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DE-OHIO EXHIBIT \_\_\_\_\_

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**PUCO**

**BEFORE**

**THE PUBLIC UTILITIES COMMISSION OF OHIO**

In The Matter of the Application of	)	
Duke Energy Ohio for Approval	)	Case No. 08-920-EL-SSO
of an Electric Security Plan	)	
In the Matter of the Application of	)	
Duke Energy Ohio for Approval to	)	Case No. 08-921-EL-AAM
Amend Accounting Methods	)	
In the Matter of the Application of	)	
Duke Energy Ohio for Approval of	)	
a Certificate of Public Convenience and	)	Case No. 08-922-EL-UNC
Necessity to Establish an Unavoidable	)	
Capacity Charge	)	
In the Matter of the Application of	)	
Duke Energy Ohio for Approval to	)	Case No. 08-923-EL-ATA
Amend its Tariffs	)	

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**DIRECT TESTIMONY OF**

**PAUL G. SMITH**

**ON BEHALF OF**

**DUKE ENERGY OHIO**

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July 31, 2008

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### **Attachments:**

PGS-1	Summary of proposed ESP price structure
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## **I. INTRODUCTION AND PURPOSE**

1    **Q.    PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2    A.    My name is Paul G. Smith and my business address is 139 East Fourth Street,  
3           Cincinnati, Ohio 45202.

4    **Q.    BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5    A.    I am employed by the Duke Energy Corporation (Duke Energy) affiliated  
6           companies as Vice President, Rates – Ohio and Kentucky.

7    **Q.    PLEASE SUMMARIZE YOUR EDUCATION AND PROFESSIONAL  
8           QUALIFICATIONS.**

9    A.    I received a Bachelor of Science in Industrial Management Degree from Purdue  
10          University and a Master of Business Administration Degree, with Honors, from  
11          the University of Chicago Graduate School of Business. I am a Certified Public  
12          Accountant (CPA) in the State of Ohio and a member of the American Institute of  
13          Certified Public Accountants. I am also a member of the Edison Electric  
14          Institute's Economic Regulation and Competition Committee, and previously  
15          served on the Budgeting and Financial Forecasting Committee.

16   **Q.    PLEASE SUMMARIZE YOUR WORK EXPERIENCE.**

17   A.    Upon graduation from Purdue University in 1982, I began my career as a public  
18          accountant in the Chicago office of Deloitte & Touche (then Touche, Ross &  
19          Co.), and from 1984 to 1987 in the Indianapolis office of Crowe, Chizek & Co.  
20          Since 1987, I have held various positions with PSI Energy, Inc., Cinergy Services,  
21          Inc., and Duke Energy Shared Services, Inc., including responsibilities in Rates  
22          and Regulation, Budgets and Forecasts, Investor Relations, and Corporate

1 Development as well as the International Business Unit.

2 Most recently, in 1998, I served as Distribution Price Control Program  
3 Manager at Midlands Electricity, the regional electric company in the United  
4 Kingdom of which Cinergy Corp. (Cinergy) previously held a 50% equity  
5 ownership. In 1999, I was named Revenue Requirements Manager with  
6 responsibilities related to the implementation of Amended Substitute Bill No. 3,  
7 Ohio's electric restructuring legislation. In 2001, I was appointed General  
8 Manager, Budgets & Forecasts with responsibility for Cinergy's financial  
9 planning and analysis activities, and in 2005 I was responsible for strategic and  
10 financial planning related to the due diligence and integration of the Cinergy/Duke  
11 Energy merger. I was appointed to my current position as Vice President, Rates in  
12 April 2006.

13 **Q. PLEASE DESCRIBE YOUR DUTIES AS VICE PRESIDENT, RATES.**

14 A. As Vice President, Rates, I am responsible for all state and federal regulated rate  
15 matters involving Duke Energy Ohio, Inc. (DE-Ohio or Company), and Duke  
16 Energy Kentucky, Inc.

17 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE PUBLIC**  
18 **UTILITIES COMMISSION OF OHIO?**

19 A. Yes. I provided testimony in several proceedings before the Public Utilities  
20 Commission of Ohio (PUCO or Commission).

21 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**  
22 **PROCEEDING?**

23 A. The purpose of my testimony in this proceeding is to support various components

1 of DE-Ohio's Electric Security Plan (ESP). Specifically, I provide testimony  
2 regarding the proposed price structure and its primary components. I also discuss  
3 the excess earnings test, the low-income pilot program, and the projected price  
4 impact. Finally, I discuss the requested financial relief and sponsor various  
5 schedules associated with my testimony, including schedules identified as Part B,  
6 Part C and Part F.

7 **Q. WERE THESE SCHEDULES PREPARED BY YOU OR UNDER YOUR**  
8 **DIRECTION AND SUPERVISION?**

9 A. Yes.

10 **II. ESP PRICE STRUCTURE**

11 **Q: PLEASE DESCRIBE DE-OHIO'S PROPOSED ESP PRICE STRUCTURE.**

12 A. The Company's proposed ESP price structure improves upon the existing  
13 structure approved in Case No. 03-93-EL-ATA, *et al.* The improvements include  
14 enhanced transparency, simplified structure and clear functional alignment. Price  
15 transparency is enhanced by clearly identifying components as either avoidable or  
16 unavoidable, and eliminating current provisions whereby certain components are  
17 either avoidable or unavoidable depending on a designated level of customer  
18 switching. Additional transparency and simplification comes from consolidating  
19 the recovery of all costs for fuel, economy purchased power and emission  
20 allowances within a single rider, rather than the existing recovery in two separate  
21 components. The Company's proposed ESP simplifies the price structure by  
22 designating only four primary components of the total bill:

- 23
  - Avoidable Generation

- Unavoidable Generation
- Transmission
- Distribution

Improved clarity, transparency and simplification will improve a customer's ability to evaluate offers from alternative suppliers. Further, such improvements will enhance the continued development of a competitive retail electric market.

