

**BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO**

**CASE NO. 16-0395-EL-SSO
CASE NO. 16-0396-EL-ATA
CASE NO. 16-0397-EL-AAM**

**DIRECT TESTIMONY OF
EMILY S. MEDINE
PRINCIPAL
ENERGY VENTURES ANALYSIS, INC.**

**ON BEHALF OF
MURRAY ENERGY CORPORATION**

1 **INTRODUCTION**

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

3 A. My name is Emily Medine. I am a Principal with Energy Ventures Analysis, Inc. (EVA). EVA's
4 corporate address is 1901 N. Moore Street, Suite 1200, Arlington, VA 22209.

5 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

6 A. The purpose of my testimony is to explain why the unilateral decision to close Killen and Stuart
7 power plants has not been justified, is not in the public interest, and is likely to have extreme
8 negative economic consequences for Dayton Power & Light (DP&L) ratepayers and the public
9 interest.

10 **Q. ON WHOSE BEHALF ARE YOU FILING YOUR TESTIMONY?**

11 A. I am filing this testimony on behalf of Murray Energy Corporation.

12 **Q. WHAT IS YOUR EDUCATIONAL AND WORK BACKGROUND?**

13 A. I have a BA from Clark University and a Masters in Public Affairs (MPA) from the Woodrow
14 Wilson School of International and Public Affairs at Princeton University. I concentrated in
15 domestic energy policy in graduate school. While at Princeton, I worked at Brookhaven National
16 Laboratory on coal policy. I spent three years at Energy and Environmental Analysis, a
17 consulting firm, ultimately as project manager on two large government projects, one for the
18 Environmental Protection Agency (EPA) on new source performance standards for industrial
19 boilers and one for the Department of Energy evaluating the financial capability of power plants
20 which had converted their coal boilers to fire oil back to coal. I joined Consolidation Coal
21 Company (now Consol Energy) in 1982 where I held several positions including Strategic Studies
22 Coordinator and Assistant District Sales Manager. In 1987, I joined Energy Ventures Analysis,

1 Inc. (EVA) with whom I am currently a principal. I focus on market analysis, fuel procurement
2 strategies, and acquisition and divestment support. My clients include producers, consumers,
3 transporters, agencies of the U.S. government, state governments, and trade associations. I
4 have performed over 50 management/performance audits of fuel procurement practices, many
5 of which have been performed on behalf of the Staff of the Public Utilities Commission of Ohio
6 (PUCO). I provide expert testimony in coal market disputes. I am a regular presenter on energy
7 markets at industry meetings. My resume is provided in Appendix A.

8 **Q. HAVE YOU PREVIOUSLY PRESENTED TESTIMONY BEFORE THE COMMISSION?**

9 A. Yes. I have testified multiple times before the Commission. In the last 30 years, EVA has
10 performed 34 Management/Performance Audits of the Ohio utilities. I have been involved in all
11 of them with one exception. An audit report was filed for each audit. I have testified in the
12 cases that have gone to hearing. I have also testified on behalf of Staff in Case No. 10-2929 and
13 on behalf of the Ohio Consumers' Counsel in Case Nos. 08-917-EL-SSO and 08-918-EL-SSO.

14 **Q. HOW IS YOUR TESTIMONY ORGANIZED?**

15 A. I first provide general conclusions which are followed by background on DPL&L and its holding
16 company DPL Inc. (DPL), The AES Corporation (AES), a review of DP&L generating assets, a
17 review of deregulation in Ohio and the related impacts on DP&L, a review of DP&L's proposed
18 ESP III, the Stipulation, and the impact of the closure of Killen and Stuart.

1 **CONCLUSIONS**

2 **Q. PLEASE SUMMARIZE YOUR CONCLUSIONS**

- 3 1. DPL's heavy debt burden which is in part behind the ESP request is due at least in part to
4 AES's over-payment for DPL.
- 5 2. DPL and presumably AES since its 2011 acquisition of DPL were aware of the
6 requirement under SB221 to divest of generation.
- 7 3. The other three Ohio affected utilities completed their divestiture commitments by the
8 end of 2014. AES indicated it came close to divesting the DP&L generation in 2014 but
9 decided to hold the generation hoping for the value of the assets to improve.
- 10 4. In 2014, at least one rating agency, Moody's, indicated concerns about AES's credit
11 ratings given a sale or transfer of DP&L generation.
- 12 5. AES assumed the risk of its purchase of DPL and the associated risk with the delay in
13 divestiture. The divestiture either to a third party or an unregulated affiliate was to be
14 completed by January 1, 2017.
- 15 6. In February 2016, DP&L filed for a new ESP (ESP III) which provided for support for its
16 coal-fired generation for a 10-year period. DP&L claimed its coal-fired generation was
17 critical in many respects and its loss would have severe economic consequences.
- 18 7. Considerable opposition to the ESP III resulted in negotiations with many parties as to a
19 compromise. A Stipulation was ultimately negotiated with only nine of the 27 parties
20 that participated in the negotiations. Notably the Staff of the PUCO, the Office of

1 Consumers' Counsel as well as other material parties were not signatories to the
2 Stipulation.

3 8. The same day the Stipulation was docketed (January 30, 2017), DP&L and the Sierra
4 Club issued press releases stating that they had come to an agreement that would allow
5 the Sierra Club to support the Stipulation. The agreement was that DP&L would close
6 the Killen and Stuart stations in mid-2018. No other information about the closures was
7 provided by the press releases or since.

