BEFORE THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of The Dayton Power and Light Company for Approval of its Electric Security Plan)))	Case No. 16-0395-EL-SSO
In the Matter of the Application of The Dayton Power and Light Company for Approval of Revised Tariffs)))	Case No. 16-0396-EL-ATA
In the Matter of the Application of The Dayton Power and Light Company for Approval of Certain Accounting Authority Pursuant to Ohio Rev. Code § 4905.13)))	Case No. 16-0397-EL-AAM

DIRECT TESTIMONY OF KEVIN M. MURRAY ON BEHALF OF INDUSTRIAL ENERGY USERS-OHIO

PUBLIC VERSION

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1 I. INTRODUCTION

- 2 Q1. Please state your name and business address.
- 3 A1. My name is Kevin M. Murray. My business address is 21 East State Street, 17th
- 4 Floor, Columbus, Ohio 43215-4228.
- 5 **Q2.** By whom are you employed and in what position?
- 6 A2. I am employed as a Technical Specialist by McNees Wallace & Nurick LLC
- 7 ("McNees") and serve as the Executive Director of the Industrial Energy Users-
- 8 Ohio ("IEU-Ohio"). I am providing testimony on behalf of IEU-Ohio.
- 9 Q3. Please describe your educational background.

1 A3. I graduated from the University of Cincinnati in 1982 with a Bachelor of Science 2 degree in Metallurgical Engineering.

3 Q4. Please describe your professional experience.

4 A4. I have been employed by McNees for 19 years where I focus on helping 5 IEU-Ohio members address issues that affect the price and availability of utility 6 services. I have also been actively involved, on behalf of commercial and 7 industrial customers, in the formation of regional transmission operators ("RTOs") 8 and the organization of regional electricity markets from both the supply-side and 9 demand-side perspective. I serve as an end-use customer sector representative 10 on the Midcontinent Independent Transmission System Operator, Inc. ("MISO") 11 Advisory Committee and I have been actively involved in MISO working groups 12 that focus on various issues since 1999. Prior to joining McNees, I was 13 employed by the law firm of Kegler, Brown, Hill & Ritter ("KBH&R") in a similar 14 capacity. Prior to joining KBH&R, I spent 12 years with The Timken Company, a 15 specialty steel and roller bearing manufacturer. While at The Timken Company, I 16 worked within a group that focused on meeting the electricity and natural gas 17 requirements for facilities in the United States. I also spent several years in 18 supervisory positions within The Timken Company's steelmaking operations (now TimkenSteel). 19

20 Have you previously testified before the Public Utilities Commission of Q5. 21

Ohio ("Commission")?

A5. Yes. The proceedings before the Commission in which I have submitted expert
 testimony are identified in Exhibit KMM-1.

3 Q6. What is the purpose of your testimony?

4 A6. The purpose of my testimony is to recommend that the Commission not approve 5 The Dayton Power & Light Company's ("DP&L") proposed Distribution 6 Modernization Rider ("DMR") as a component of the proposed electric security 7 plan ("ESP III"). I also recommend the Commission not approve DP&L's request 8 to recover costs associated with DP&L's liquidating its Ohio Valley Electric 9 Corporation ("OVEC") contract entitlement in PJM Interconnection's ("PJM") 10 electricity markets and recover the difference between DP&L's OVEC-related 11 costs and the resulting PJM market revenues through the proposed 12 Reconciliation Rider ("RR"). Finally, I recommend the Commission not approve 13 DP&L's request to waive Rule 4901:1-36-04(B), Ohio Administrative Code 14 ("OAC"), which requires that transmission costs be recovered through a 15 bypassable charge, or allow DP&L to continue to recover transmission costs 16 through the non-bypassable transmission cost recovery rider ("TCRR-N").

I also offer some observations regarding various forecasts DP&L has submitted in this proceeding over time and recommend that the Commission reject the financial forecasts DP&L has presented in this proceeding and direct DP&L to submit revised financial forecasts to reflect DP&L's operation as a "wires only" electric distribution utility ("EDU") based on a pro forma generation divestiture or separation date of December 31, 2016.

1 II. HISTORY OF THIS PROCEEDING

2 Q7. What are the significant components of the ESP III?

A7. DP&L has proposed that its ESP III have a seven-year term from January 1,
2017 through December 31, 2023.¹ Under the ESP III, the generation supply for
customers that remain under the standard service offer ("SSO") would be
sourced through a series of competitive bids conducted through auctions similar
to DP&L's previous ESP. A significant aspect of the ESP III is the DMR. The
DMR would be a non-bypassable charge that would allow DP&L to collect \$145
million annually from customers.

10 DP&L has proposed several additional riders as part of the ESP III.² DP&L has 11 requested that the Commission allow DP&L to recover costs associated with its 12 OVEC entitlement through the RR. DP&L has requested the Commission 13 approve DP&L's request to waive Rule 4901:1-36-04(B), OAC, which requires 14 that transmission costs be recovered through a bypassable charge, and allow 15 DP&L to continue to recover transmission costs through the TCRR-N.