Attachment PGS-1 provides a summary of DE-Ohio's proposed ESP price structure. To facilitate understanding of the proposed price structure, Attachment PGS-2 graphically summarizes the transition from the current RSP to the proposed ESP.

### **III. AVOIDABLE GENERATION CHARGE**

**Q: PLEASE DESCRIBE DE-OHIO'S AVOIDABLE GENERATION CHARGE.**

A. The Company's avoidable generation charge is also referred to as the Price-to-Compare (PTC) and represents the charge that consumers bypass, or do not pay, if they switch to a competitive supplier. The proposed PTC compensates DE-Ohio for base generation (including inflation), fuel, emission allowances, economy purchased power, energy from renewable resources (renewable capacity costs are recoverable via Rider SRA-NDC discussed later), congestion and losses, environmental compliance, homeland security, and changes in tax law.

**Q: PLEASE DESCRIBE THE COMPONENTS OF THE PTC.**

A. The avoidable PTC charge consists of four component riders: base generation (Rider PTC-BG), base generation inflation adjustment (Rider PTC-IA), fuel,

1 purchased power, and emission allowances (Rider PTC-FPP) and the annually  
2 adjusted component (Rider PTC-AAC).

3 **Q. PLEASE DESCRIBE RIDER PTC-BG.**

4 A. DE-Ohio's proposed Rider PTC-BG represents the Commission approved  
5 unbundled generation price less regulatory transition charges (RTC) and less the  
6 proposed transfer of the historical approved unbundled fuel, purchased power and  
7 SO<sub>2</sub> emission allowance costs to Rider FPP. Said differently, excluding the  
8 proposed transfer of fuel clause costs previously frozen in the Company's market-  
9 based standard service offer (MBSSO), Rider PTC-BG is equivalent to the term  
10 currently known as "little g."

11 **Q. WHY DOES DE-OHIO PROPOSE TO TRANSFER THE RECOVERY OF**  
12 **HISTORICAL UNBUNDLED FUEL CLAUSE COSTS TO RIDER FPP?**

13 A. As further described in the testimony of Mr. William Don Wathen Jr., DE-Ohio's  
14 recovery of fuel, economy purchased power and SO<sub>2</sub> emission allowance costs are  
15 currently included in two places: first, in the MBSSO price established when the  
16 historical electric fuel cost (EFC) component of 1.2453 ¢/kWh was frozen in  
17 1999, and second, the incremental costs above the frozen EFC rate are recovered  
18 in the current Rider FPP. The Company proposes to consolidate recovery of the  
19 total fuel, economy purchased power, and emission allowance costs in a single  
20 component, Rider PTC-FPP. This will simplify the price structure and improve  
21 price transparency. This transfer will not impact the total price as Rider PTC-BG  
22 will decrease by the same amount that Rider PTC-FPP will increase (1.2453  
23 ¢/kWh). Both Rider PTC-BG and Rider PTC-FPP are avoidable by customers

1 who switch to an alternative supplier; therefore, the transfer will neither provide  
2 an incentive nor impede consumer switching. The new price structure will benefit  
3 competitive suppliers by clearly stating the fuel component of DE-Ohio's ESP  
4 prices.

5 **Q. DOES DE-OHIO PROPOSE AN ADJUSTMENT OF RIDER PTC-BG?**

6 A. Yes, DE-Ohio proposes an increase of \$9.00/MWh to Rider PTC-BG, effective  
7 January 1, 2009.

8 **Q. WHY DOES DE-OHIO BELIEVE A \$9.00/MWH INCREASE IN RIDER**  
9 **PTC-BG IS APPROPRIATE?**

10 A. In determining the appropriate price increase to propose, the Company took into  
11 consideration the reasonable cost recovery of, or compensation for, the following:

- 12 • Inflationary update – The Company's unbundled base generation  
13 charge (excluding fuel and environmental costs) has not increased  
14 since 1993, when it was approved in Case No. 92-1464-EL-AIR.  
15 Consequently, while increases in fuel and environmental costs have  
16 generally been recoverable in riders, over the past 15 years DE-Ohio  
17 has had to absorb significant inflationary pressures of approximately  
18 40%<sup>1</sup> on the frozen unbundled base generation component of its  
19 MBSSO price. Included in the frozen "little g" rate are costs such as  
20 labor, health care and retirement benefits, maintenance expenses and  
21 property taxes which have escalated at, or above, the average rate of  
22 inflation. Adjusting Rider PTC-BG to reflect the estimated inflation

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<sup>1</sup> U.S. Department of Labor: Bureau of Labor Statistics, Producer Price Index (See Part B, Schedule 1).



1 experienced during the time period since the current base generation  
2 rate was approved would equate to a price increase of approximately  
3 \$10/MWh (or 25% of “little g”).

- 4 ■ Continued dedication of generating assets – The Company will  
5 continue to dedicate its efficient legacy generating assets to serve the  
6 load requirements in its certified territory. As reserve margins  
7 persistently decline, and the observable prices for generation capacity  
8 continue to escalate, the value of DE-Ohio’s dedicated capacity has  
9 appreciably increased. Physical generation capacity market prices  
10 currently range from \$40/kW-year<sup>2</sup> to \$80/kW-year<sup>3</sup>, to even higher  
11 prices to construct new capacity. Assuming the low end of the  
12 observable physical capacity market price range (*i.e.*, the lowest  
13 clearing price for the PJM capacity auction), the current market value  
14 of DE-Ohio’s dedicated capacity is at least \$150 million, which  
15 significantly exceeds the \$50 million that DE-Ohio charges for  
16 dedicating capacity in the unavoidable System Resource Adequacy  
17 component (currently known as Infrastructure Maintenance Fund or  
18 IMF) described below. DE-Ohio should receive full market value  
19 compensation for its generating capacity - the same compensation that  
20 our Ohio-based co-owners receive for selling their capacity ownership  
21 in the same stations (our station co-owners sell their capacity into the  
22 PJM capacity auction). Adjusting Rider PTC-BG, an avoidable cost,

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<sup>2</sup> PJM capacity auction price (rest of market) = \$41/kW/yr (2008), \$37 (2009), \$64 (2010) and \$40 (2011).