8 9. On February 6, 2017, testimony was filed by a DP&L witness and a DP&L-engaged expert
9 witness about the Stipulation. Both pieces of testimony referred to the Stipulation
10 containing the plant closure provisions. Neither piece of testimony provided any
11 analysis as to whether the plant closures were the best outcome for DP&L ratepayers or
12 the local communities in which the two power plants reside.

13 10. A Stipulation containing the plant closure provisions was never filed.

14 11. On March 14, 2017, an amended Stipulation ("Amended Stipulation") was filed. The
15 Amended Stipulation differed in a number of respects from the Stipulation that was
16 filed on January 30, 2017. There was no mention of plans to close the Killen and Stuart
17 plants. The Amended Stipulation repeated an agreement to conduct a sales process for
18 DP&L's ownership share in Conesville #4, Miami Fort 7/8 and Zimmer.

19 12. On March 22, 2017, testimony was filed by Company Witness Shroder and Company
20 Expert Witness Malinak related to the Amended Stipulation. With respect to the
21 disposition of Killen and Stuart, Company Witness Shroder's testimony on the Amended
22 Stipulation did not mention the plant closures while Company Expert Witness Malinak

1 stated "I understand that DP&L has announced plans to close certain of these coal
2 generation facilities by June, 2018..."¹

3 13. The objective of SB221's requirement for utilities to divest their generation was to
4 improve the competitive power generation market for customers. The PUCO retained
5 its rights to approve divestments under Ohio Revised Code 4928.17.

6 14. The Order in Case 13-2420 required DP&L complete its divestment by January 1, 2017,
7 an event that did not occur.

8 15. Several parties filed motions for rehearing on all or parts of the Order in Case 13-2420.
9 In response to requests for rehearing related to the divestment plan, the Commission
10 responded "we find that the information that DP&L has already provided sufficiently
11 demonstrates that the object, purpose, terms, and conditions of the divestiture **benefits**
12 **the public interest.**"²

13 16. The approval of the transfer of DP&L generation to an unregulated affiliate set a
14 deadline of January 1, 2017. As the transfer did not take place as required, the approval
15 presumably expired at the end of 2016.

16 17. Both the Stipulation and the Amended Stipulation contained a commitment for DP&L to
17 transfer its generation into AES Ohio Generation LLC within 180 days following final
18 PUCO approval of the Amended Stipulation, provided that the PUCO approval is without
19 material modifications.

¹ Witness Malinak also provides a redacted response to the question as to whether he considered any non-quantifiable or quantifiable benefits to the closures. Given the brevity of the response, it suggests an incomplete evaluation.

²<http://dis.puc.state.oh.us/TiffToPDF/A1001001A14I17B40321I87255.pdf>, page 9

1 18. DP&L's February 2016 application for an ESP speaks to the importance to customers of
2 retaining the coal-fired generation.

3 19. DP&L by all accounts including Company Expert Witness Malinak testimony filed on
4 March 24, 2017 intends to close the Killen and Stuart plants by mid-2018. There has
5 been minimal testimony that the divestiture/closure of the Killen and Stuart plants is in
6 the public interest.

7 20. If the assets are transferred to AES Ohio Generation LLL or another affiliate, the PUCO
8 will lose its right under Ohio Revised Code 4928.17 to weigh in on whether the closure is
9 in the public interest and therefore this issue needs to be addressed at this time.

10 21. The closure of Killen and Stuart is likely to increase power prices to DP&L customers.

11 22. The closure of Killen and Stuart will have severe economic consequences on the
12 communities in which the plants reside.

13 23. Both the Killen and Stuart stations could be sold. Potential buyers include private
14 equity, merchant generators, and strategic players including coal producers.

15 24. There is no reason why a sales process to which DP&L has agreed for its other coal
16 assets cannot be extended to include Killen and Stuart.

17 25. Absent a demonstration by DP&L that including Killen and Stuart in a sale process is not
18 in the public interest, the Amended Stipulation should be revised to include an
19 obligation by DP&L to commence a sale process for these units as well.

20 **BACKGROUND ON DAYTON POWER & LIGHT**

Q. WHAT IS DAYTON POWER & LIGHT?

A. DP&L is a public utility as defined in Section 4905.02, Revised Code, and, as such, is subject to the jurisdiction of the Public Utilities Commission of Ohio (PUCO). DP&L is a wholly-owned subsidiary of DPL, Inc. In 2011, AES acquired 100 percent of the common stock of DPL for an approximate payment of \$3.5 billion plus the assumption of \$1.255 in liabilities.

Q. WHO IS AES?

A. AES, founded in 1985, is now a global energy company with generation and distribution businesses across four continents. Starting with three independent power producers in the U.S., AES rapidly expanded both within the U.S. and internationally. AES reports it has operations in 17 countries across four continents, 35 GW of generating capacity, seven utility companies and a global workforce of approximately 21,000. In 2015, AES reported annual revenues of \$15 billion.