The ESP III reflects an amendment from the initial application submitted by DP&L in this proceeding. Previously, DP&L had proposed an ESP with a ten-year term. A significant element of the initial application was the Reliable Electricity Rider ("RER"). The RER was intended to charge or credit retail customers the

¹ DP&L has previously conducted competitive bids to secure generation supply for standard service offer ("SSO") customers through May 31, 2017.

² In addition to the riders discussed in my testimony, other riders include the distribution investment rider, the distribution decoupling rider and the clean energy rider.

projected annual variance between the costs DP&L incurs associated with the several coal-fired electric generation facilities³ and the forecasted wholesale revenue expected to be earned from selling energy, capacity and ancillary services from the RER Units into PJM's regional electricity markets.

5 **III.**

MERGER HISTORY AND MERGER COMMITMENTS

Q8. Can you provide a brief summary regarding the merger of DPL Inc. and The AES Corporation?

A8. Yes. On May 18, 2011, the AES Corporation ("AES"), its subsidiary, Dolphin
Sub, Inc. ("Merger Sub"), along with DPL Inc., and its subsidiary, DP&L, jointly
filed an application (collectively "Applicants") for the Commission's approval of a
merger of Merger Sub and DPL Inc. in Case No. 11-3002-EL-MER. Following
the completion of the transaction, AES owned all of DPL Inc.'s outstanding
shares of common stock. Merger Sub, which was an AES subsidiary formed to
effectuate the merger, no longer exists.

15 Q9. Did parties in Case No. 11-3002-EL-MER express concerns about the 16 merger?

A9. Yes. For example, IEU-Ohio filed comments expressing concerns that the
 merger transaction was highly leveraged and, as such, the merger could
 pressure AES to draw revenue from customers in DP&L's service territory.

³ Stuart Station Units #1-4, Zimmer Unit #1, Miami Fort Units #7-8, Killen Unit #32, Conesville Unit #4, Clifty Creek Units #1-6 and Kiger Creek Units #1-5 (OVEC) (collectively the "RER Units").

1 The Commission Staff recommended that no merger-related costs (long or short 2 term) be recovered through regulated rates and recommended the Commission include this requirement in any approval of the merger. The Commission Staff 3 4 also recommended additional ring fencing provisions. These included a 5 requirement that DP&L maintain a capital structure of at least 45 percent equity. 6 In addition, the Commission Staff recommended that DP&L should maintain a 7 retained earnings to total utility plant ratio of at least ten percent. The Commission Staff expressed the view that these measures would help to ensure 8 9 DP&L remained viable even if its affiliated companies experienced financial difficulties. 10

Q10. Did the Commission impose any conditions when it issued its order authorizing the merger?

A10. Yes. In the merger proceeding, three stipulations were submitted in which DP&L
 agreed to certain merger conditions. In its November 22, 2011 order authorizing
 the merger, the Commission adopted the stipulations and conditioned the merger
 on these commitments, which included:

- The Applicants agreed that neither the costs incurred directly related to
 the negotiation, approval and closing of the merger, nor any acquisition
 premium shall be eligible for inclusion in rates and charges applicable
 to retail electric service provided by DP&L.
- DP&L committed to maintain a capital structure that includes an equity
 ratio of at least 50 percent.

1

DP&L agreed to not have a negative retained earnings balance.

2 Q11. Have these commitments been modified?

A11. Yes. As discussed in the direct testimony of IEU-Ohio witness Joseph G.
Bowser, in subsequent retail rate and corporate restructuring proceedings the
Commission agreed to temporarily waive the requirement for DP&L to maintain a
capital structure that includes an equity ratio of at least 50 percent. However, the
Commission maintained the requirement to have positive retained earnings as
well as the requirement that any merger related or acquisition premium costs are
not permitted to be recovered through DP&L's rates.

10 IV. DISTRIBUTION MODERNIZATION RIDER

11 Q12. What is the purpose of the proposed DMR?

A12. As proposed, the DMR would be a non-bypassable charge that collects from
customers \$145 million annually. As described by DP&L, the DMR would allow
DP&L, and its parent DPL Inc., to maintain their financial integrity. This would
allow DP&L and DPL Inc. to service and reduce debt and provide sufficient cash
flows to maintain operations and provide a return to equity holders.

According to DP&L witness R. Jeffrey Malinak, without the revenues from the DMR, DPL Inc. would not be able to service its approximately \$1.1 billion in debt. DPL Inc. would need to seek incremental debt, a condition Mr. Malinak has assumed for modelling purposes but a result he does not believe is likely. Mr. Malinak projects DPL Inc.'s expected credit rating would reach junk bond status

in the absence of the DMR. Mr. Malinak observes that DPL Inc. is heavily
 dependent upon cash flows from DP&L to service its debt.

