\$0.271	4.813
Employment	52,937	32,617	4,460	90,014
Notes: The Low Case is based on results achieved in Texas using the lower end of the range of relative change in retail prices for regulated and unregulated regions in Texas following the introduction of competition in portions of Texas. See Hartley, Peter R., Kenneth B. Medlock III, and Olivera Jankovska, Electricity Reform and Retail Pricing in Texas, Center for Energy Studies, Baker Institute, June 2017. The 2016 values represent the estimated direct savings that would have occurred in Florida had competition been fully implemented and mature in 2016. The 2030 values represent the estimated direct savings that will occur in Florida assuming that statewide competition is introduced and reaches maturity by that time. Future usage by segment and baseline prices were obtained from projections provided by the Energy Information Administration. See Table 55.2 Florida Reliability Coordinating Council, Electric Power Projections for Electricity Market Module Regions, Annual Energy Outlook 2017, U.S. Energy Information Administration, January 5, 2017. Source: The Peryman Group				

Under High Case Assumptions, the estimated increase in Florida business activity associated with the introduction of statewide competition in the market for electric power (when multiplier effects are considered) rises to

- \$7.7 billion in gross product and nearly 84,000 permanent jobs if statewide competition had been in place in 2016 and
- \$9.7 billion in gross product and close to 105,000 permanent jobs by 2030 if statewide competition is soon implemented.

Potential Economic Benefits of Statewide Competition in the Florida Market for Electric Power: High Case (Dollar Amounts in Billions of 2016 Dollars and Permanent Jobs)				
2016: If statewide competition had been in place				
	Residential	Commercial	Industrial	TOTAL
Total Expenditures	\$9.147	\$5.794	\$0.794	\$15.735
Gross Product	\$4.555	\$2.846	\$0.338	\$7.739
Personal Income	\$2.670	\$1.614	\$0.201	\$4.485
Employment	50,149	30,533	3,311	83,993
2030: If statewide competition is soon implemented				
Total Expenditures	\$11.251	\$7.212	\$1.247	\$19.710
Gross Product	\$5.603	\$3.542	\$0.531	\$9.676
Personal Income	\$3.284	\$2.009	\$0.316	\$5.608
Employment	61,686	38,008	5,197	104,892
Notes: The High Case is based on the differential between the estimated rates that would exist if the Texas competitive markets had remained regulated (which are also consistent with current US average rates) relative to current rates as determined by the Public Utility Commission of Texas. See Scope of Competition in Electric Markets in Texas, Report to the 85th Texas Legislature, Public Utility Commission of Texas, January 2017. The 2016 values represent the estimated direct savings that would have occurred in Florida had competition been fully implemented and mature in 2016. The 2030 values represent the estimated direct savings that will occur in Florida assuming that statewide competition is introduced and reaches maturity by that time. Future usage by segment and baseline prices were obtained from projections provided by the Energy Information Administration. See Table 55.2 Florida Reliability Coordinating Council, Electric Power Projections for Electricity Market Module Regions, Annual Energy Outlook 2017, U.S. Energy Information Administration, January 5, 2017. Source: The Peryman Group				

Conclusion

Increasing competition in the market for electric power can lead to significant savings to consumers, enhanced consumer choice, less volatility in prices, and other benefits. As a result, there are substantial gains to the economy.

The Peryman Group estimates that if implemented in the near future, statewide competition in the Florida electric power market could generate benefits by 2030 including \$8.3 billion in gross product and over 90,000 jobs under Low Case assumptions, with \$9.7 billion in gross product and nearly 105,000 jobs if High Case results are obtained.

Appendix A: About The Perryman Group

- The Perryman Group (TPG) is an economic research and analysis firm based in Waco, Texas. The firm has about 35 years of experience in assessing the economic impact of corporate expansions, regulatory changes, real estate developments, public policy initiatives, and myriad other factors affecting business activity. TPG has conducted hundreds of impact analyses for local areas, regions, and states throughout the United States. Impact studies have been performed for hundreds of clients including many of the largest corporations in the world, governmental entities at all levels, educational institutions, major health care systems, utilities, and economic development organizations.
- Dr. M. Ray Perryman, founder and President of the firm, developed the US Multi-Regional Impact Assessment System (used in this study) in the early 1980s and has consistently maintained, expanded, and updated it since that time. The model has been used in hundreds of diverse applications and has an excellent reputation for reliability. A major study developed using the relevant model was recently published in *The Journal of Medical Economics*.
- The Perryman Group has extensive expertise in analysis of the electric power industry and has performed numerous studies including, among others, rate analysis, impact assessments of potential additions to generation capacity (gas, wind, coal, and nuclear) and transmission infrastructure, demand forecasts, price forecasts, fuel diversity analysis, usage analysis, power adequacy analysis, and major policy studies. TPG has also analyzed the effects of competition in the electric power industry on multiple occasions, including major studies before, during, and after the introduction of competition in Texas and played a key role in the introduction of wholesale and retail competition into the state. Dr. M. Ray Perryman, founder and president of the firm, has testified before the US Department of Energy, the US Department of Agriculture, the Public Utility Commission of Texas, the Oklahoma Corporation Commission, the Texas Railroad Commission, the Texas Legislature (House and Senate), and numerous other legislative and regulatory bodies on electric industry and other energy matters. He has also spoken to major industry conferences on dozens of occasions. Additionally, the firm has performed other studies related to the effects of introducing competition in a variety of sectors, including telecommunications, financial services, natural gas, trucking, and railroads, with Dr. Perryman offering testimony on multiple occasions.
- With regard to renewable energy, TPG has analyzed the economic and fiscal impact of construction and operation of numerous specific wind farm projects. In addition, the firm performed a detailed county-by-county assessment of the impact of the Competitive Renewable Energy Zones (CREZ) project in Texas, a large-scale, multi-billion dollar investment program to provide transmission infrastructure to support the development of wind energy in the state. Similar analyses has been conducted, involving both wind power generation and transmission, regarding the delivery of wind power from Oklahoma and Kansas to the Tennessee Valley Authority along the Plains & Eastern Clean Line transmission system and from Texas to the southeastern US along the Southern Cross Transmission system.