Q. WHAT REASONS DID AES PROVIDE FOR ITS ACQUISITION OF DPL?

A. AES prepared an Investor Presentation on its acquisition of DPL Inc.³ The presentation dated April 20, 2011, provided several rationales for the acquisition. AES indicated the acquisition was consistent with AES Growth Strategy in that the acquisition would be accretive to earnings year one (excluding acquisition costs), it supported its M&A strategy “in regulated utilities, using (its) existing platform at IPL⁴, and it was supported by AES’ advantageous tax position.

Q. WHAT IS IPL?

³ http://s2.q4cdn.com/825052743/files/doc_presentations/2011/04-20-11-Investor-Presentation_FINAL.pdf

⁴ The Financial Presentation also said the acquisition supported AES’ strategy to “(m)ake additional rate base investments in regulated utility business.”

1 A. IPL is Indianapolis Power & Light Company. It is a fully-regulated utility which AES acquired in
2 2000. In 2014, AES sold a minority interest in IPL to CDPO, an institutional investor
3 headquartered in Quebec, Canada for \$595 million reportedly to generate cash for its capital
4 expenditure program.⁵

5 **Q. DID AES ACKNOWLEDGE THE DIFFERENT REGULATORY ENVIRONMENTS FOR IP&L AND DP&L**
6 **IN THE INVESTOR PRESENTATION?**

7 A. From the Financial Presentation AES indicated that while DP&L's transmission and distribution
8 (T&D) business was fully regulated, DP&L generation would continue to receive financial support
9 through an Electric Security Plan (ESP). AES gave no indication that the ESP was intended only
10 for a transition period or of DP&L's obligation to divest of its generation under Senate Bill 221
11 (SB221).

12 **Q. DO YOU THINK AES THOUGHT IT WAS ACQUIRING A FULLY REGULATED UTILITY?**

13 A. I am not sure. The high price AES paid, the statements in the Financial Presentation, and the
14 goodwill impairment of over \$1.8 billion in 2012 suggest that might have been the case.

15 **Q. WHAT DO YOU MEAN ABOUT THE HIGH PRICE?**

16 A. AES paid about \$4.7 billion for DPL. AES indicated in its 2011 10-K filing⁶ the preliminary
17 allocation of the purchase price to the fair value of assets acquired and liabilities assumed is as
18 follows (in millions):

⁵ <http://www.businesswire.com/news/home/20141215005378/en/AES-Announces-Agreement-Sell-Minority-Interest-IPALCO>

⁶ http://s2.q4cdn.com/825052743/files/doc_financials/annual/2011/02-24-12%2010-K_FINAL.PDF

Cash	116
Accounts receivable	278
Inventory	124
Other current assets	41
Property, plant and equipment	2,549
Intangible assets subject to amortization	166
Intangible assets—indefinite-lived	5
Regulatory assets	201
Other noncurrent assets	58
Current liabilities	(401)
Non-recourse debt	(1,255)
Deferred taxes	(558)
Regulatory liabilities	(117)
Other noncurrent liabilities	(195)
Redeemable preferred stock	(18)
Net identifiable assets acquired	994
Goodwill	2,489
Net assets acquired	3,483

As noted in the table above, the Property, plant and equipment (PP&E) was \$2.5 billion, about the same as goodwill. The PP&E includes the generating assets in addition to the Transmission and Distribution assets. AES acknowledged the goodwill was high and indicated that the reasons for the sizable goodwill “include, but are not limited to: the ability to expand the U.S. utility platform in the Mid-West market, the ability to capitalize on utility management experience gained from IPL, enhanced ability to negotiate with suppliers of fuel and energy, the ability to capture value associated with AES’ U.S. tax position, a well-positioned generating fleet, the ability of DPL to leverage its assembled workforce to take advantage of growth.” As noted above, the U.S. platform to which AES was referring was a regulated utility.

In 2012, AES took a goodwill impairment charge of \$1.82 billion for DPL and obtained a waiver and amendment to certain of its loan documents, which included new covenants and various restrictions on DPL’s ability to distribute dividends to AES. AES noted in its 2012 10-K filing that

1 it had “not realized the anticipated benefits and cost savings of the DPL acquisition, and DPL
2 continues to face business and regulatory challenges.”⁷

3 **Q. HOW DID AES FINANCE THE DPL PURCHASE?**

4 A. AES indicated in its 2011 10-K that it funded the purchase through a combination of the
5 following:

- the proceeds from a \$1.05 billion term loan obtained in May 2011;
- the proceeds from a private offering of \$1.0 billion notes in June 2011;
- temporary borrowings of \$251 million under its revolving credit facility; and
- the proceeds from private offerings of \$450 million aggregate principal amount of 6.50% senior notes due 2016 and \$800 million aggregate principal amount of 7.25% senior notes due 2021 (collectively, the “Notes”) in October 2011 by Dolphin Subsidiary II, Inc. (“Dolphin II”), a wholly-owned special purpose indirect subsidiary of AES, which was merged into DPL upon the completion of acquisition.