3 Q13. Should the DMR be approved?

A13. No. There are no DP&L distribution service costs associated with the revenues
that DP&L proposes to collect through the DMR. As such, the DMR violates the
fundamental principles of economic rate regulation. It is also my understanding
that without an underlying DMR-related distribution service cost to DP&L, the
Commission lacks the statutory authority to approve the DMR.

9 Further, as discussed in the direct testimony of IEU-Ohio witness Joseph G. 10 Bowser, there is no imminent financial integrity problem at DP&L that needs to be 11 addressed. As discussed in Mr. Bowser's testimony, the DMR is designed to allow DPL Inc. to address its heavy debt overhang associated with AES's 12 13 acquisition of DPL Inc. There is no financial integrity issue at DP&L that requires 14 the Commission to take any action.⁴ Permitting DP&L to implement the DMR 15 would violate the merger commitment that any merger related or acquisition 16 premium costs are not permitted to be recovered through DP&L's rates.

Q14. Do you have any other recommendations regarding the DMR for the Commission?

⁴ I note that DP&L has a pending request for an increase in base distribution rates before the Commission in Case No. 15-1830-EL-AIR.

A14. There is an old saying that the Commission should be mindful of as it deliberates
 how to proceed in this proceeding. Fool me once, shame on you; fool me twice,
 shame on me.

I am recommending that the Commission not approve DP&L's request to
approve the proposed DMR.

However, I recognize that the Commission has, in the past, decided it was
 necessary to maintain the financial integrity of EDUs, presumably based upon an
 assumption it was necessary to ensure the continuity of continued reliable
 service.

Three years ago, the Commission authorized DP&L to collect \$110 million a year during 2014, 2015 and 2016 through non-bypassable charges (the Service Stability Rider or SSR) imposed on its retail distribution service customers in order to prop up earnings eroded by declining margins on electricity sales from generation assets owned by DP&L. The Commission justified its decision, in part, as follows:

16 [T]he Commission believes that the SSR would have the effect of stabilizing or providing certainty regarding retail electric service. We 17 agree with DP&L that if its financial integrity becomes further 18 19 compromised, it may not be able to provide stable or certain retail 20 electric service... Although generation, transmission, and 21 distribution rates have been unbundled, DP&L is not a structurally 22 separated utility; thus, the financial losses in the generation, transmission, or distribution business of DP&L are financial losses 23 24 for the entire utility. Therefore, if one of the businesses suffers 25 financial losses, it may impact the entire utility, adversely affecting its ability to provide stable, reliable, or safe retail electric service. 26

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The Commission finds that the SSR will provide stable revenue to DP&L for the purpose of maintaining its financial integrity.⁵

While it might be reasonable to assume that DP&L would have treated the Commission's SSR approval as a gift (notwithstanding its since-declared unlawfulness) and used the resulting revenues to maintain the financial integrity of DP&L's balance sheet, that is not how this chapter of utility regulation has played out.

- 8 As of the end of 2012, DP&L held long-term (or currently to be refinanced) debt 9 obligations of \$903.1 million and its retained earnings were \$534.1 million.
- In 2012, DP&L paid \$146.1 million in dividends to its parent. In 2013, DP&L paid
 \$190.9 million in dividends to its parent. In 2014, DP&L paid \$160.0 million in
 dividends to its parent. The three-year total dividends are \$497 million.

As a condition of its merger, DP&L agreed to maintain positive retained earnings. It also agreed to maintain a capital structure that includes an equity ratio of at least 50 percent, a condition the Commission has waived temporarily. DP&L also agreed that neither the costs incurred directly related to the negotiation, approval and closing of the merger, nor any acquisition premium would be eligible for inclusion in rates and charges applicable to retail electric service provided by DP&L.

⁵ In the Matter of the Application of The Dayton Power and Light Company for Approval of its Electric Security Plan, et al., Case No. 12-426-EL-SSO, et al., Order at 21-22.

As of the end of the second quarter 2016, DP&L's long-term debt now stands at
 \$758.8 million. Its retained earnings are gone, standing at (\$61) million.

3 DP&L stands poised to transfer all of its generating assets to a non-regulated 4 affiliate ("Ohio Genco") at net book value (as approved by the Commission) but 5 transfer none of the generation-related long-term debt currently on its books.

Relative to where it stood at the end of 2012, DP&L's financial state of affairs has
not materially improved. If the Commission's hope was to strengthen DP&L's
financial state of affairs with the SSR revenues, those results have not
materialized.