Appendix B: Methods Used

- The basic modeling technique employed in this study is known as dynamic input-output analysis. This methodology essentially uses extensive survey data, industry information, and a variety of corroborative source materials to create a matrix describing the various goods and services (known as resources or inputs) required to produce one unit (a dollar's worth) of output for a given sector. Once the base information is compiled, it can be mathematically simulated to generate evaluations of the magnitude of successive rounds of activity involved in the overall production process.
- There are two essential steps in conducting an input-output analysis once the system is operational. The first major endeavor is to accurately define the levels of direct activity to be evaluated. In the case of a prospective evaluation, it is necessary to first calculate reasonable estimates of the direct activity. This process was described at length in the report.
- The second major phase of the analysis is the simulation of the input-output system to measure overall economic effects of these incremental outlays. The present study was conducted within the context of the US Multi-Regional Impact Assessment System (USMRIAS) which was developed and is maintained by The Perryman Group. This model has been used in hundreds of diverse applications across the country and has an excellent reputation for accuracy and credibility. The systems used in the current simulations reflect the unique industrial structure and characteristics of Florida.
- The USMRIAS is somewhat similar in format to the Input-Output Model of the United States and the Regional Input-Output Modeling System, both of which are maintained by the US Department of Commerce. The model developed by TPG, however, incorporates several important enhancements and refinements. Specifically, the expanded system includes (1) comprehensive 500-sector coverage for any county, multi-county, or urban region; (2) calculation of both total expenditures and value-added by industry and region; (3) direct estimation of expenditures for multiple basic input choices (expenditures, output, income, or employment); (4) extensive parameter localization; (5) price adjustments for real and nominal assessments by sectors and areas; (6) measurement of the induced impacts associated with payrolls and consumer spending; (7) embedded modules to estimate multi-sectoral direct spending effects; (8) estimation of retail spending activity by consumers; and (9) comprehensive linkage and integration capabilities with a wide variety of econometric, real estate, occupational, and fiscal impact models. Moreover, the model uses specific local taxing patterns to estimate the fiscal effects of activity on a detailed sectoral basis. The models used for the present investigation have been thoroughly tested for reasonableness and historical reliability.
- The impact assessment (input-output) process essentially estimates the amounts of all types of goods and services required to produce one unit (a dollar's worth) of a specific type of output. For purposes of illustrating the nature of the system, it is useful to think of inputs and outputs in dollar (rather than physical) terms. As an example, the construction of a new building will require specific dollar amounts of lumber, glass, concrete, hand tools, architectural services, interior design services, paint, plumbing, and numerous other elements. Each of these suppliers

must, in turn, purchase additional dollar amounts of inputs. This process continues through multiple rounds of production, thus generating subsequent increments to business activity. The initial process of building the facility is known as the *direct effect*. The ensuing transactions in the output chain constitute the *indirect effect*.

- Another pattern that arises in response to any direct economic activity comes from the payroll dollars received by employees at each stage of the production cycle. As workers are compensated, they use some of their income for taxes, savings, and purchases from external markets. A substantial portion, however, is spent locally on food, clothing, health care services, utilities, housing, recreation, and other items. Typical purchasing patterns in the relevant areas are obtained from the *ACCRA Cost of Living Index*, a privately compiled inter-regional measure which has been widely used for several decades, and the *Consumer Expenditure Survey* of the US Department of Labor. These initial outlays by area residents generate further secondary activity as local providers acquire inputs to meet this consumer demand. These consumer spending impacts are known as the *induced effect*. The USMRIAS is designed to provide realistic, yet conservative, estimates of these phenomena.
- Sources for information used in this process include the Bureau of the Census, the Bureau of Labor Statistics, the Regional Economic Information System of the US Department of Commerce, and other public and private sources. The pricing data are compiled from the US Department of Labor and the US Department of Commerce. The verification and testing procedures make use of extensive public and private sources.
- Impacts were measured in constant 2016 dollars to eliminate the effects of inflation.
- The USMRIAS generates estimates of the effect on several measures of business activity. The most comprehensive measure of economic activity used in this study is Total Expenditures. This measure incorporates every dollar that changes hands in any transaction. For example, suppose a farmer sells wheat to a miller for \$0.50; the miller then sells flour to a baker for \$0.75; the baker, in turn, sells bread to a customer for \$1.25. The Total Expenditures recorded in this instance would be \$2.50, that is, \$0.50 + \$0.75 + \$1.25. This measure is quite broad, but is useful in that (1) it reflects the overall interplay of all industries in the economy, and (2) some key fiscal variables such as sales taxes are linked to aggregate spending.
- A second measure of business activity frequently employed in this analysis is that of Gross Product. This indicator represents the regional equivalent of Gross Domestic Product, the most commonly reported statistic regarding national economic performance. In other words, the Gross Product of Texas is the amount of US output that is produced in that state; it is defined as the value of all final goods produced in a given region for a specific period of time. Stated differently, it captures the amount of value-added (gross area product) over intermediate goods and services at each stage of the production process, that is, it eliminates the double counting in the Total Expenditures concept. Using the example above, the Gross Product is \$1.25 (the value of the bread) rather than \$2.50. Alternatively, it may be viewed as the sum of the value-added by the farmer, \$0.50; the miller, \$0.25 (\$0.75 - \$0.50); and the baker, \$0.50 (\$1.25 - \$0.75). The total value-added is, therefore, \$1.25, which is equivalent to the final value of the bread. In

many industries, the primary component of value-added is the wage and salary payments to employees.