6 **DP&L GENERATING ASSETS**

7 **Q. WHAT ARE DP&L’S CURRENT GENERATING ASSETS?**

8 A. Most of DP&L’s coal generating capacity was developed in concert with two other utilities:
9 Columbus Southern Power (which merged with Ohio Power in 2011) and Cincinnati Gas &
10 Electric (which became Cinergy in 1994 when it merged with Public Service of Indiana and Duke
11 Energy Ohio when Cinergy was purchased by Duke Energy in 2006). These units were referred
12 to initially as CCD units because of their ownership. All of the remaining coal assets, except for

⁷ http://s2.q4cdn.com/825052743/files/doc_financials/annual/2011/02-24-12%2010-K_FINAL.PDF

1 DP&L's ownership share of OVEC, are CCD plants. The operating owner, with consultation from
2 its partners, manages the plants.

3 The CCD plants which were viewed at the time as a risk management tool have turned out to be
4 problematic with respect to the sale of the non-operating owners position. Dynegy just
5 announced a trade of its ownership in Conesville #4 for AEP's ownership in Zimmer.⁸ In 2014,
6 DP&L sold its position in East Bend to Duke Energy Kentucky.⁹

7 OVEC is the Ohio Valley Electric Corporation which owns two power plants: Clifty Creek and
8 Kyger Creek. OVEC and the Indiana-Kentucky Electric Company (IKEC) were formed by several
9 investor-owned utilities in the 1950's to supply the tremendous electrical needs of a gaseous
10 diffusion plant plant. As the power needs for the atomic plant declined, the electricity
11 increasingly moved into the power market. OVEC and IKEC merged into OVEC. DP&L's
12 ownership share of OVEC is relatively small.

13 DP&L's current generating assets are listed below¹⁰.

⁸ <http://www.crossroadstoday.com/story/34588953/aep-and-dynegy-to-transfer-ownership-of-co-owned-power-plants>

⁹ The purchase price was reported to be \$12.4 million for the 186 MW.
<http://www.cincinnati.com/story/money/2014/12/08/duke-east-bend/20098047/>

¹⁰ In recent years, DP&L closed its solely-owned Hutchings station and sold its share of East Bend. In addition, it lost its Beckjord generation when that plant was retired by Duke Energy Ohio.

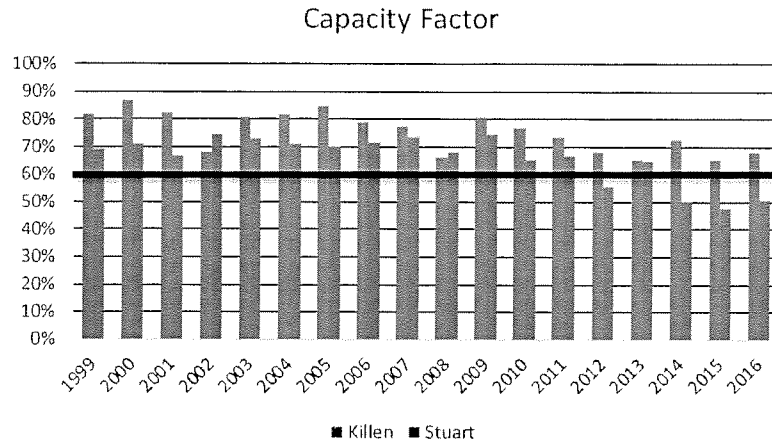
Operator	Plant Name	Units	Location	DP&L Ownership %	Capacity (MW)		Fuel Type
					Total	DP&L Share	
COAL GENERATING ASSETS							
Dayton P&L	J.M. Stuart	1-4	Aberdeen, OH	35%	2,308	808	Coal
Dayton P&L	Killen	2	Wrightsville, OH	67%	600	402	Coal
AEP Generation Resources	Conesville	4	Conesville, OH	17%	780	129	Coal
Dynegy Ohio	Miami Fort	7,8	North Bend, OH	36%	1,020	368	Coal
Dynegy Ohio	Zimmer	1	Moscow, OH	28%	1320	371	Coal
OVEC	Clifty Cr/Kyger Cr	All	Madison, IN/Cheshire, OH	4.9%	2109	103	Coal
TOTAL					8,137	2,181	
OTHER GENERATING ASSETS							
Dayton P&L	O.H. Hutchings CT	7	Miamisburg, OH	100%	23	23	NG
Dayton P&L	JM Stuart IC	1-4	Aberdeen, OH	35%	8.8	3	DFO
Dayton P&L	Killen CT	1	Manchester, OH	67%	18	12	DFO
Dayton P&L	Frank M Tait GT	1-3	Moraine, OH	100%	256	256	NG
Dayton P&L	Frank M Tait IC	1-4	Moraine, OH	100%	10	10	DFO
Dayton P&L	Monument IC	1-5	Dayton, OH	100%	12	12	DFO
Dayton P&L	Sidney IC	1-5	Sidney, OH	100%	12	12	DFO
Dayton P&L	Yankee Street GT	1-7	Centerville, OH	100%	94	94	NG
TOTAL					434	422	

Q. ARE BOTH STUART AND KILLEN STATIONS CONSIDERED TO BE BASE LOAD GENERATION?

A. Yes.¹¹ Killen has had a capacity factor greater than 60 percent in every year during the 1999 through 2016 H1 period.¹² Stuart historically had a capacity factor greater than 60 percent but has struggled in recent years. Capacity factor is the ratio of actual generation to potential generation and a good indicator of plant performance.