1 to reflect the reasonable incremental value of the dedicated capacity in  
2 excess of the current IMF would equate to a price increase of at least  
3 \$5/MWh.

- 4 • Dedication of coal purchases – The Company will dedicate its low-cost  
5 2009, 2010 and 2011 coal purchase agreements thereby benefiting DE-  
6 Ohio's Rider FPP load. Prior to enactment of Amended Substitute  
7 Senate Bill No. 221 (SB-221), Duke Energy's Commercial Businesses  
8 purchased coal for delivery after December 31, 2008, in anticipation of  
9 competing in the wholesale power markets. Such purchases were  
10 made without any assurance of recovery and exposed DE-Ohio to  
11 significant risk had the market price for coal declined. To the contrary,  
12 market prices for the delivery of coal in 2009, 2010 and 2011 have  
13 increased significantly, not unlike other energy commodities.  
14 According to the latest data from the U.S. Department of Energy,  
15 Energy Information Administration, the price for coal has increased  
16 from \$60.00/ton to \$140.00/ton in 2008. With the rise in coal prices,  
17 the current estimated value of the coal agreements is approximately  
18 \$500 million in excess of the Duke Energy Commercial Businesses  
19 purchase price, which equates to an average \$8/MWh over the three-  
20 year ESP period.

21 The total impact of the items listed above is approximately \$23/MWh over  
22 the term of the ESP. Increasing Rider PTC-BG by \$23/MWh would produce a

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<sup>3</sup> The Midwest Independent System Operator, Inc., (MISO) estimated cost of new entrant

1 total price-to-compare which is nearer, but still below, the estimated retail market  
2 price sponsored by DE-Ohio witness Judah L. Rose.

3 **Q. DOES THE COMPANY PROPOSE TO INCREASE RIDER PTC-BG BY**  
4 **THE FULL IMPACT OF THE ITEMS DESCRIBED ABOVE?**

5 A. No. Although a full \$23/MWh price increase is justified, and would result in a  
6 competitive electric price that is very similar to the retail market price estimated  
7 by Mr. Rose, DE-Ohio proposes to mitigate the impact of the above items.  
8 Consumers will realize a benefit in the form of a lower Rider PTC-FPP price as  
9 the delivered cost of fuel will be much less than the current market price, and they  
10 will also realize a benefit in the form of a lower price for generation capacity as  
11 the cost of DE-Ohio's dedicated capacity will be less than the current market  
12 price. As compensation for these benefits, and the inflation price adjustment  
13 previously discussed, DE-Ohio believes a \$9/MWh price increase is reasonable  
14 and represents a fair balancing of stakeholder interests. Customers will benefit  
15 from the mitigation of the \$23/MWh justifiable increase, and the Company will  
16 receive a fair increase that brings its price closer to the retail market. Even with  
17 the proposed \$9/MWh price increase, DE-Ohio's prices will remain well below  
18 the estimated retail market price supported by Mr. Rose.

19 Weighing the initial price impact on consumers, and accounting for the  
20 termination of the residential and non-residential RTC after 2008 and 2010,  
21 respectively, DE-Ohio also proposes to defer approximately 10% of the increase  
22 (or \$1/MWh of the \$9/MWh increase) from 2009 until 2011 for the exclusive  
23 benefit of non-residential customers. The Company does not propose a carrying

1 cost on the deferral, and proposes recovery of the deferral through increases to  
2 Rider PTC-BG, which is an avoidable charge.

3 The Company's proposed deferral provides several benefits: the initial  
4 price impact to non-residential customers is further mitigated; the two-year  
5 deferral will not accrue carrying costs; and the recovery of the deferral as an  
6 avoidable charge will support the continued development of a competitive retail  
7 market.

8 **Q. PLEASE DESCRIBE RIDER PTC-IA.**

9 A. No business is immune to the economic realities of inflation, as demonstrated by  
10 the 40% inflation that has occurred since 1993. Labor, health care and retirement  
11 benefits, maintenance and real estate tax expenditures continually increase  
12 without any current opportunity for recovery. DE-Ohio proposes Rider PTC-IA to  
13 mitigate the adverse financial impact of future inflation. Rider PTC-IA will be  
14 effective beginning January 1, 2010, and computed at a fixed rate of 3% of Rider  
15 PTC-BG, compounded annually. Rider PTC-IA will not begin in 2009 as the  
16 Rider PTC-BG adjustment described previously takes into consideration the cost  
17 of inflation up to December 31, 2008. The 3% annual increase in Rider PTC-BG  
18 is lower than recent inflation data, as shown at Part B, Schedule I, and stated at a  
19 fixed rate for purposes of administrative ease. DE-Ohio assumes the risk that  
20 future inflation may increase at a greater rate without an opportunity for a  
21 commensurate price increase.

22 **Q. PLEASE DESCRIBE RIDER PTC-FPP.**

23 A. DE-Ohio proposes to maintain the current Rider FPP, with the new naming

1 convention Rider PTC-FPP. As I previously described, the Company proposes to  
2 transfer the recovery of fuel, economy purchased power and SO<sub>2</sub> emission  
3 allowance costs from Rider PTC-BG to Rider PTC-FPP. Mr. Charles R.  
4 Whitlock and Mr. William Don Wathen Jr. discuss Rider PTC-FPP, including  
5 proposed changes to its calculation.

6 **Q. PLEASE DESCRIBE RIDER PTC-AAC.**

7 A. DE-Ohio proposes to slightly modify the current Rider AAC, with the new  
8 naming convention Rider PTC-AAC. Rider PTC-AAC recovers costs associated  
9 with environmental compliance, homeland security and changes in tax law. DE-  
10 Ohio proposes to expand the recovery to also include costs incurred to increase  
11 the Company's fuel flexibility. DE-Ohio proposes to update Rider PTC-AAC in  
12 this proceeding. Rider PTC-AAC is further described in the testimony of Mr.  
13 Charles R. Whitlock and Mr. William Don Wathen Jr.