- The third gauge of economic activity used in this evaluation is Personal Income. As the name implies, Personal Income is simply the income received by individuals, whether in the form of wages, salaries, interest, dividends, proprietors' profits, or other sources. It may thus be viewed as the segment of overall impacts which flows directly to the citizenry.
- The fourth measure, Retail Sales, represents the component of Total Expenditures which occurs in retail outlets (general merchandise stores, automobile dealers and service stations, building materials stores, food stores, drugstores, restaurants, and so forth). Retail Sales is a commonly used measure of consumer activity.
- The final aggregates used are Permanent Jobs and Person-Years of Employment. The Person-Years of Employment measure reveals the full-time equivalent jobs generated by an activity. It should be noted that, unlike the dollar values described above, Permanent Jobs is a "stock" rather than a "flow." In other words, if an area produces \$1 million in output in 2016 and \$1 million in 2017, it is appropriate to say that \$2 million was achieved in the 2016-2017 period. If the same area has 100 people working in 2016 and 100 in 2017, it only has 100 Permanent Jobs. When a flow of jobs is measured, such as in a construction project or a cumulative assessment over multiple years, it is appropriate to measure employment in Person-Years (a person working for a year). This concept is distinct from Permanent Jobs, which anticipates that the relevant positions will be maintained on a continuing basis.

Appendix C: Detailed Results

Low Case: 2016

The Estimated Total Impact of Implementing Statewide Retail Electric Competition on Business Activity in Florida Low Case—Residential—2016				
Category	Total Expenditures (2016 Dollars)	Gross Product (2016 Dollars)	Personal Income (2016 Dollars)	Employment (Permanent Jobs)
Agriculture	\$171,062,841	\$49,574,351	\$31,966,262	509
Mining	\$117,014,355	\$27,195,140	\$15,722,652	94
Construction	\$157,975,682	\$82,952,172	\$68,357,757	974
Nondurable Manufacturing	\$734,475,151	\$202,026,622	\$106,170,474	1,784
Durable Manufacturing	\$173,277,487	\$68,490,166	\$44,451,184	625
Transportation and Utilities	\$745,476,747	\$274,022,542	\$155,380,625	1,676
Information	\$244,826,750	\$150,970,183	\$65,166,942	624
Wholesale Trade	\$1,154,482,186	\$781,184,995	\$450,438,226	5,190
Retail Trade (including Restaurants)	\$1,259,457,037	\$882,269,774	\$501,952,733	17,360
FIRE	\$1,599,554,236	\$514,858,364	\$138,631,705	1,404
Business Services	\$334,710,118	\$194,404,807	\$158,584,508	1,958
Health Services	\$415,885,808	\$294,801,981	\$249,257,807	4,178
Other Services	\$741,324,195	\$386,045,571	\$304,868,066	6,658
TOTAL	\$7,849,522,593	\$3,908,796,667	\$2,290,948,940	43,036

Notes: The Low Case is based on results achieved in Texas using the lower end of the range of relative change in retail prices for regulated and unregulated regions in Texas following the introduction of competition in portions of Texas. See Hartley, Peter R., Kenneth B. Medlock III, and Olivera Jankovska, Electricity Reform and Retail Pricing in Texas, Center for Energy Studies, Baker Institute, June 2017. The 2016 values represent the estimated direct savings that would have occurred in Florida had competition been fully implemented and mature in 2016.

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

The Estimated Total Impact of Implementing Statewide Retail Electric Competition on Business Activity in Florida Low Case—Commercial—2016				
Category	Total Expenditures (2016 Dollars)	Gross Product (2016 Dollars)	Personal Income (2016 Dollars)	Employment (Permanent Jobs)
Agriculture	\$151,835,156	\$44,607,752	\$29,240,820	467
Mining	\$61,107,897	\$15,769,537	\$9,218,546	63
Construction	\$209,533,675	\$102,010,384	\$84,062,908	1,198
Nondurable Manufacturing	\$425,100,613	\$119,968,335	\$63,343,333	1,049
Durable Manufacturing	\$118,805,836	\$46,564,614	\$30,008,452	431
Transportation and Utilities	\$264,246,019	\$111,634,167	\$66,106,954	773
Information	\$100,310,850	\$60,958,588	\$26,951,928	287
Wholesale Trade	\$207,967,401	\$140,677,378	\$81,115,834	935
Retail Trade (including Restaurants)	\$774,949,269	\$572,402,643	\$331,233,580	10,549
FIRE	\$1,611,372,054	\$595,824,825	\$152,744,139	1,522
Business Services	\$367,792,949	\$236,330,725	\$192,785,312	2,380
Health Services	\$257,040,419	\$174,929,074	\$147,904,158	2,479
Other Services	\$421,939,564	\$220,355,680	\$170,223,722	4,069
TOTAL	\$4,972,001,702	\$2,442,033,702	\$1,384,939,686	26,202

Notes: The Low Case is based on results achieved in Texas using the lower end of the range of relative change in retail prices for regulated and unregulated regions in Texas following the introduction of competition in portions of Texas. See Hartley, Peter R., Kenneth B. Medlock III, and Olivera Jankovska, Electricity Reform and Retail Pricing in Texas, Center for Energy Studies, Baker Institute, June 2017. The 2016 values represent the estimated direct savings that would have occurred in Florida had competition been fully implemented and mature in 2016.