¹¹ Killen was built as an intermediate load plant meaning it was designed with greater capabilities to follow load but it has operated as a base load plant through most of its life.

¹² EIA 923 data, EVA calculations



Q. HAS THE POOR PERFORMANCE AT STUART SINCE 2014 BEEN A CONCERN FOR DP&L?

A. Yes. The Public Version of the Management/Performance Audit of Fuel and Purchased Power for the calendar year 2014 raised poor performance at Stuart as a major concern. The Public Version of the report stated:

Poor performance at Stuart has been a major issue for DP&L over the last year. In response to EVA -2014-OS-5 which asked for DP&L's strategy to improve performance, DP&L indicated it adopted a multi-faceted approach that includes the following:

- *Significant restructuring of the DPL Generation team in early 2015 including a new Vice President of Generation, a new Director of Planning, Outages & Engineering, a new Stuart station manager, and new managers in many of the key plant roles*
- *Complete reorganization of the Stuart team to create a more team-driven, performance based business*
- *Improved culture within the business*
- *Development of an improved Asset Life Cycle Program that matches the challenging operations using ILB coal as a main source of fuel*

1 While DP&L's admission of problems is quite remarkable, it seems largely driven by (a) the
2 lack of market interest in acquiring the assets at values acceptable to AES and (b) the poor
3 performance in 2014. In 2014, the Equivalent Forced Outage Rate (EFOR) for Stuart was 21.5
4 percent versus the stated corporate target of 6-7 percent.¹³

5 The two points of particular interest are that the situation was sufficiently poor that DP&L
6 restructured its generation team and replaced the Stuart station manager and the EFOR was
7 very poor with respect to DP&L's targets.

8 **Q. WERE THE PROBLEMS AT STUART IN 2014 RELATED TO THE LOW PRICE OF NATURAL GAS?**

9 A. Not particularly in 2014. The capacity factor for Killen in 2014 was over 70 percent which was
10 not only high but higher than the capacity factor in 2013. Had low gas prices been an issue in
11 2014, Killen's capacity factor would have also been affected.

12 **Q. DID THE PUBLIC VERSION OF THE MANAGEMENT/PERFORMANCE AUDIT IDENTIFY ANY FUEL-**
13 **RELATED ISSUES AT STUART?**

14 A. The Stuart plant was designed for lower sulfur coals which are characterized by high fusion
15 temperatures. When the plant was being retrofit with scrubbers, it was believed that the plant
16 would burn a blend of high sulfur and low sulfur coals because of the boiler design and concerns
17 about slagging and fouling with the lower fusion high sulfur coals. Due to the price differential
18 between low and high sulfur coals, DP&L ultimately went to almost 100 percent high sulfur
19 coal.¹⁴ The Public Version of the Management/Performance audit spoke to DP&L's struggle with
20 slagging issues which is fuel related.

21 **DEREGULATION IN OHIO AND DP&L**

¹³ <http://dis.puc.state.oh.us/TiffToPdf/A1001001A15J02B10439H00932.pdf>

¹⁴ EIA 923 data, <https://www.eia.gov/electricity/data/eia923/>

1 Q. CAN YOU PROVIDE A BRIEF HISTORY OF DEREGULATION START IN THE STATE OF OHIO?

2 A. Deregulation of the power industry in Ohio started in 1999 with Senate Bill 3 (SB3) which
3 required that consumers be given a choice with respect to their energy provider.¹⁵ The law took
4 effect in 2001 at which time customers could choose to buy energy from a Certified Retail
5 Electric Supplier (CRES). The law required a five percent residential rate reduction and rate
6 freeze until 2005. In 2005, the PUCO determined that there had been insufficient growth in
7 market activity and extended the transition period. In May 2008, Senate Bill 221 (SB221) was
8 enacted which required utilities to offer a Standard Service Offer (SSO) to customers who did
9 not choose a CRES.¹⁶ The PUCO had the obligation to ensure the SSO was fair and reasonable.
10 Meanwhile, the utilities got to choose whether their SSO should be established through an
11 Electric Security Plan (ESP) or a Market Rate Offer (MRO). The four regulated utilities (Dayton
12 Power & Light, Duke Energy Ohio, FirstEnergy, and Ohio Power) ended up with ESP's¹⁷, which is
13 more akin to a traditional rate plan. ESP's require the utility to secure its energy for its SSO
14 customers through competitive wholesale auctions. **SB221 further required each utility to**
15 **divest their power generation operations** and become solely an electric distribution utility.
16 The divestment which was completed for all utilities except DP&L comprised both transfers to
17 unregulated affiliates and sales to third parties.