14 **Q. PLEASE DESCRIBE ATTACHMENT PGS-3.**

15 A. Attachment PGS-3 reflects the projected total PTC, assuming current estimated  
16 costs recoverable under Riders PTC-FPP and PTC-AAC, over the 3-year ESP  
17 period 2009-2011. This information was provided to DE-Ohio witness Mr. Judah  
18 L. Rose.

19 **IV. UNAVOIDABLE GENERATION CHARGE**

20 **Q. PLEASE DESCRIBE THE UNAVOIDABLE GENERATION CHARGE.**

21 A. The unavoidable generation charge consists of the System Resource Adequacy  
22 (SRA) charge and the RTC. System resource adequacy provides partial  
23 compensation for DE-Ohio's Provider of Last Resort (POLR) obligation. The

1 SRA consists of three unavoidable components: market capacity purchases (Rider  
2 SRA-SRT), capacity dedication (Rider SRA-CD) and newly dedicated capacity  
3 (Rider SRA-NDC).

4 **Q. PLEASE DESCRIBE RIDER SRA-SRT.**

5 A. DE-Ohio proposes to maintain its current Rider SRT, with the new naming  
6 convention Rider SRA-SRT. Rider SRA-SRT is further described in the  
7 testimony of Mr. Charles R. Whitlock and Mr. William Don Wathen Jr.

8 **Q. PLEASE DESCRIBE RIDER SRA-CD.**

9 A. DE-Ohio's compensation for dedicating its low-cost legacy generating assets to  
10 serve the load requirements in its certified territory is split into an unavoidable  
11 and an avoidable component. Rider SRA-CD (currently known as Infrastructure  
12 Maintenance Fund) represents the unavoidable component. Despite the increase  
13 in the value of the dedicated capacity, which is more fully described within the  
14 avoidable Rider PTC-BG adjustment above, the Company is not proposing to  
15 increase the unavoidable component approved by the Commission in Case No.  
16 03-93-EL-ATA, *et al.* In addition to providing first call on legacy generating asset  
17 capacity, Rider SRA-CD also compensates DE-Ohio for the risk of consumers'  
18 ability to switch competitive retail electric service providers and for assuming the  
19 risk associated with maintaining a reasonably stable capacity price offer during the  
20 ESP period.

21 **Q. PLEASE DESCRIBE RIDER SRA-NDC.**

22 A. Rider SRA-NDC represents an unavoidable charge for any newly dedicated  
23 capacity to provide a long-term reduction in DE-Ohio's short capacity position, to

1 maintain system reliability and to help fulfill DE-Ohio's statutory POLR  
2 obligation. Such new capacity, including renewable sources, shall be dedicated to  
3 serving load in DE-Ohio's certified territory for the life of the asset, and shall be  
4 unavoidable by all consumers for the life of the asset. All energy costs, including  
5 fuel, related to the newly dedicated capacity will be recoverable via the avoidable  
6 Rider PTC-FPP. The proposed annual compensation will be computed using the  
7 most recently approved capital structure and debt cost rate, and the return on  
8 equity (ROE) will equal the average ROE for the highly regulated companies as  
9 discussed in the testimony of DE-Ohio witness Mr. Judah L. Rose. The cost  
10 allocation and rate design of Rider SRA-NDC will be similar to Rider SRA-SRT.  
11 Part C, Schedule 3 depicts the calculation of the unavoidable Rider SRA-NDC  
12 charge, including any construction work-in-progress.

13 **Q. PLEASE DESCRIBE THE RTC.**

14 A. The RTC was previously approved by the Commission in Case No. 99-1658-EL-  
15 ETP as an unavoidable charge. Consistent with SB-221, DE-Ohio proposes to  
16 terminate the residential and non-residential RTC, as originally scheduled, on  
17 December 31, 2008, and December 31, 2010, respectively.

18 **V. DISTRIBUTION RIDERS**

19 **Q. PLEASE DESCRIBE DE-OHIO'S PROPOSED DISTRIBUTION RIDERS.**

20 A. DE-Ohio proposes to establish three unavoidable distribution riders: Infrastructure  
21 Modernization (Rider DR-IM), Energy Efficiency (Rider DR-SAW), and an  
22 Economic Competitiveness Fund (Rider DR-ECF).

1     **Q.     PLEASE DESCRIBE DE-OHIO'S PROPOSED RIDER DR-IM.**

2     A.     DE-Ohio proposes Rider DR-IM to recover costs associated with modernizing,  
3           maintaining and operating its aging distribution system including the costs and  
4           benefits associated with the deployment of a SmartGrid infrastructure. Rider DR-  
5           IM is further described in the testimony of Mr. William Don Wathen Jr.  
6           Additionally, DE-Ohio proposes to amend its distribution rate design to adopt a  
7           more levelized pricing methodology, consistent with the proposal in the pending  
8           electric distribution rate case, Case No. 08-709-EL-AIR, *et al.* I believe such a  
9           rate design more accurately assigns specific customer-related costs to serve,  
10          thereby providing a more accurate price signal.

11    **Q.     PLEASE DESCRIBE THE RECOVERY MECHANISM REFERRED TO**  
12       **AS SAVE-A-WATT (SAW) (RIDER DR-SAW).**

13    A.     DE-Ohio is requesting that the Commission authorize the Company to implement  
14           Rider DR-SAW which will provide for the recovery of costs and incentives,  
15           applicable to energy efficiency<sup>4</sup> programs administered by the Company. DE-  
16           Ohio witness Mr. Theodore E. Schultz provides a detailed discussion of the  
17           Company's Energy Efficiency Plan and the method of calculating the net costs for  
18           recovery in Rider DR-SAW.

19                 Attachment PGS-5 provides a description of how the revenue requirement  
20           and prices for the proposed Rider DR-SAW will be developed and implemented.  
21           Additionally, Mr. Schultz sponsors the proposed Rider DR-SAW in the form of a  
22           tariff.