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

The Estimated Total Impact of Implementing Statewide Retail Electric Competition on Business Activity in Florida Low Case—Industrial—2016				
Category	Total Expenditures (2016 Dollars)	Gross Product (2016 Dollars)	Personal Income (2016 Dollars)	Employment (Permanent Jobs)
Agriculture	\$28,001,636	\$6,590,949	\$4,380,737	68
Mining	\$16,010,610	\$3,800,970	\$2,084,122	10
Construction	\$11,140,028	\$6,171,861	\$5,086,004	71
Nondurable Manufacturing	\$190,833,053	\$58,046,387	\$30,037,133	430
Durable Manufacturing	\$93,498,646	\$39,808,944	\$25,655,192	334
Transportation and Utilities	\$94,408,346	\$38,643,017	\$23,107,844	272
Information	\$30,493,907	\$18,546,859	\$7,947,078	72
Wholesale Trade	\$23,575,227	\$15,952,373	\$9,198,279	106
Retail Trade (including Restaurants)	\$64,943,628	\$48,843,556	\$28,417,360	879
FIRE	\$66,781,602	\$17,443,251	\$6,884,173	68
Business Services	\$19,684,396	\$11,890,967	\$9,699,970	118
Health Services	\$15,352,181	\$10,741,309	\$9,081,863	151
Other Services	\$26,931,671	\$13,784,385	\$11,024,878	263
TOTAL	\$681,654,930	\$290,264,827	\$172,604,634	2,842

Notes: The Low Case is based on results achieved in Texas using the lower end of the range of relative change in retail prices for regulated and unregulated regions in Texas following the introduction of competition in portions of Texas. See Hartley, Peter R., Kenneth B. Medlock III, and Olivera Jankovska, Electricity Reform and Retail Pricing in Texas, Center for Energy Studies, Baker Institute, June 2017. The 2016 values represent the estimated direct savings that would have occurred in Florida had competition been fully implemented and mature in 2016.

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

The Estimated Total Impact of Implementing Statewide Retail Electric Competition on Business Activity in Florida Low Case—Total—2016				
Category	Total Expenditures (2016 Dollars)	Gross Product (2016 Dollars)	Personal Income (2016 Dollars)	Employment (Permanent Jobs)
Agriculture	\$350,899,633	\$100,773,051	\$65,587,819	1,044
Mining	\$194,132,861	\$46,765,648	\$27,025,321	167
Construction	\$378,649,385	\$191,134,417	\$157,506,669	2,244
Nondurable Manufacturing	\$1,350,408,817	\$380,041,344	\$199,550,940	3,264
Durable Manufacturing	\$385,581,969	\$154,863,724	\$100,114,829	1,391
Transportation and Utilities	\$1,104,131,113	\$424,299,727	\$244,595,423	2,722
Information	\$375,631,508	\$230,475,629	\$100,065,948	983
Wholesale Trade	\$1,386,024,814	\$937,814,746	\$540,752,339	6,231
Retail Trade (including Restaurants)	\$2,099,349,935	\$1,503,515,972	\$861,603,672	28,788
FIRE	\$3,277,707,892	\$1,128,126,439	\$298,260,017	2,995
Business Services	\$722,187,462	\$442,626,499	\$361,069,790	4,456
Health Services	\$688,278,408	\$480,472,365	\$406,243,828	6,808
Other Services	\$1,190,195,430	\$620,185,636	\$486,116,666	10,990
TOTAL	\$13,503,179,225	\$6,641,095,197	\$3,848,493,260	72,080

Notes: The Low Case is based on results achieved in Texas using the lower end of the range of relative change in retail prices for regulated and unregulated regions in Texas following the introduction of competition in portions of Texas. See Hartley, Peter R., Kenneth B. Medlock III, and Olivera Jankovska, Electricity Reform and Retail Pricing in Texas, Center for Energy Studies, Baker Institute, June 2017. The 2016 values represent the estimated direct savings that would have occurred in Florida had competition been fully implemented and mature in 2016.

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

Low Case: 2030

The Estimated Total Impact of Implementing Statewide Retail Electric Competition on Business Activity in Florida Low Case—Residential—2030				
Category	Total Expenditures (2016 Dollars)	Gross Product (2016 Dollars)	Personal Income (2016 Dollars)	Employment (Permanent Jobs)
Agriculture	\$210,418,358	\$60,979,658	\$39,320,569	626
Mining	\$143,935,225	\$33,451,782	\$19,339,879	116
Construction	\$194,320,307	\$102,036,537	\$84,084,463	1,198
Nondurable Manufacturing	\$903,451,942	\$248,505,811	\$130,596,550	2,194
Durable Manufacturing	\$213,142,516	\$84,247,334	\$54,677,832	769
Transportation and Utilities	\$916,984,616	\$337,065,451	\$191,128,219	2,062
Information	\$301,152,738	\$185,703,090	\$80,159,553	768
Wholesale Trade	\$1,420,087,760	\$960,908,071	\$554,068,153	6,385
Retail Trade (including Restaurants)	\$1,549,213,617	\$1,085,248,887	\$617,434,327	21,354
FIRE	\$1,967,555,170	\$633,309,088	\$170,525,963	1,727
Business Services	\$411,715,094	\$239,130,487	\$195,069,202	2,408
Health Services	\$511,566,443	\$362,625,505	\$306,603,224	5,139
Other Services	\$911,876,708	\$474,861,021	\$375,007,440	8,190
TOTAL	\$9,655,420,494	\$4,808,072,720	\$2,818,015,374	52,937

Notes: The Low Case is based on results achieved in Texas using the lower end of the range of relative change in retail prices for regulated and unregulated regions in Texas following the introduction of competition in portions of Texas. See Hartley, Peter R., Kenneth B. Medlock III, and Olivera Jankovska, Electricity Reform and Retail Pricing in Texas, Center for Energy Studies, Baker Institute, June 2017. The 2030 values represent the estimated direct savings that will occur in Florida assuming that statewide competition is introduced and reaches maturity by that time. Future usage by segment and baseline prices were obtained from projections provided by the energy Information Administration. See Table 55.2 Florida Reliability Coordinating Council, Electric Power Projections for Electricity Market Module Regions, Annual Energy Outlook 2017, U.S. Energy Information Administration, January 5, 2017.
SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