10 Notwithstanding this history, DP&L has the chutzpah to request that the 11 Commission bless the imposition of yet another non-bypassable charge on retail 12 customers that would collect from customers an astounding \$1.015 billion over 13 the next seven years. The majority of the revenues collected through the DMR 14 appears to be targeted to reduce debt at DPL Inc.⁶

DP&L's DMR proposal is by any measure absurd. Even traditional cost of service regulation in its worst days did not subject customers to this degree of regulatory abuse. There is no justification from a public policy perspective to essentially require retail electric distribution customers to prop up DPL Inc., the holding company (whose shareholders are supposed to have assumed all of DPL

⁶ The Commission ordered in Case No. 11-3002-EL-MER that DP&L could not recover any mergerrelated cost from customers. As Mr. Jackson's testimony indicates during the term of the ESP III, DPL Inc. is projected to repay **million** in long-term debt, which implies that over **million** of the DMR revenues requested by DP&L will be used in this fashion. A significant portion of the debt held by DPL Inc. was incurred in conjunction with the merger.

Inc.'s financial risk), through the revenues collected through the DMR and, if any
 funds remain, perhaps try to strengthen DP&L's balance sheet.

If at the end of its deliberations the Commission determines it must provide some retail customer funding to prop up DP&L's financial wherewithal (and I maintain my recommendation it should not), this Commission should do so in a way that minimizes the overall cost to retail customers and try to ensure we are not experiencing a "*deja vue* all-over-again" moment at the end of ESP III. Accordingly, I make the following recommendations:

- The Commission should direct DP&L to suspend all dividend payments
 to its shareholder until its balance sheet has been restored to an
 appropriate debt to equity ratio (approximately 50/50).⁷
- The DMR should be rejected without prejudice. The Commission
 should authorize DP&L to seek to modify its ESP III after presenting a
 business plan developed by independent outside financial advisors in
 an application to the Commission if it is determined some additional

⁷ DPL Inc. has acknowledged the risk that the Commission may suspend DP&L's payment of dividends based upon its financial condition. Its most recent 10K report submitted to the Securities and Exchange Commission ("SEC") states:

DP&L is regulated by the PUCO, which possesses broad oversight powers to ensure that the needs of utility customers are being met. The PUCO could impose additional restrictions on the ability of DP&L to distribute, loan or advance cash to DPL pursuant to these broad powers. As part of the PUCO's approval of the Merger, DP&L agreed to maintain a capital structure that includes an equity ratio of at least 50 percent and not to have a negative retained earnings balance. While we do not expect any of the foregoing restrictions to significantly affect DP&L's ability to pay funds to DPL in the future, a significant limitation on DP&L's ability to pay dividends or loan or advance funds to DPL would have a material adverse effect on DPL's results of operations, financial condition and cash flows.

The 10-K report is available at:

https://www.sec.gov/Archives/edgar/data/27430/000078725016000035/dpl10k12312015q4.htm.

revenues are necessary to restore DP&L's financial integrity. DP&L's
application should be subject to review through an evidentiary hearing.
In the event that the Commission determines in DP&L's pending base
rate case that a significant portion of DP&L's long-term debt is not a
distribution-related cost of service, it may be appropriate to collect from
DP&L's retail distribution customers some additional revenue to cover
interest payments on this debt.

- The Commission should direct DP&L to adopt ring fencing protections
 to secure its assets.
- The ESP III should be limited to a term of no more than three years in
 order to provide an opportunity to reassess the financial integrity of
 DP&L at that time.
- 13 V. RECON

RECONCILIATION RIDER

14 Q15. What costs does DP&L propose to recover through the RR?

A15. DP&L has requested the Commission allow DP&L to recover deferred costs associated with its OVEC entitlement through the RR. It appears these costs are the difference between the revenues DP&L has received from liquidating its OVEC entitlements into PJM's regional electricity markets (as directed by the Commission in a September 17, 2014 order issued in Case No.13-2420-EL-UNC) and DP&L's incurred costs pursuant to its OVEC entitlements.

21 Q16. Should the Commission approve this request?

A16. No. The costs that DP&L proposes to recover through the RR are above-market
wholesale generation-related costs. RR charges to collect OVEC-related abovemarket costs would constitute transition revenues or their equivalent, which is not
permitted. Additionally, any such RR charges would be a subsidy from retail
distribution customers to support DP&L's OVEC ownership interest, which is
contrary to Ohio's policies which require the Commission to prohibit the recovery
of any generation-related costs through distribution or transmission rates.

8

VI. TRANSMISSION COST RECOVERY RIDER

9 Q17. How has DP&L proposed to recover transmission related costs?

10 A17. DP&L has requested that the Commission waive Rule 4901:1-36-04(B), OAC, 11 which requires that transmission costs be recovered through a bypassable 12 charge, and allow DP&L to continue to recover transmission costs through the 13 current TCRR-N.

14 **Q18.** Should the Commission approve DP&L's request?

15 A18. No. DP&L's request is not consistent with the principles of cost causation.

Within PJM, each customer's calendar year responsibility for transmission costs (network integration transmission service and any regional transmission expansion charges) is based upon the customer's historical contribution to the

single zonal coincident peak that occurs in the twelve months ending October 31
 of the prior year.⁸

3 At the retail level, the costs associated with network integration transmission service and transmission expansion charges are allocated between customer 4 5 classes based upon the PJM single zonal coincident peak. However, the resulting TCRR-N revenue requirement for larger customers is recovered through 6 7 charges assessed based upon monthly billing demand. Monthly billing demand, using a High Voltage rate schedule as an example, is the greater of a customer's 8 highest on-peak thirty-minute demand or 75 percent of the customer's highest 9 10 off-peak demand. Allocating costs at the wholesale level based upon a single 11 zonal peak, and then billing at the retail customer level based upon monthly 12 billing demand, results in intra-class cost shifting.