18 Q. CAN YOU SUMMARIZE DP&L'S EXPERIENCE UNDER DEREGULATION BEGINNING IN 2006?

¹⁵ This is not intended to be a legal summary.

¹⁶ SB 221 implementing rules contained targets relating to advanced energy portfolio standards, renewable energy, demand reduction and energy efficiency standards.

¹⁷ Several of the utilities had applied for MRO's but ultimately switched to ESP's.

1 A. Consistent with the state deregulation plans, DP&L's rates were set pursuant to a rate
2 stabilization plan (RSP) from January 1, 2006 through December 31, 2008 (RSP Stipulation).
3 Under the RSP, DP&L's fuel rate was fixed and included in the base retail generation rates.¹⁸
4 On October 10, 2008, DP&L filed an application for SSO in the form of an ESP. A stipulation
5 approved by the PUCO extended the DP&L rate plan through December 31, 2012 (subsequently
6 extended by a year) and allowed DP&L among other things to implement a by-passable fuel
7 recovery rider to recover jurisdictional fuel and purchased power costs consistent with the
8 provisions of SB221.

9 A second ESP (ESP II) for DP&L was approved on September 4, 2013 for the period beginning
10 January 1, 2014 and ending May 31, 2017. The order established a schedule under which DP&L
11 would conduct auctions to procure power to serve its SSO customers, which transitioned to 100
12 percent by the end of the ESP II period. At the end of the ESP II, the company was expected to
13 have divested its generation assets. A service stability rider (SSR) was established to provide a
14 SSO standard service offer as DP&L divested its generation assets during the term of the ESP II.
15 The SSR was intended to collect \$330 million during the three-year period 2014 through 2016.
16 ESP II provided DP&L with an option to seek future approval from the PUCO for a five-month
17 extension not to exceed \$45.8 million.

18 Several parties filed for rehearing on ESP II and on March 19, 2014 the PUCO determined that
19 DP&L's phase-in to full competitive pricing for SSO generation requirements should be
20 accelerated. The PUCO based its ruling upon DP&L's February 25, 2014 supplemental filing in a
21 separate proceeding (Case No 13-2420-EL-UNC) that addressed the company's proposal to
22 transfer or sell its generating assets. In that supplemental filing, **DP&L indicated that the**

¹⁸ This is not intended to be a legal summary.

1 company and "its indirect parent, The AES Corporation (AES), have recently begun to evaluate
2 the transfer of DP&L's generation assets to an unaffiliated third party through a potential sale.
3 A sale to a third party could occur as early as 2014."¹⁹ The PUCO, therefore, determined that
4 the competitive bid process (CBP) should account for 60 percent of load beginning January 1,
5 2015 (up from 40 percent); and, 100 percent of load beginning January 1, 2016 (up from 70
6 percent). Also, the PUCO determined on rehearing that the deadline for the company to divest
7 its generation should be no later than January 1, 2016. In June, the PUCO further modified its
8 orders and established December 31, 2016, as the date by which DP&L will complete the sale or
9 transfer of its generation assets.

10 On February 22, 2016, DP&L filed for an ESP that would be in effect beginning January 1, 2017.
11 As part of this filing, DP&L was seeking a Reliable Electricity Rider for 10 years, based on the
12 variance between the proposed revenue requirement and the actual revenues net of operating
13 costs of the generation units. The proposed plan established the terms and conditions for
14 DP&L's SSO beginning June 1, 2017 to customers that did not choose a CRES. In its plan, DP&L
15 recommended including renewable energy attributes as part of the product that is competitively
16 bid, and seeks recovery of approximately \$10 million of regulatory assets. The plan also
17 proposed a new Distribution Investment Rider to allow DP&L to recover costs associated with
18 future distribution equipment and infrastructure needs. Additionally, the plan established new
19 riders set initially at zero, related to energy reductions from DP&L's energy efficiency programs,
20 and certain environmental liabilities the Company may incur. It is this application, as modified
21 by the negotiated stipulation, which is the subject of these proceedings.

22 **ESP III APPLICATION AND STIPULATION**

¹⁹ <http://dis.puc.state.oh.us/TiffToPdf/A1001001A14B25B63152E19165.pdf>

1 Q. WHAT IS THE STATUS OF THE ESP III APPLICATION?

2 A. There was considerable opposition to the February 2016 Application with multiple parties filing
3 testimony in opposition to one or more parts. It is my understanding that the parties negotiated
4 for months to find common ground. AES reported in its third quarter 2016 Financial
5 Presentation that DP&L had amended its ESP filing to propose a Distribution Modernization
6 Rider of \$145 million per year over seven years targeting Investment Grade rating at the utility.²⁰
7 On January 30, 2017, DP&L filed a Stipulation which DP&L represented involved negotiations
8 with 27 parties although there were only nine signatories. Also on January 30, 2017, DP&L and
9 the Sierra Club each issued press releases that spoke to the Stipulation and noted an agreement
10 to shutter the Killen and Stuart power plants in 2018 would result in the Sierra Club adding its
11 support to the Stipulation.