The Estimated Total Impact of Implementing Statewide Retail Electric Competition on Business Activity in Florida Low Case—Commercial—2030				
Category	Total Expenditures (2016 Dollars)	Gross Product (2016 Dollars)	Personal Income (2016 Dollars)	Employment (Permanent Jobs)
Agriculture	\$189,007,403	\$55,528,611	\$36,399,550	581
Mining	\$76,068,318	\$19,630,232	\$11,475,429	78
Construction	\$260,831,660	\$126,984,542	\$104,643,169	1,491
Nondurable Manufacturing	\$529,173,645	\$149,338,955	\$78,851,033	1,306
Durable Manufacturing	\$147,891,853	\$57,964,552	\$37,355,115	537
Transportation and Utilities	\$328,938,668	\$138,964,418	\$82,291,243	962
Information	\$124,868,929	\$75,882,455	\$33,550,293	357
Wholesale Trade	\$258,881,931	\$175,117,980	\$100,974,593	1,163
Retail Trade (including Restaurants)	\$964,672,167	\$712,538,124	\$412,326,107	13,132
FIRE	\$2,005,867,782	\$741,694,518	\$190,138,923	1,895
Business Services	\$457,835,932	\$294,189,157	\$239,982,967	2,963
Health Services	\$319,968,995	\$217,755,169	\$184,114,019	3,086
Other Services	\$525,238,709	\$274,303,106	\$211,897,854	5,065
TOTAL	\$6,189,245,993	\$3,039,891,821	\$1,724,000,295	32,617

Notes: The Low Case is based on results achieved in Texas using the lower end of the range of relative change in retail prices for regulated and unregulated regions in Texas following the introduction of competition in portions of Texas. See Hartley, Peter R., Kenneth B. Medlock III, and Olivera Jankovska, Electricity Reform and Retail Pricing in Texas, Center for Energy Studies, Baker Institute, June 2017. The 2030 values represent the estimated direct savings that will occur in Florida assuming that statewide competition is introduced and reaches maturity by that time. Future usage by segment and baseline prices were obtained from projections provided by the energy Information Administration. See Table 55.2 Florida Reliability Coordinating Council, Electric Power Projections for Electricity Market Module Regions, Annual Energy Outlook 2017, U.S. Energy Information Administration, January 5, 2017.
SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

The Estimated Total Impact of Implementing Statewide Retail Electric Competition on Business Activity in Florida Low Case—Industrial—2030				
Category	Total Expenditures (2016 Dollars)	Gross Product (2016 Dollars)	Personal Income (2016 Dollars)	Employment (Permanent Jobs)
Agriculture	\$43,953,147	\$10,345,572	\$6,876,284	107
Mining	\$25,131,271	\$5,966,245	\$3,271,371	16
Construction	\$17,486,096	\$9,687,746	\$7,983,315	112
Nondurable Manufacturing	\$299,543,685	\$91,113,298	\$47,148,193	675
Durable Manufacturing	\$146,761,416	\$62,486,648	\$40,270,020	524
Transportation and Utilities	\$148,189,338	\$60,656,535	\$36,271,540	427
Information	\$47,865,174	\$29,112,328	\$12,474,239	113
Wholesale Trade	\$37,005,174	\$25,039,858	\$14,438,203	166
Retail Trade (including Restaurants)	\$101,939,646	\$76,667,948	\$44,605,694	1,379
FIRE	\$104,824,645	\$27,380,035	\$10,805,835	107
Business Services	\$30,897,878	\$18,664,817	\$15,225,690	185
Health Services	\$24,097,758	\$16,860,242	\$14,255,470	237
Other Services	\$42,273,662	\$21,636,847	\$17,305,349	412
TOTAL	\$1,069,968,892	\$455,618,116	\$270,931,201	4,460

Notes: The Low Case is based on results achieved in Texas using the lower end of the range of relative change in retail prices for regulated and unregulated regions in Texas following the introduction of competition in portions of Texas. See Hartley, Peter R., Kenneth B. Medlock III, and Olivera Jankovska, Electricity Reform and Retail Pricing in Texas, Center for Energy Studies, Baker Institute, June 2017. The 2030 values represent the estimated direct savings that will occur in Florida assuming that statewide competition is introduced and reaches maturity by that time. Future usage by segment and baseline prices were obtained from projections provided by the energy Information Administration. See Table 55.2 Florida Reliability Coordinating Council, Electric Power Projections for Electricity Market Module Regions, Annual Energy Outlook 2017, U.S. Energy Information Administration, January 5, 2017.
SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

The Estimated Total Impact of Implementing Statewide Retail Electric Competition on Business Activity in Florida Low Case—Total—2030				
Category	Total Expenditures (2016 Dollars)	Gross Product (2016 Dollars)	Personal Income (2016 Dollars)	Employment (Permanent Jobs)
Agriculture	\$443,378,909	\$126,853,841	\$82,596,403	1,314
Mining	\$245,134,813	\$59,048,258	\$34,086,679	210
Construction	\$472,638,063	\$238,708,825	\$196,710,947	2,802
Nondurable Manufacturing	\$1,732,169,272	\$488,958,064	\$256,595,775	4,176
Durable Manufacturing	\$507,795,786	\$204,698,534	\$132,302,966	1,830
Transportation and Utilities	\$1,394,112,623	\$536,686,403	\$309,691,002	3,451
Information	\$473,886,841	\$290,697,873	\$126,184,085	1,238
Wholesale Trade	\$1,715,974,866	\$1,161,065,909	\$669,480,949	7,714
Retail Trade (including Restaurants)	\$2,615,825,430	\$1,874,454,959	\$1,074,366,128	35,865
FIRE	\$4,078,247,597	\$1,402,383,641	\$371,470,722	3,729
Business Services	\$900,448,904	\$551,984,461	\$450,277,858	5,556
Health Services	\$855,633,196	\$597,240,916	\$504,972,713	8,462
Other Services	\$1,479,389,079	\$770,800,974	\$604,210,643	13,667
TOTAL	\$16,914,635,378	\$8,303,582,657	\$4,812,946,870	90,014