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<sup>4</sup> The term "energy efficiency," as used in this testimony, includes both energy efficiency/conservation



1    **Q.    IS THE COMPANY'S PROPOSED RATE ADJUSTMENT MECHANISM**  
2       **CONSISTENT WITH OHIO LAW AND THE COMMISSION'S RULES?**

3    A.    Yes. The structure of Rider DR-SAW is consistent with R.C. 4928.64, R.C.  
4       4928.66, and R.C. 4905.31, as recently modified by SB-221.

5    **Q.    PLEASE DESCRIBE DE-OHIO'S PROPOSED LOW-INCOME PILOT**  
6       **PROGRAM.**

7    A.    DE-Ohio's proposed low-income pilot program is intended to provide an  
8       incentive for low-income consumers to: implement energy efficiency measures;  
9       mitigate the impact, if any, of the more levelized distribution rate design; and to  
10       diminish reliance upon programs such as Percentage Income Payment Plan  
11       (PIPP). DE-Ohio proposes to enroll up to 10,000 eligible customers who shall be  
12       non-PIPP customers verified at or below 175% of poverty level. The proposed  
13       tariff will provide a \$4 per month credit in the distribution rates to enrolled  
14       customers.

15   **Q.    PLEASE DESCRIBE RIDER DR-ECF.**

16   A.    DE-Ohio proposes Rider DR-ECF to permit the Commission and the Company to  
17       support public and private economic development. Rider DR-ECF, which is  
18       unavoidable, is further described in the testimony of Mr. Barry W. Wood Jr. The  
19       Rider DR-ECF calculation specifically excludes from recovery the \$1 million  
20       funding to be provided by DE-Ohio's shareholders for public green infrastructure  
21       projects.

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and demand response measures.

1                                   **VI.    GOVERNMENTAL AGGREGATION**

2   **Q.    PLEASE DESCRIBE THE “STANDBY SERVICE” CHARGE THAT IS**  
3       **AVOIDABLE BY GOVERNMENTAL AGGREGATORS.**

4   A.   Per SB-221, governmental aggregators may elect to avoid “standby service.”  
5       Since “standby service” is not defined as a separate component of the proposed  
6       ESP price structure, DE-Ohio proposes that a charge equivalent to five percent  
7       (5%) of the SRA-SRT and SRA-CD serve as a proxy for “standby service.”  
8       Governmental aggregation customers will receive this credit on their monthly bill.  
9       The schedule illustrating the computation of the “standby service” credit is set  
10      forth at Part F, Schedule 5.

11                                   **VII.   EXCESS EARNINGS TEST**

12   **Q.    WILL THE PROPOSED ESP CAUSE DE-OHIO TO EARN AN ROE**  
13       **THAT SIGNIFICANTLY EXCEEDS THE RETURN EARNED BY**  
14       **PUBLICLY TRADED COMPANIES, INCLUDING UTILITIES, THAT**  
15       **FACE COMPARABLE BUSINESS AND FINANCIAL RISKS?**

16   A.   No. As shown on Attachment PGS-4, the Company’s actual earned ROE for  
17       calendar year 2007 was approximately 4%, which is considerably lower than the  
18       earnings test threshold supported in the testimony of Mr. Judah L. Rose.  
19       Prospectively, the only proposed ESP adjustment that will materially impact DE-  
20       Ohio’s ROE is the initial adjustment to PTC-BG. As also shown on Attachment  
21       PGS-4, a *pro forma* ROE calculation that includes the proposed Rider PTC-BG  
22       adjustment would result in an earned ROE that is only slightly higher,  
23       approximately 6%; consequently, the proposed adjustment to Rider PTC-BG will

1 not cause DE-Ohio's ROE to exceed the threshold. All other ESP proposed  
2 adjustments essentially represent cost-based recovery with authorized regulated  
3 returns and, therefore, cannot cause DE-Ohio to earn a ROE that significantly  
4 exceeds the return earned by publicly traded companies, including utilities, that  
5 face comparable business and financial risks.

6 **Q. WHAT DOES DE-OHIO PROPOSE REGARDING THE EARNINGS**  
7 **TEST?**

8 A. Even though the Commission is not required to apply an earnings test in this  
9 proceeding, DE-Ohio requests that the Commission approve the earnings test  
10 methodology proposed by Mr. Rose for use in the Commission's future reviews of  
11 DE-Ohio's earnings under the ESP. Additionally, DE-Ohio proposes that an  
12 earnings test, if applicable, appropriately adjust for non-recurring items (such as  
13 mark-to-market accounting and any material gains/losses on the disposition of  
14 assets) and that the test be performed on cumulative basis over the three-year ESP  
15 period.

16 **VIII. PROJECTED PRICE IMPACT**

17 **Q. PLEASE SUMMARIZE THE PROJECTED AVERAGE PRICE IMPACT**  
18 **OF DE-OHIO'S PROPOSED ESP.**

19 A. The projected average total price increase attributable to the Company's proposed  
20 ESP is 6.2%, 1.8% and (2.1%) in 2009, 2010 and 2011, respectively. The  
21 projected impacts reflect the Company's stated generation price increase in  
22 avoidable Riders PTC-BG and PTC-IA, and the decrease in the unavoidable RTC  
23 charge. Further, the projected impacts assume no price change in any of the cost-

1 based riders, and exclude any impact related to the Company's pending electric  
2 distribution rate proceeding in Case No. 08-709-EL-AIR, *et al.*

3 **Q. WILL EACH CUSTOMER CLASS REALIZE THE SAME PRICE**  
4 **IMPACT?**

5 A. No. Although an overall weighted-average price impact is informative, the  
6 increase to each customer class (*i.e.*, residential, commercial, industrial) can vary  
7 significantly. For instance, the termination of the residential RTC in 2009 will  
8 result in a lower increase for residential consumers in the initial year. Similarly,  
9 the deferral of a portion of the 2009 Rider PTC-BG adjustment and the  
10 termination of the RTC in 2011 will affect non-residential prices, and will result  
11 in a projected price decrease in 2011.