13 Q19. Are there additional reasons to not approve the proposed TCRR-N?

A19. Yes. DP&L's proposed TCRR-N sends a price signal to retail customers that is inconsistent with the state's peak demand reduction requirements. An individual retail customer's monthly billing demand would rarely be consistent with its annual zonal coincident peak. Therefore, the proposed TCRR-N does not send a price signal as good as billing based upon the single annual zonal peak to encourage the customer to reduce its peak demand.

⁸ See Exhibit KMM-4 which is an excerpt from PJM's Open Access Transmission Accounting Business Practice Manual. The complete manual is available at: <u>http://www.pjm.com/~/media/documents/manuals/m27.ashx</u>.

Billing for transmission service based upon each customer's contribution to the annual zonal peak would also provide larger customers willing to proactively manage their contribution to the zonal coincident peak the opportunity to reduce their transmission bill and increase their competitiveness in global markets.

5 VII. FORECAST OBSERVATIONS

Q20. Has DP&L presented forecasts of forward electricity market prices in this proceeding?

A20. Yes. In its original application, DP&L presented the testimony of witness Eugene
T. Meehan who addressed, among other things, a forecast of wholesale energy
and capacity prices during the term of the ESP III. Mr. Meehan's testimony was
subsequently withdrawn.

- 12 As part of its amended application, DP&L has presented the testimony of witness
- 13 David J. Crusey. In his testimony, Mr. Crusey presents his outlook for wholesale
- 14 energy and capacity prices during the term of the ESP III.

15 Q21. Can you compare and contrast the forward electricity market forecasts

16 presented by Mr. Meehan and Mr. Crusey?

17 A21. Yes. Mr. Meehan testified:

18 My analysis indicates that baseline energy prices will rise from 19 current levels through 2026 at a rate considerably higher than 20 expected inflation. Current prices are at low levels relative to 21 historical prices in real terms. The current prices are a function 22 primarily of low natural gas prices and low variable emission costs 23 for coal generation. As natural gas prices return to levels indicated 24 by long-term forecasts, and as the Clean Power Plan ("CPP") is implemented, the variable costs of generation (both natural gas and coal) will increase significantly in real terms, which will translate into increased wholesale energy prices in the long run.⁹

Mr. Meehan presented a "baseline" estimate of wholesale energy prices for the DP&L load area that ranged from approximately **s** per megawatt-hour (around the clock) in 2017 and **s** to approximately **s** per megawatt-hour (around the clock) in 2026.

8 Mr. Meehan had a similarly on PJM Interconnection's capacity 9 prices. He projected capacity prices for the 2018/2019 delivery year at 10 approximately **\$** per megawatt-day, escalating to approximately **\$** per 11 megawatt-day by the 2021/2022 delivery year, and

through the 2026/2027 delivery year. I have attached excerpted pages from his
pre-filed written testimony to illustrate his forecast expectations as Exhibit KMM2.

15 In contrast, Mr. Crusey's expectations about forward electricity prices are 16 than Mr. Meehan's. For example, Mr. Crusey projects electricity prices for the AD Hub (which directionally should be slightly lower than corresponding 17 prices for the DP&L Load area) to range from approximately **\$** per megawatt-18 hour (around the clock) in 2017 and to approximately \$ per 19 He also predicts capacity prices than Mr. 20 megawatt-hour in 2023. Meehan, ranging from *\$* per megawatt-day in 2017, increasing to *\$* per 21 megawatt-day in 2023. I have attached excerpted pages from his pre-filed 22 23 written testimony to illustrate his forecast expectations as Exhibit KMM-3.

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⁹ Meehan testimony at 6.

Q22. Do you have any observations regarding the forecasts of forward electricity
 markets that have been presented in this proceeding?

3 A22. Yes. In the eight months that have elapsed between the submission of Mr. Meehan's and Mr. Crusey's prefiled written testimony, DP&L's outlook regarding 4 5 power market prices Because DP&L continues to present its financial forecasts (through the testimony of DP&L 6 7 witness Craig L. Jackson) assuming a throughout the term of the ESP III, these in forecast power 8 effect on DP&L's financial forecasts and its claimed 9 prices have a 10 need for financial assistance. Ten months ago, DP&L claimed that a temporary 11 assistance from customers (the RER, which was initially projected but which DP&L claimed would 12 over the term of the ESP III) 13 and produce a 14 would be enough to help DP&L right its sinking financial ship. A mere 10 months 15 later, a seven-year bailout totaling \$1.015 billion is now being requested by 16 DP&L. As noted in the testimony of IEU-Ohio witness Joseph G. Bowser, Mr. 17 Jackson's financial forecasts to support the requested bailout reflect other 18 improprieties (

19 20) that suggest the forecasts should be afforded little, if any, weight or credibility by the Commission.