12 The Sierra Club press release noted:

13 *In addition to these provisions, Sierra Club and DP&L have reached agreement in*
14 *principle on terms that would retire the Killen and Stuart coal plants in June 2018 due to*
15 *economic reasons.*²¹

16 The DP&L press release noted:

17 *In addition, the Company and Sierra Club have reached agreement in principle that will*
18 *add Sierra Club to the list of parties agreeing to settlement. Upon completion of a few*

²⁰ cs2.q4cdn.com/825052743/files/doc_presentations/2016/AES-Q3-2016-Financial-Review.pdf

²¹ <http://content.sierraclub.org/press-releases/2017/01/dpl-agrees-invest-clean-energy-signaling-agreement-retire-stuart-and-killen>

1 *remaining details, DP&L anticipates Sierra Club will formally join the settlement later this*
2 *week, as well as one other party.*²²

3 **Q. HAS AN AMENDED STIPULATION BEEN FILED?**

4 A. Yes but not until March 14th, approximately six weeks after the press releases.

5 **Q. DO YOU KNOW THE REASONS FOR THE DELAY?**

6 A. My understanding is that negotiations with a number of parties resumed.

7 **Q. HOW DID THE AMENDED STIPULATION COMPARE TO THE STIPULATION FILED ON JANUARY**
8 **30TH?**

9 A. There were a number of changes but none related to the divestment of generation. In other
10 words, there was no mention of the planned retirement of Killen and Stuart in either the
11 Stipulation or the Amended Stipulation.

12 **Q. HOW DO YOU RECONCILE THE SUBSEQUENT ANNOUNCEMENTS BY OR ON BEHALF OF DP&L**
13 **TO CLOSE KILLEN AND STUART?**

14 A. Given the silence as to the closures in the Amended Stipulation, I can only assume that DP&L has
15 decided that it does not need approval from the PUCO.

16 **Q, DO YOU AGREE?**

²² <http://www.dplinc.com/news/details/dpl-reaches-agreement-with-various-intervenors-in-electric-security-plan-ca?phpMyAdmin=VDzL-FTt66ks4BwnaBr4J95u502>

1 A. Obviously this is for the PUCO to decide. My understanding is that under Section 4928.17 of the
2 Ohio Revised Code the PUCO must approve of a corporate separation plan. The code is
3 provided Appendix B.

4 Q. **HAD DP&L PREVIOUSLY RECEIVED APPROVAL FROM THE PUCO.?**

5 In 2014 when DP&L sought and received approval from the PUCO, DP&L had demonstrated that
6 the transfer was in the public interest. As that approval expired at the end of 2016 and there
7 have been a number of material changes since then, DP&L requires “new” approval and as such
8 should be obligated to justify why such a transfer remains in the public interest.

9 Q. **TO WHAT MATERIAL CHANGES ARE YOU REFERRING?**

10 A. The primary material change is that there is no indication that DP&L’s unregulated affiliate has
11 any intention of operating this generation or seeing this generation operated after mid-2018
12 through a sale. This is clear in the Amended Stipulation and has been confirmed in company-
13 issued press releases, third-party press releases and company-sanctioned testimony. In 2014
14 when DP&L applied for and received approval to transfer its generating assets, the PUCO
15 justified the transfer as follows:

16 *At the hearing in this case, DP&L witnesses testified that there are terms and conditions*
17 *in certain bonds that significantly impede upon its ability to transfer its generation assets*
18 *to an affiliate before September 1, 2016, and, due to adverse market conditions, DP&L*
19 *will not have sufficient cash flow to refinance the bonds before 2017. DP&L Ex. 16A at 2-*
20 *4; Tr. Vol. I at 260-262. Tr. Vol. III at 800- 805; Tr. Vol. Vat 1148-1150; Tr. Vol. XI at 2897.*
21 *Therefore, a modified deadline of January 1, 2017, for the asset divestiture should*
22 *alleviate any existing obstacles regarding the terms and conditions in DP&L's bonds and*

1 *its ability to refinance such bonds. Further, a deadline of January 1, 2017, should allow*
2 *DP&L to obtain terms and conditions to divest its generation assets while ensuring that*
3 *the assets are divested during the period of this electric security plan.*

4 **Q. WERE THERE WERE OTHER CHANGES IN THE AMENDED STIPULATION?**

5 A. Yes. There were a number of changes related to the riders.

6 **_Q. DO YOU BELIEVE THE CLOSURE OF KILLEN AND STUART IS A BETTER OUTCOME FOR**
7 **CUSTOMERS OF DP&L?**

8 A. To start with, I believe DP&L has the burden of showing that closure of Killen and Stuart is a
9 better outcome for customers than a sale particularly given the February 2016 filing which
10 spoke to the importance of retaining the coal generation. As discussed above, DP&L has not
11 provided any such analysis to date. From my analysis, it is unlikely that the closure of Killen and
12 Stuart is a better outcome for the customers of DP&L.