Notes: The Low Case is based on results achieved in Texas using the lower end of the range of relative change in retail prices for regulated and unregulated regions in Texas following the introduction of competition in portions of Texas. See Hartley, Peter R., Kenneth B. Medlock III, and Olivera Jankovska, Electricity Reform and Retail Pricing in Texas, Center for Energy Studies, Baker Institute, June 2017. The 2030 values represent the estimated direct savings that will occur in Florida assuming that statewide competition is introduced and reaches maturity by that time. Future usage by segment and baseline prices were obtained from projections provided by the energy Information Administration. See Table 55.2 Florida Reliability Coordinating Council, Electric Power Projections for Electricity Market Module Regions, Annual Energy Outlook 2017, U.S. Energy Information Administration, January 5, 2017.
SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

High Case: 2016

The Estimated Total Impact of Implementing Statewide Retail Electric Competition on Business Activity in Florida High Case—Residential—2016				
Category	Total Expenditures (2016 Dollars)	Gross Product (2016 Dollars)	Personal Income (2016 Dollars)	Employment (Permanent Jobs)
Agriculture	\$199,335,828	\$57,767,918	\$37,249,593	593
Mining	\$136,354,296	\$31,689,909	\$18,321,266	109
Construction	\$184,085,645	\$96,662,372	\$79,655,816	1,135
Nondurable Manufacturing	\$855,868,007	\$235,417,252	\$123,718,156	2,079
Durable Manufacturing	\$201,916,507	\$79,810,109	\$51,798,004	729
Transportation and Utilities	\$868,687,929	\$319,312,541	\$181,061,682	1,953
Information	\$285,291,316	\$175,922,288	\$75,937,628	728
Wholesale Trade	\$1,345,293,119	\$910,297,978	\$524,885,922	6,048
Retail Trade (including Restaurants)	\$1,467,618,043	\$1,028,089,884	\$584,914,662	20,229
FIRE	\$1,863,925,953	\$599,953,315	\$161,544,527	1,636
Business Services	\$390,030,460	\$226,535,717	\$184,795,097	2,281
Health Services	\$484,622,736	\$343,526,372	\$290,454,731	4,869
Other Services	\$863,849,049	\$449,850,553	\$355,256,163	7,759
TOTAL	\$9,146,878,890	\$4,554,836,208	\$2,669,593,246	50,149

Notes: The High Case is based on the differential between the estimated rates that would exist if the Texas competitive markets had remained regulated (which are also consistent with current US average rates) relative to current rates as determined by the Public Utility Commission of Texas. See Scope of Competition in Electric Markets in Texas, Report to the 85th Texas Legislature, Public Utility Commission of Texas, January 2017. The 2016 values represent the estimated direct savings that would have occurred in Florida had competition been fully implemented and mature in 2016.

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

The Estimated Total Impact of Implementing Statewide Retail Electric Competition on Business Activity in Florida High Case—Commercial—2016				
Category	Total Expenditures (2016 Dollars)	Gross Product (2016 Dollars)	Personal Income (2016 Dollars)	Employment (Permanent Jobs)
Agriculture	\$176,930,223	\$51,980,448	\$34,073,695	544
Mining	\$71,207,710	\$18,375,901	\$10,742,173	73
Construction	\$244,165,059	\$118,870,494	\$97,956,688	1,396
Nondurable Manufacturing	\$495,360,549	\$139,796,506	\$73,812,616	1,223
Durable Manufacturing	\$138,441,871	\$54,260,738	\$34,968,200	503
Transportation and Utilities	\$307,920,171	\$130,084,881	\$77,033,003	901
Information	\$116,890,064	\$71,033,724	\$31,406,499	334
Wholesale Trade	\$242,339,914	\$163,928,305	\$94,522,526	1,089
Retail Trade (including Restaurants)	\$903,031,620	\$667,008,419	\$385,979,326	12,293
FIRE	\$1,877,697,000	\$694,301,780	\$177,989,441	1,774
Business Services	\$428,581,168	\$275,391,082	\$224,648,554	2,773
Health Services	\$299,523,641	\$203,841,067	\$172,349,516	2,889
Other Services	\$491,677,047	\$256,775,707	\$198,358,021	4,741
TOTAL	\$5,793,766,038	\$2,845,649,052	\$1,613,840,259	30,533

Notes: The High Case is based on the differential between the estimated rates that would exist if the Texas competitive markets had remained regulated (which are also consistent with current US average rates) relative to current rates as determined by the Public Utility Commission of Texas. See Scope of Competition in Electric Markets in Texas, Report to the 85th Texas Legislature, Public Utility Commission of Texas, January 2017. The 2016 values represent the estimated direct savings that would have occurred in Florida had competition been fully implemented and mature in 2016.

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

The Estimated Total Impact of Implementing Statewide Retail Electric Competition on Business Activity in Florida High Case—Industrial—2016				
Category	Total Expenditures (2016 Dollars)	Gross Product (2016 Dollars)	Personal Income (2016 Dollars)	Employment (Permanent Jobs)
Agriculture	\$32,629,701	\$7,680,290	\$5,104,778	79
Mining	\$18,656,817	\$4,429,189	\$2,428,583	12
Construction	\$12,981,234	\$7,191,937	\$5,926,610	83
Nondurable Manufacturing	\$222,373,629	\$67,640,199	\$35,001,622	501
Durable Manufacturing	\$108,951,950	\$46,388,501	\$29,895,440	389
Transportation and Utilities	\$110,012,003	\$45,029,872	\$26,927,070	317
Information	\$35,533,890	\$21,612,253	\$9,260,558	84
Wholesale Trade	\$27,471,702	\$18,588,955	\$10,718,555	123
Retail Trade (including Restaurants)	\$75,677,405	\$56,916,339	\$33,114,135	1,024
FIRE	\$77,819,156	\$20,326,243	\$8,021,978	80
Business Services	\$22,937,800	\$13,856,286	\$11,303,165	138
Health Services	\$17,889,564	\$12,516,615	\$10,582,899	176
Other Services	\$31,382,894	\$16,062,646	\$12,847,052	306
TOTAL	\$794,317,746	\$338,239,324	\$201,132,446	3,311

Notes: The High Case is based on the differential between the estimated rates that would exist if the Texas competitive markets had remained regulated (which are also consistent with current US average rates) relative to current rates as determined by the Public Utility Commission of Texas. See Scope of Competition in Electric Markets in Texas, Report to the 85th Texas Legislature, Public Utility Commission of Texas, January 2017. The 2016 values represent the estimated direct savings that would have occurred in Florida had competition been fully implemented and mature in 2016.