12 The following table summarizes the ESP price impact, by year, for a  
13 typical bill in each customer classification:

	<u>2009</u>	<u>2010</u>	<u>2011</u>
Residential	4.3%	0.7%	0.7%
Commercial	9.3%	1.8%	(6.0%)
Industrial	<u>9.5%</u>	<u>1.8%</u>	<u>(5.6%)</u>
Total Average	6.2%	1.8%	2.1%

14

15 **IX. REQUESTED RELIEF**

16 **Q. WHAT APPROVAL DOES DE-OHIO SEEK FROM THE COMMISSION**  
17 **IN THIS PROCEEDING?**

18 A. DE-Ohio requests that the Commission approve its ESP application in a timely

1 manner so that the Company can implement the ESP by January 1, 2009.

2 **Q. IF THE COMMISSION IS UNABLE TO APPROVE THE ESP BY**  
3 **JANUARY 1, 2009, WHAT APPROVAL DOES DE-OHIO SEEK?**

4 A. If the Commission is unable to review and approve DE-Ohio's ESP by January 1,  
5 2009, then DE-Ohio requests approval to continue its current RSP, including normal  
6 adjustments, until the ESP is approved.

7 **Q. WHAT ARE THE NORMAL ADJUSTMENTS TO THE RSP THAT DE-**  
8 **OHIO WOULD SEEK TO MAKE IN 2009 IF THE COMMISSION DOES**  
9 **NOT APPROVE THE ESP BY JANUARY 1, 2009?**

10 A. The normal adjustments include RSP riders FPP, AAC, SRT, TCR and the  
11 termination of the residential RTC.

12 **X. CONCLUSION**

13 **Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?**

14 A. Yes.

**Duke Energy Ohio****Electric Security Plan Price Structure**

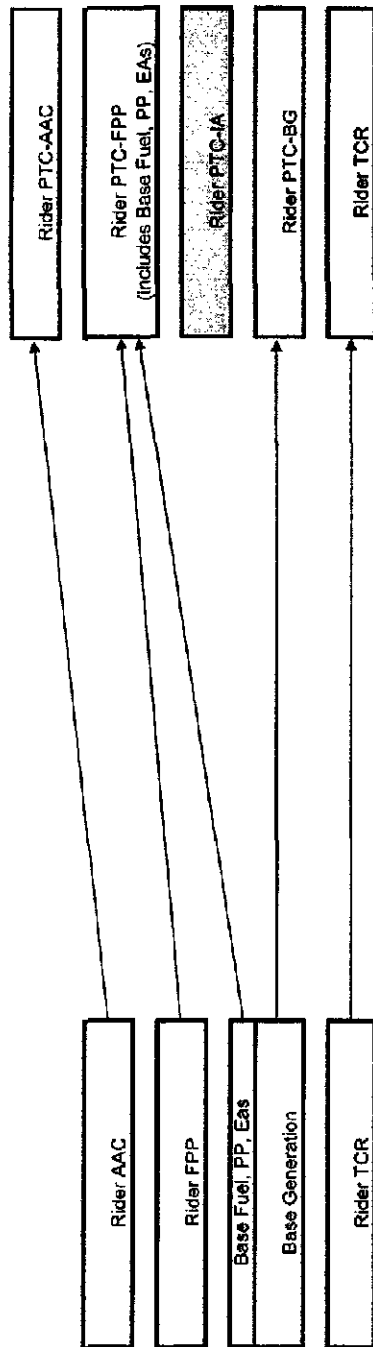
<b><u>Component</u></b>	<b><u>Acronym</u></b>
<b><u>Generation</u></b>	
<b>Avoidable Generation Charges</b>	
<b>Price-to-Compare (PTC)</b>	
<i>Base Generation</i>	<i>PTC-BG</i>
<i>Price Deferral</i>	<i>PTC-BG</i>
<i>Inflation Adjustment</i>	<i>PTC-IA</i>
<i>Fuel &amp; Purchased Power</i>	<i>PTC-FPP</i>
<i>Environmental, Security &amp; Tax Law</i>	<i>PTC-AAC</i>
<b>Unavoidable Generation Charges</b>	
<b>System Resource Adequacy (SRA) (POLR)</b>	
<i>Capacity Dedication (formerly IMF)</i>	<i>SRA-CD</i>
<i>Market Capacity Purchases</i>	<i>SRA-SRT</i>
<i>Newly Dedicated Capacity</i>	<i>SRA-NDC</i>
<b>Other Unavoidable Generation Charges</b>	
<i>Regulatory Transition Charge</i>	<i>RTC</i>
<b><u>Transmission</u></b>	
<i>Transmission Cost Recovery</i>	<i>TCR</i>
<b><u>Distribution</u></b>	
<i>Distribution Cost Recovery</i>	<i>D</i>
<i>Infrastructure Modernization (includes SmartGrid)</i>	<i>DR-IM</i>
<i>Energy Efficiency (formerly DSM)</i>	<i>DR-SAW</i>
<i>Economic Competitiveness Fund</i>	<i>DR-ECF</i>

# Duke Energy Ohio

## Price Structure Transition From RSP to ESP

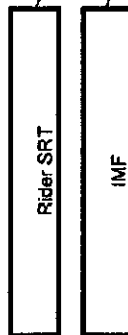
### RSP Structure

### ESP Structure

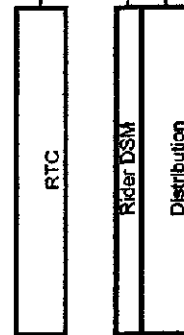


Available

Residential = Unavoidable  
Non-Residential = Avoidable (with commitment)



Unavoidable



**Duke Energy Ohio****Projected Average Price-to-Compare**

	<b><u>Acronym</u></b>	<b>Projected Avg. Price<sup>1</sup></b>		
		<b>2009</b>	<b>2010</b>	<b>2011</b>
Base Generation	PTC-BG	\$34.00	\$34.00	\$34.00
Price Deferral	PTC-BG	(1.00)	0.00	1.00
Inflation Adjustment	PTC-IA	0.00	0.70	1.40
Fuel & Purchased Power	PTC-FPP <sup>2</sup>	23.80	27.10	30.10
Environmental, Homeland Security & Tax Law Changes	PTC-AAC <sup>2</sup>	5.70	5.50	5.00
Total Projected Price-to-Compare (PTC)		<b>\$62.50</b>	<b>\$67.30</b>	<b>\$71.50</b>

## Notes:

<sup>1</sup> Projected prices stated in \$ / MWh.<sup>2</sup> The projected Rider PTC-FPP and PTC-AAC prices reflect current cost estimates.