The wide swings in forecast results presented by DP&L and the inaccuracies inherent in forecasts in general provide additional support for the Commission to limit the term of the ESP III to no more than three years. Additionally, at a

1 minimum, the Commission needs to correct the factual errors identified by Mr. 2 Bowser in the financial forecasts provided by Mr. Jackson when evaluating DP&L's application and request for financial assistance. Further, in the event the 3 4 Commission does not deny the request to approve the DMR, I recommend that the Commission direct DP&L to file revised financial forecasts (corrected to 5 6 reflect the errors identified by Mr. Bowser) that reflect on a pro-forma basis after 7 December 31, 2016 the separation of DP&L's wires-only electric distribution business from further ownership of generation assets and rely upon these 8 9 revised forecasts to evaluate DP&L's claims that any financial assistance is 10 necessary.

11 VIII. CONCLUSION

12 Q23. What are your overall recommendations on the ESP III?

A23. If the Commission chooses to approve the ESP III, it should modify the proposal
 and direct DP&L to eliminate the DMR. The Commission should also not permit
 recovery of OVEC-related costs through the RR. Finally, the Commission should
 direct DP&L to modify TCRR-N such that costs are allocated between customer
 classes based upon each class's contribution to the single zonal peak. The
 TCRR-N rate design for larger customers with interval meters should also be
 based upon each customer's contribution to the single coincident zonal peak.

In the event the Commission does not accept my primary recommendation and determines some financial support is necessary from DP&L retail customers, I recommend the Commission adopt appropriate safeguards, including but not

1 limited to, suspending all dividend payments by DP&L; direct DP&L to retain 2 outside financial advisors to prepare a business restructuring plan to restore its finances; conditionally limit any cost support (depending on pending base rate 3 4 case determinations) to revenues necessary to service debt; direct DP&L to 5 implement ring fencing protections and limit the term of the ESP III to three years. Additionally, I recommend the Commission evaluate DP&L's request for 6 7 financial assistance based upon updated financial forecasts that have been corrected for the errors noted in Mr. Bowser's testimony and reflect the 8 9 separation of generation assets from DP&L after December 31, 2016.

- 10 Q24. Does this conclude your direct testimony?
- 11 A24. Yes.

CERTIFICATE OF SERVICE

In accordance with Rule 4901-1-05, Ohio Administrative Code, the PUCO's e-filing system will electronically serve notice of the filing of this document upon the following parties. In addition, I hereby certify that a service copy of the foregoing *Direct Testimony of Kevin M. Murray on Behalf of Industrial Energy Users-Ohio, Public Version,* was sent by, or on behalf of, the undersigned counsel for IEU-Ohio to the following parties of record this 21st day of November 2016, *via* electronic transmission.

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ATTORNEY EXAMINERS

Exhibit KMM-1

Exhibit KMM-1

In the Matter of the Application of Ohio Edison Company, The Cleveland Electric Illuminating Company and The Toledo Edison Company for Authority to Provide for a Standard Service Offer Pursuant to R.C. 4928.143 in the Form of an Electric Security Plan, Case No. 14-1297-EL-SSO (pre-filed written direct testimony not submitted).

In the Matter of the Application of Ohio Power Company for Authority to Establish a Standard Service Offer Pursuant to §4928.143, Revised Code, in the Form of an Electric Security Plan, et al., Case Nos. 13-2385-EL-SSO, et al.

In the Matter of the Application of The Dayton Power and Light Company for Approval of Its Market Rate Offer, et al., PUCO Case Nos. 12-426-EL-SSO, et al.

In the Matter of the Commission Review of the Capacity Charges of Ohio Power Company and Columbus Southern Power Company, PUCO Case No. 10-2929-EL-UNC.

In the Matter of the Application of Columbus Southern Power Company and Ohio Power Company for Authority to Establish a Standard Service Offer Pursuant to §4928.143, Ohio Rev. Code, in the Form of an Electric Security Plan, PUCO Case Nos. 11-346-EL-SSO and 11-348-EL-SSO, et al.

In the Matter of the Application of Columbus Southern Power Company for Approval of its Electric Security Plan; an Amendment to its Corporate Separation Plan, and the Sale or Transfer of Certain Generating Assets, Case No. 08-917-EL-SSO and In the Matter of the Application of Ohio Power Company for Approval of its Electric Security Plan; and an Amendment to its Corporate Separation Plan, PUCO Case No. 08-918-EL-SSO (remand phase).

In the Matter of the Application of Columbus Southern Power Company for Approval of *its Program Portfolio Plan and Request for Expedited Consideration*, PUCO Case No. 09-1089-EL-POR.