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

The Estimated Total Impact of Implementing Statewide Retail Electric Competition on Business Activity in Florida High Case—Total—2016				
Category	Total Expenditures (2016 Dollars)	Gross Product (2016 Dollars)	Personal Income (2016 Dollars)	Employment (Permanent Jobs)
Agriculture	\$408,895,752	\$117,428,657	\$76,428,066	1,216
Mining	\$226,218,824	\$54,494,998	\$31,492,022	194
Construction	\$441,231,938	\$222,724,802	\$183,539,115	2,614
Nondurable Manufacturing	\$1,573,602,185	\$442,853,958	\$232,532,394	3,803
Durable Manufacturing	\$449,310,329	\$180,459,348	\$116,661,645	1,621
Transportation and Utilities	\$1,286,620,103	\$494,427,294	\$285,021,756	3,171
Information	\$437,715,271	\$268,568,266	\$116,604,685	1,145
Wholesale Trade	\$1,615,104,735	\$1,092,815,238	\$630,127,004	7,260
Retail Trade (including Restaurants)	\$2,446,327,069	\$1,752,014,641	\$1,004,008,122	33,546
FIRE	\$3,819,442,109	\$1,314,581,338	\$347,555,946	3,490
Business Services	\$841,549,428	\$515,783,085	\$420,746,816	5,192
Health Services	\$802,035,941	\$559,884,054	\$473,387,146	7,933
Other Services	\$1,386,908,990	\$722,688,906	\$566,461,236	12,806
TOTAL	\$15,734,962,673	\$7,738,724,584	\$4,484,565,951	83,993

Notes: The High Case is based on the differential between the estimated rates that would exist if the Texas competitive markets had remained regulated (which are also consistent with current US average rates) relative to current rates as determined by the Public Utility Commission of Texas. See Scope of Competition in Electric Markets in Texas, Report to the 85th Texas Legislature, Public Utility Commission of Texas, January 2017. The 2016 values represent the estimated direct savings that would have occurred in Florida had competition been fully implemented and mature in 2016.

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

High Case: 2030

The Estimated Total Impact of Implementing Statewide Retail Electric Competition on Business Activity in Florida High Case—Residential—2030				
Category	Total Expenditures (2016 Dollars)	Gross Product (2016 Dollars)	Personal Income (2016 Dollars)	Employment (Permanent Jobs)
Agriculture	\$245,195,962	\$71,058,276	\$45,819,409	729
Mining	\$167,724,604	\$38,980,638	\$22,536,343	135
Construction	\$226,437,250	\$118,900,969	\$97,981,806	1,397
Nondurable Manufacturing	\$1,052,773,006	\$289,578,447	\$152,181,334	2,557
Durable Manufacturing	\$248,370,364	\$98,171,596	\$63,714,895	896
Transportation and Utilities	\$1,068,542,339	\$392,775,079	\$222,717,579	2,403
Information	\$350,926,771	\$216,395,793	\$93,408,194	895
Wholesale Trade	\$1,654,797,550	\$1,119,725,390	\$645,643,634	7,440
Retail Trade (including Restaurants)	\$1,805,265,118	\$1,264,617,053	\$719,482,866	24,884
FIRE	\$2,292,749,480	\$737,981,382	\$198,710,217	2,012
Business Services	\$479,762,693	\$278,653,584	\$227,309,921	2,806
Health Services	\$596,117,311	\$422,559,657	\$357,278,105	5,989
Other Services	\$1,062,590,204	\$553,345,277	\$436,988,058	9,544
TOTAL	\$11,251,252,652	\$5,602,743,141	\$3,283,772,361	61,686

Notes: The High Case is based on the differential between the estimated rates that would exist if the Texas competitive markets had remained regulated (which are also consistent with current US average rates) relative to current rates as determined by the Public Utility Commission of Texas. See Scope of Competition in Electric Markets in Texas, Report to the 85th Texas Legislature, Public Utility Commission of Texas, January 2017. The 2030 values represent the estimated direct savings that will occur in Florida assuming that statewide competition is introduced and reaches maturity by that time. Future usage by segment and baseline prices were obtained from projections provided by the energy Information Administration. See Table 55.2 Florida Reliability Coordinating Council, Electric Power Projections for Electricity Market Module Regions, Annual Energy Outlook 2017, U.S. Energy Information Administration, January 5, 2017.

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

The Estimated Total Impact of Implementing Statewide Retail Electric Competition on Business Activity in Florida High Case—Commercial—2030				
Category	Total Expenditures (2016 Dollars)	Gross Product (2016 Dollars)	Personal Income (2016 Dollars)	Employment (Permanent Jobs)
Agriculture	\$220,246,239	\$64,706,289	\$42,415,609	677
Mining	\$88,640,765	\$22,874,685	\$13,372,069	91
Construction	\$303,941,491	\$147,972,340	\$121,938,422	1,738
Nondurable Manufacturing	\$616,634,603	\$174,021,454	\$91,883,403	1,522
Durable Manufacturing	\$172,335,178	\$67,544,839	\$43,529,107	626
Transportation and Utilities	\$383,305,115	\$161,932,231	\$95,892,205	1,121
Information	\$145,507,062	\$88,424,184	\$39,095,430	416
Wholesale Trade	\$301,669,515	\$204,061,195	\$117,663,509	1,356
Retail Trade (including Restaurants)	\$1,124,111,610	\$830,305,263	\$480,474,694	15,302
FIRE	\$2,337,394,339	\$864,280,579	\$221,564,774	2,208
Business Services	\$533,506,309	\$342,812,261	\$279,646,960	3,452
Health Services	\$372,852,948	\$253,745,389	\$214,544,084	3,596
Other Services	\$612,049,307	\$319,639,476	\$246,919,986	5,902
TOTAL	\$7,212,194,480	\$3,542,320,185	\$2,008,940,253	38,008