**Duke Energy Ohio****Return on Equity  
2007 Actual and Pro Forma ESP**

<b>Line</b>	<b>Description</b>	<b>2007 Actual (a)</b>	<b>Pro Forma ESP (b)</b>
1	Net Income	\$264	\$364
	Average Common Equity		
2	December 31, 2006 Balance	\$6,380	
3	December 31, 2007 Balance	6,534	
4	Average ( Lines (2+3) / 2 )	<u>\$6,457</u>	<u>\$6,457</u>
5	Return on Equity (Line 1 / Line 4)	<u>4.1%</u>	<u>5.6%</u>

Note: Actual net income and common equity amounts per DE-Ohio's Form 10-K

**SUMMARY OF RIDER DR-SAVE-A-WATT**

**OVERVIEW**

The revenue requirement for Rider DR-SAW will be calculated combining the sum of annual avoided capacity cost savings generated by demand response programs multiplied by the *Demand Response Sharing Percentage*, and (2) the net present value ("NPV") of avoided energy and capacity costs applicable to conservation programs multiplied by the *Conservation Sharing Percentage*. The *Demand Response Sharing Percentage* and the *Conservation Sharing Percentage* are values that will be provided in supplemental filings.

Rider DR-SAW provides for the annual recovery of lost margins incurred for each year of each vintage due to the implementation of energy conservation measures for a period of three years for each vintage. Rider DR-SAW includes a reconciliation feature (*i.e.*, "True-up Adjustment") that captures the difference between amounts billed customers based on projected avoided cost savings and amounts ultimately due the Company based on actual avoided cost savings realized.

Rider DR-SAW billing factors will be calculated separately for residential and non-residential customers. The residential charge will be calculated based on avoided costs applicable to residential customers plus the lost margins from residential conservation measures. The non-residential charge will be calculated based on the avoided costs of programs applicable to non-residential customers plus the lost margins from non-residential conservation measures.

**APPLICABILITY & ELIGIBILITY**

Certain customers will be eligible to opt-out of energy efficiency program participation and, therefore, opt-out of paying the Rider DR-SAW charge. The development of the revenue requirements for the initial Rider DR-SAW charge, which will be filed upon completion of the cost-effectiveness analysis of the proposed energy efficiency portfolio, will take into account projected kW and kWh impacts associated with an anticipated level of customer opt-out of the portfolio.

Customers taking generation service from competitive retail electric suppliers are eligible to participate in the energy efficiency program.

#### SOURCE OF DATA

The Company is proposing that the value of avoided capacity costs be developed in the near-term using a market-based rate for capacity. The Company believes that pricing energy efficiency capacity using a market price for the cost of new capacity is appropriate in the short-run because generation in Ohio is market-priced. However, over the longer-term, avoided capacity cost should trend toward the cost of building new capacity on a greenfield site. Thus, the value of saving watts (*i.e.*, energy efficiency) should be viewed as equivalent to the value of adding watts (*i.e.*, acquiring capacity via purchase or construction).

The Company will develop projections of annual avoided energy costs and the energy efficiency, or kWh, load impacts or savings are determined based on cost-effectiveness analyses. Load savings are accumulated on a vintage year basis. For example, program offerings to a group of customers that participate in the Company's Energy Efficiency Plan in 2009 are considered to make up the 2009 "vintage year." Each

year, customers can participate in demand response programs or conservation measures.

Demand response programs are single-year programs that begin and end in each vintage year. As such, participants are assumed to make a decision each year on whether they will enroll (or re-enroll) in a demand response program for each successive vintage year. Conservation measures, however, implemented in a given vintage year will begin to produce savings that year and will continue to produce savings over the assumed life of each measure. An example of such a program would be the installation of energy efficient heat pumps that are expected to generate savings over a 15-year period. When new customers install energy efficient heat pumps in the year following "Year 1," then those participants will be considered to be "Year 2" vintage year participants.

The significance of the vintage year concept is that, under the Company's Rider SAW, the avoided energy and capacity rates for a particular vintage will be fixed based on the initial year of participation (*i.e.*, the vintage year). The pricing of avoided capacity costs will reflect the Demand Response Sharing Percentage for demand response programs and the Conservation Sharing Percentage of the net present value of energy and capacity savings over the life of conservation programs for the specific vintage year.

The pricing of avoided energy will be based on the Company's IRP and escalated using a market price projection. The Company uses its proprietary model, DSMore, to develop analyses which are used to calculate the cost-effectiveness of the programs. The calculated avoided costs, including an escalation factor, will be used for the life of all vintage year 2009 programs, and so on, through the three year term of the ESP.

#### REVENUE REQUIREMENT CALCULATION – DEMAND RESPONSE

Reductions in customer coincident peak loads stated in terms of kW are multiplied by the projected market-based capacity rate per kW. The resulting estimated demand response avoided capacity cost savings are then multiplied by the Demand Response Sharing Percentage in order to determine the amount of revenue requirement to be included in the rider. Under the Company's proposal, the future stream of projected capacity cost savings over the life of a measure will be converted to a net present value amount by discounting the projected savings using the Company's after-tax overall weighted average cost of capital. The net present value of the conservation capacity savings will be multiplied by the Conservation Sharing Percentage. The Company will use this methodology when calculating the revenue requirement applicable to each vintage included in the three-year cost recovery plan.