In the Matter of the Application of Ohio Power Company for Approval of its Program Portfolio Plan and Request for Expedited Consideration, PUCO Case No. 09-1090-EL-POR.

In the Matter of the Application of Ohio Edison Company, The Cleveland Electric Illuminating Company and The Toledo Edison Company for Approval of a Market Rate Offer to Conduct a Competitive Bidding Process for Standard Service Offer Electric Generation Supply, Accounting Modifications Associated with Reconciliation Mechanism, and Tariffs for Generation Service, PUCO Case No. 09-906-EL-SSO.

In the Matter of the Application of Ohio Edison Company, The Cleveland Electric Illuminating Company and The Toledo Edison Company for Authority to Establish a

Standard Service Offer Pursuant to R.C. 4928.143 in the Form of an Electric Security Plan, PUCO Case No. 08-935-EL-SSO.

In the Matter of the Application of Ohio Edison Company, The Cleveland Electric Illuminating Company and The Toledo Edison Company for Approval of a Market Rate Offer to Conduct a Competitive Bidding Process for Standard Service Offer Electric Generation Supply, Accounting Modifications Associated with Reconciliation Mechanism, and Tariffs for Generation Service, PUCO Case No. 08-936-EL-SSO.

In the Matter of the Application of Columbus Southern Power Company for Approval of its Electric Security Plan; an Amendment to its Corporate Separation Plan; and the Sale or Transfer of Certain Generating Assets, PUCO Case No. 08-917-EL-SSO.

In the Matter of the Application of Ohio Power Company for Approval of its Electric Security Plan; and an Amendment to its Corporate Separation Plan, PUCO Case No. 08-918-EL-SSO.

In the Matter of the Application of Duke Energy Ohio for Approval of an Electric Security Plan, PUCO Case No. 08-920-EL-SSO.

In the Matter of the Application of The Dayton Power and Light Company for Approval of Its Electric Security Plan, PUCO Case No. 08-1094-EL-SSO.

Exhibit KMM-2

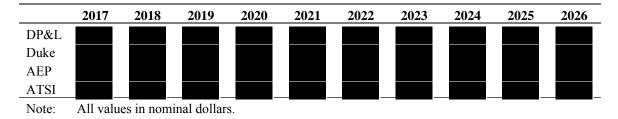
useful for analyzing price trends relative to changes in loads, resources, fuel prices and
 emission costs, they are not necessarily as precise in reflecting factors such as the
 detailed impacts of losses and congestion which will impact actual zonal energy prices.
 Calibration can adjust for these factors. The results I present in this testimony and pass
 on to Dr. Harrison and Mr. Malinak reflect calibrated results.

6 Q. PLEASE PRESENT YOUR BASELINE WHOLESALE ENERGY PRICES.

7 A. In Table 1 below, I show annual average energy prices for each Ohio PJM load zone for

- 8 the period 2017 through 2026. Figure 3 shows a graphical representation of these prices.
- 9

TABLE 1: BASELINE WHOLESALE ENERGY PRICE FORECAST (\$/MWH)



		16/17 17/18 18/19 19/20 20/21 21/22 22/23 23/24 24/25 25/26
12 13	TAI	BLE 2: BASELINE WHOLESALE CAPACITY PRICE AND SUPPLY FORECAST: BRA FOR THE RTO REGION
11		a graphical representation of these capacity prices.
10		applicable to the PJM BRAs for the 2016/2017 through 2026/2027 DYs. Figure 4 shows
9	A.	In Table 2 below, I show annual capacity prices and capacity supply for the RTO region
8	Q.	PLEASE PRESENT YOUR BASELINE WHOLESALE CAPACITY PRICES.
7		relevant period (i.e., beginning with the 2018/2019 BRA).
6		in RPM market-design elements are incorporated in my capacity market forecasts for the
5		of both orders were first incorporated with the 2018/2019 BRA. The associated changes
4		of New Entry ("CONE") values as a result of the triennial review process. ¹² The impacts
3		November 28, 2014, FERC approved various revisions to the VRR curve and gross Cost
2		market design did not provide adequate incentives for resource performance. ¹¹ On
1	A.	Yes. On June 9, 2015, FERC approved PJM's CP order, recognizing that the current

	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27
Capacity Price (\$/MW-day											
UCAP)											
Capacity Supply (GW UCAP)											

Note: All values in nominal dollars; all prices correspond to the actual or forecasted BRA RTO price.