Notes: The High Case is based on the differential between the estimated rates that would exist if the Texas competitive markets had remained regulated (which are also consistent with current US average rates) relative to current rates as determined by the Public Utility Commission of Texas. See Scope of Competition in Electric Markets in Texas, Report to the 85th Texas Legislature, Public Utility Commission of Texas, January 2017. The 2030 values represent the estimated direct savings that will occur in Florida assuming that statewide competition is introduced and reaches maturity by that time. Future usage by segment and baseline prices were obtained from projections provided by the energy Information Administration. See Table 55.2 Florida Reliability Coordinating Council, Electric Power Projections for Electricity Market Module Regions, Annual Energy Outlook 2017, U.S. Energy Information Administration, January 5, 2017.

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

The Estimated Total Impact of Implementing Statewide Retail Electric Competition on Business Activity in Florida High Case—Industrial—2030				
Category	Total Expenditures (2016 Dollars)	Gross Product (2016 Dollars)	Personal Income (2016 Dollars)	Employment (Permanent Jobs)
Agriculture	\$51,217,651	\$12,055,471	\$8,012,784	124
Mining	\$29,284,926	\$6,952,336	\$3,812,058	19
Construction	\$20,376,170	\$11,288,921	\$9,302,784	130
Nondurable Manufacturing	\$349,051,777	\$106,172,355	\$54,940,769	787
Durable Manufacturing	\$171,017,904	\$72,814,339	\$46,925,783	611
Transportation and Utilities	\$172,681,831	\$70,681,748	\$42,266,441	497
Information	\$55,776,252	\$33,923,966	\$14,535,960	132
Wholesale Trade	\$43,121,329	\$29,178,405	\$16,824,526	193
Retail Trade (including Restaurants)	\$118,788,064	\$89,339,502	\$51,978,050	1,607
FIRE	\$122,149,892	\$31,905,362	\$12,591,806	125
Business Services	\$36,004,629	\$21,749,707	\$17,742,167	216
Health Services	\$28,080,596	\$19,646,875	\$16,611,590	276
Other Services	\$49,260,584	\$25,212,950	\$20,165,549	480
TOTAL	\$1,246,811,606	\$530,921,936	\$315,710,268	5,197

Notes: The High Case is based on the differential between the estimated rates that would exist if the Texas competitive markets had remained regulated (which are also consistent with current US average rates) relative to current rates as determined by the Public Utility Commission of Texas. See Scope of Competition in Electric Markets in Texas, Report to the 85th Texas Legislature, Public Utility Commission of Texas, January 2017. The 2030 values represent the estimated direct savings that will occur in Florida assuming that statewide competition is introduced and reaches maturity by that time. Future usage by segment and baseline prices were obtained from projections provided by the energy Information Administration. See Table 55.2 Florida Reliability Coordinating Council, Electric Power Projections for Electricity Market Module Regions, Annual Energy Outlook 2017, U.S. Energy Information Administration, January 5, 2017.

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

The Estimated Total Impact of Implementing Statewide Retail Electric Competition on Business Activity in Florida High Case—Total—2030				
Category	Total Expenditures (2016 Dollars)	Gross Product (2016 Dollars)	Personal Income (2016 Dollars)	Employment (Permanent Jobs)
Agriculture	\$516,659,852	\$147,820,036	\$96,247,802	1,531
Mining	\$285,650,295	\$68,807,658	\$39,720,469	244
Construction	\$550,754,911	\$278,162,230	\$229,223,012	3,265
Nondurable Manufacturing	\$2,018,459,386	\$569,772,256	\$299,005,507	4,866
Durable Manufacturing	\$591,723,445	\$238,530,774	\$154,169,785	2,133
Transportation and Utilities	\$1,624,529,284	\$625,389,057	\$360,876,225	4,022
Information	\$552,210,086	\$338,743,943	\$147,039,584	1,442
Wholesale Trade	\$1,999,588,394	\$1,352,964,990	\$780,131,668	8,989
Retail Trade (including Restaurants)	\$3,048,164,793	\$2,184,261,818	\$1,251,935,610	41,793
FIRE	\$4,752,293,711	\$1,634,167,323	\$432,866,797	4,346
Business Services	\$1,049,273,631	\$643,215,553	\$524,699,048	6,474
Health Services	\$997,050,856	\$695,951,921	\$588,433,780	9,861
Other Services	\$1,723,900,094	\$898,197,702	\$704,073,593	15,926
TOTAL	\$19,710,258,738	\$9,675,985,262	\$5,608,422,882	104,892

Notes: The High Case is based on the differential between the estimated rates that would exist if the Texas competitive markets had remained regulated (which are also consistent with current US average rates) relative to current rates as determined by the Public Utility Commission of Texas. See Scope of Competition in Electric Markets in Texas, Report to the 85th Texas Legislature, Public Utility Commission of Texas, January 2017. The 2030 values represent the estimated direct savings that will occur in Florida assuming that statewide competition is introduced and reaches maturity by that time. Future usage by segment and baseline prices were obtained from projections provided by the energy Information Administration. See Table 55.2 Florida Reliability Coordinating Council, Electric Power Projections for Electricity Market Module Regions, Annual Energy Outlook 2017, U.S. Energy Information Administration, January 5, 2017.

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group