#### REVENUE REQUIREMENT CALCULATION – ENERGY CONSERVATION

The projected energy impacts, stated in terms of kWh for each energy efficiency conservation measure are obtained from the DSMore<sup>1</sup>. The resulting impacts represent an estimate of sum of the load reductions that will occur on DE-Ohio's system for each hour of each day of the year. The hourly kWh reductions over the life of the conservation programs are multiplied by the hourly marginal energy costs taken from the production costing model used by DE-Ohio in its IRP analysis in order to estimate the savings that DE-Ohio customers will realize by the reduction in the consumption of power. Under the

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<sup>1</sup> A proprietary software package designed to help energy professionals more fully understand the potential impacts of different types of various energy demand options including energy efficiency, demand reduction, and load control programs.

Company's proposal, the future stream of projected energy cost savings over the life of the conservation programs will be converted to a net present value amount by discounting the projected savings using the Company's after-tax overall weighted-average cost of capital. The net present value of the conservation energy savings will be multiplied by the Conservation Sharing Percentage to determine the amount of revenue requirement to be included in the rider.

#### LOST MARGINS

DE-Ohio proposes to maintain the current method of calculating lost margins per existing Rider DSM, with a clarification that addresses demand reductions in addition to energy reductions. The applicable lost revenues will be computed by multiplying the estimated reduction in kilowatt and kilowatt-hour sales that will be lost for each twelve-month period rate schedule over a three year period as a result of the implementation of approved conservation programs by the appropriate rate charge, excluding the variable costs included in the charge, for the applicable rate schedule. The resulting estimated lost margin value by rate schedule will be divided by the expected kilowatt and kilowatt-hour sales for each twelve-month period of the upcoming three year period. The expected kilowatt and kilowatt hour sales will be reduced by the reduction in sales as result of the energy efficiency plans for the upcoming three year period. This projected lost margins amount will be included in the Rider DR-SAW revenue requirement calculation for that year. The recovery of lost margins will be reduced to the extent they are recovered in base rates as part of a general rate case proceeding.

### TRUE-UP OF ACTUAL SAVINGS AND LOST MARGINS

The Company proposes that there be a single true-up at the end of the three-year term. The true-up mechanism will include three components: (1) an avoided cost component that will adjust for the difference between verified actual avoided cost savings and projected avoided cost savings; (2) a lost margin component that will capture the difference between actual lost margins and the recovery of lost margins billed customers; and (3) an earnings cap component that will ensure that the after-tax incentive retained by the Company does not exceed preset levels.

The true-up process related to actual kW and kWh savings will capture the difference between amounts due the Company based on an “after-the-fact” calculation of recoverable costs and amounts billed customers. This component of the true-up calculation will be calculated as follows:

- a. Actual kW and kWh savings will be determined at the end of the third year, using various measurement and verification methods.
- b. The actual kW savings for demand response programs will be multiplied by the avoided capacity rates by year as determined at the time Rider DR-SAW was initially set for each vintage. The resulting avoided cost savings will be multiplied by the Demand Response Sharing Percentage in order to determine the Company’s share of actual avoided capacity cost savings.
- c. The actual kW savings for conservation programs will be multiplied by the avoided capacity rates by year as determined at the time Rider DR-SAW was initially set for each vintage, on a present value basis back to each vintage

year and then multiplied by the Conservation Sharing Percentage to determine the Company's share of actual conservation-related avoided capacity savings.

- d. The actual kWh savings will be present valued for each vintage year and then multiplied by the Conservation Sharing Percentage to determine the actual avoided energy costs the Company is entitled to collect as revenues over three years.
- e. The amount subject to collection in the true-up will be the difference between the actual total three year revenues collected under the avoided cost component of Rider DR-SAW and the total three year revenues the Company is entitled to collect for avoided capacity and energy costs calculated in b., c., and d.

The true-up process related to lost margins will compare the lost margins recoverable based on verified actual reductions in kWh sales and amounts recovered from customers. This component of the true-up calculation will be calculated as follows:

- a. The actual kWh savings achieved as a result of the energy efficiency measures will be determined through the various measurement and verification processes at the end of the third year.
- b. The actual kWh savings will be multiplied times the Company's average tariff rates, excluding the tariff's variable costs in order to determine the actual lost margins the Company is entitled to collect.
- c. The difference between the actual total three year revenues collected under the lost margins component of Rider DR-SAW and the total three year revenues



the Company is entitled to collect for lost margins will determine the lost margins component of the true-up amount.

The true-up process related to the earnings cap will compare the level of after-tax net income calculated based on revenues that reflect actual verified kW and kWh savings versus the preset earnings limit. Any excess earnings as determined by this analysis will be refunded to customers as part of the final true-up process. This earnings cap adjustment will be calculated as follows:

- a. The actual three year total avoided cost savings associated with the actual kW and kWh savings will be compared to the targeted three year total avoided cost savings to determine the percentage of targeted savings achieved.
- b. The appropriate performance target cap percentage based on the percentage actual target achievement will be multiplied by the actual total three year program costs to determine the appropriate net income cap.
- c. The cumulative net income the Company would earn over three years from the Save-a-Watt program must be calculated and compared to the earnings cap. This calculation equals total revenues the Company is entitled to collect for actual kW and kWh savings plus revenues for lost margins associated with actual kW and kWh savings minus actual program costs minus lost margins associated with actual kW and kWh savings minus revenue-related taxes and income taxes.
- d. If net income calculated in c. above exceeds the net income cap, the earnings cap adjustment will be the difference between the net income cap and the net income calculated in "c." grossed up to a revenue requirement. If the net

income calculated in "c." is less than the net income cap, the earnings cap adjustment will be zero.

The avoided cost component of the true-up amount, the lost margins component of the true-up amount, and the earnings cap component of the true-up amount, if applicable, will be summed in order to determine the total true-up amount. Amounts owed customers or the Company will be refunded to customers or recovered from customers through Rider DR-SAW in the fourth year.

#### RATE DESIGN

Each year the projected avoided cost component and the projected lost margins component will be summed separately for residential and non-residential customers. The sums will be divided by the projected retail kWh sales for the classes to arrive at the Rider DR-SAW value stated in ¢/kWh. In the fourth year of the rider, the true-up amount will be included in the rider calculation.