¹¹ PJM Interconnection, L.L.C., 151 FERC ¶ 61,208 (2015). http://elibrary ferc.gov/idmws/common/OpenNat.asp?fileID=13899457

¹² PJM Interconnection, L.L.C., 149 FERC ¶ 61,183 (2014). <u>http://elibrary_ferc.gov/idmws/common/OpenNat.asp?fileID=13697133</u>

Exhibit KMM-3

CORRECTED CHART ON PAGE 3 OF OCTOBER 11, 2016 DIRECT TESTIMONY OF DAVID J. CRUSEY

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DP&L Price Forecasts								
Commodity	<u>Unit</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
Power ATC AD Hub	\$/MWh	1 martine			,			ì
11800 ILB Coal (\$/Ton FOB Barge)	\$/Ton							
Natural Gas Henry Hub	\$/MMBtu							
Capacity RPM	\$/MW-Day							

CORRECTED CHART ON PAGE 10 OF OCTOBER 11, 2016 DIRECT TESTIMONY OF DAVID J. CRUSEY

ATC AD Hub Power (\$/MWh)	2017	2018	2019	2020	2021	2022	2023
PIRA - 5/26/16	\$29.40	\$30.34	\$34.28	\$34.04	\$33.64	\$33.53	\$33.46
ESAI - 6/30/16	\$32.45	\$32.45	\$32.73	\$33.45	\$34.42	\$36.31	\$37.40
DP&L Projection - 6/30/16	ļ	4	*	*			
11800 ILB Coal (FOB Barge \$/Ton)	2017	2018	2019	2020	2021	2022	2023
PIRA - 5/26/16	\$35.04	\$35.70	\$36.69	\$37.04	\$37.26	\$37.47	\$37.69
ESAI - 6/30/16	n/a						
DP&L Projection - 6/30/16			i i				
Henry Hub NG (\$/MMBtu)	2017	2018	2019	2020	2021	2022	2023
PIRA - 5/26/16	\$2.95	\$3.40	\$4.22	\$4.13	\$4.05	\$4.01	\$3.98
ESAI - 6/30/16	\$3.18	\$3.17	\$3.16	\$3.32	\$3.45	\$3.59	\$3.73
DP&L Projection - 6/30/16							
PJM Capacity (\$/MW-Day)	2017	2018	2019	2020	2021	2022	2023
I H S August 2016				\$140	\$140	n/a	n/a
ESAI - 6/30/16				\$130	\$134	\$151	\$164
DP&L Projection - 6/30/16							

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Exhibit KMM-4

Exhibit KMM-4



Working to Perfect the Flow of Energy

PJM Manual 27: Open Access Transmission Tariff Accounting

Revision: 85 Effective Date: July 15, 2015

Prepared by: Market Settlements Development Department

2015 © PJM



Manual 27: Open Access Transmission Tariff Accounting Section 5: Network Integration Transmission Service Accounting

5.2 Network Integration Transmission Service Charges

A daily demand charge for network transmission service is calculated by the PJM for each Network Customer, including TOs, for the Zone(s) in which the Network Load of the Network Customer is located. It is based on the Network Customer's daily network service peak load contribution (including losses), coincident with the zonal peak for the 12 months ending October 31 of the preceding year for each zone in which load is served. For non-zone network service, the customer pays the non-zone rate based on their load at the hour of the PJM regional peak for the 12 months ending October 31 of the preceding year. The preceding year's zonal peak load contributions are effective each January 1.

For Network Customers taking Network Integration Transmission Service under state required retail access programs, peak load contributions may change daily, and are expressed in tenths of a MW. These daily peak load contributions are submitted to PJM by the associated Electric Distribution Companies (EDCs) 36 hours prior to the day being billed, and may be corrected up to 12:00 PM Eastern Prevailing Time of the next business day following the Operating Day. These daily peak load contributions are then subtracted from the EDC's fixed peak load obligation to obtain the EDC's daily peak load contribution.

Network customers who are TOs (excluding those in the PPL, ComEd, Dayton, Duquesne, ATSI and DEOK zones) do not actually pay themselves for use of their own transmission facilities. Network demand charges are shown on TOs' invoices only to identify their cost responsibility, as ordered by FERC, and they are offset by an equal amount of network service credits.

PJM Actions:

- The PJM accounting process prepares a list of Network Customers.
- The PJM accounting process retrieves the following information:
- Network Customer's daily peak load contribution (including losses) by zone.
- Zonal network integration transmission service rates (\$/MW-year)
- The PJM accounting process calculates the daily demand charge for each Network Customer (\$) for each zone in which load is served as follows:

Sum of ((Zonal Daily Peak Load Contribution * Annual Zonal Network Integration Transmission Service Rate)	١
	Number of days per year	J

- The PJM accounting process calculates the demand charge for each Network Customer (\$) by summing the daily charges.
- PJM calculates the negative charge offsets for the network customers in the Allegheny Power zone based on their peak load contribution and the applicable tariff rebate rate.
- PJM calculates the ComEd and AEP RTO Startup Cost Recovery charges for the network and firm point-to-point transmission customers serving load in the ComEd and AEP zones.

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Case No(s). 16-0395-EL-SSO, 16-0396-EL-ATA, 16-0397-EL-AAM

Summary: Testimony Public Version - Direct Testimony of Kevin M. Murray on Behalf of Industrial Energy Users-Ohio electronically filed by Ms. Vicki L. Leach-Payne on behalf of Darr, Frank P. Mr.