13 **Q. PLEASE EXPLAIN WHY YOU DO NOT THINK CLOSURE OF KILLEN AND STUART IS IN**
14 **CUSTOMERS' INTEREST?**

15 A. There are two aspects of the closure economics that I question are in the best interest of DP&L
16 ratepayers. First, a sale of these assets should generate positive value to DP&L both through a
17 payment and a transfer of costs related to the ultimate closing of the plants thereby reducing
18 the revenue needed to support DPL's heavy debt load.²³ Second, while DP&L may own only
19 1100 MW of the two stations, including the ownership of other parties, the stations account for

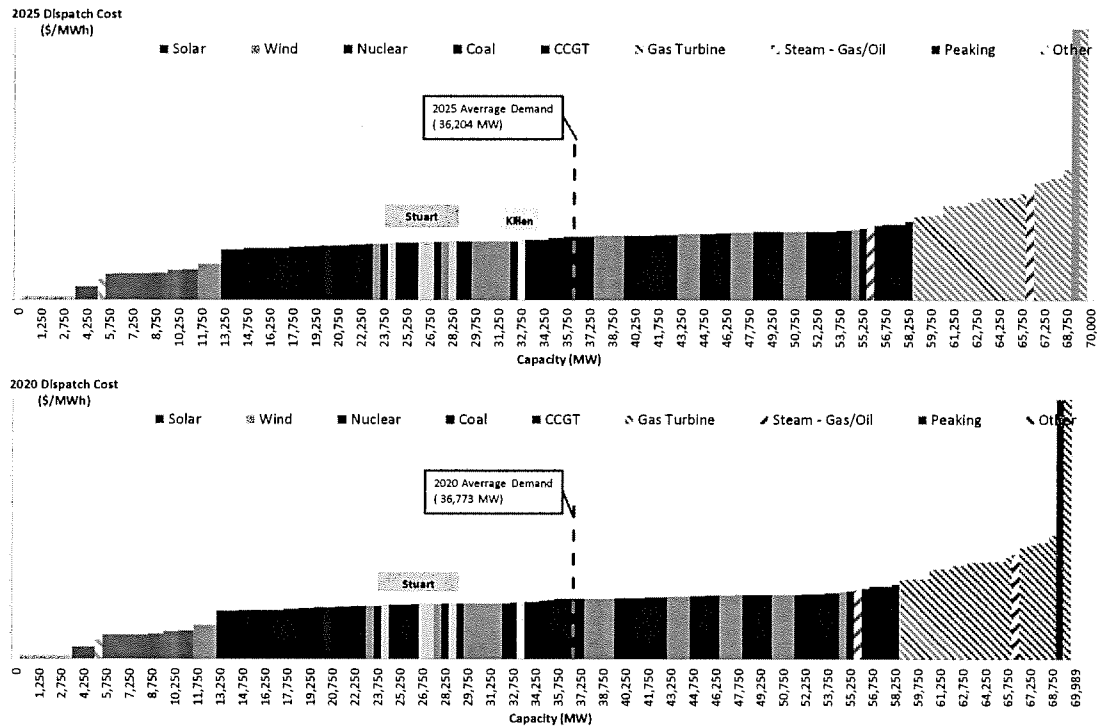
²³ The sale proceeds are unlikely to solve DPL's debt problems. It is important to remember that the cause of the debt was at least in part AES's over-payment for DPL. Asking DP&L to solve this problem is akin to asking a seller of a house to refund part of a purchase price if the value of the house declined.

almost 3000 MW of generation. Historically and prospectively, this capacity has at most times been “in the money”. If the capacity is retired, the supply curve contracts and power prices would be higher.

Q. ON WHAT BASIS HAVE YOU CONCLUDED THAT IT IS NOT IN CUSTOMERS INTEREST TO CLOSE KILLEN AND STUART?

A. EVA develops market forecasts regularly for its multi-client services COALCAST and FUELCAST. In addition, EVA prepares customized forecasts for clients incorporating their preferred scenarios. In EVA’s most recent multi-client forecast, the Stuart and Killen plants fall in lower cost part of the supply curve in PJM. The PJM West “stack” for two years: 2020 and 2025 are shown below. The stack provides lowest to highest cost generators based upon their dispatch cost in dollars per megawatt-hour (\$/MWH) with includes fuel and variable O&M. Stuart and Killen are in the lower cost half of the supply curve in both 2020 and 2025. The curve, which was prepared before DP&L’s January 30, 2017 announcement, includes all announced plant retirements as well as economic plant retirements. Stuart and Killen are included as their retirements had neither been announced nor evaluated to be economic.

PJM WEST DISPATCH STACK IN 2020 AND 2025



Q. DOES THE EVA FORECAST ASSUME THE CLEAN POWER PLAN IS IMPLEMENTED?

A. No. The Clean Power Plan was stayed by the U.S. Supreme Court in February 2016. A stay, which is a rare event, requires among other things a finding that the legal challenges are likely to prevail and absent a stay there would be irreparable harm. The election of Donald Trump increased the likelihood that the Clean Power Plan would not be implemented given the campaign promises of Candidate Trump to reduce regulatory burden. The recent confirmation of Scott Pruitt as EPA Administrator further strengthens this position as Pruitt had been as the Attorney General of the state of Oklahoma a leading plaintiff in the challenges to the Clean Power Plan.

1 **Q. IS EVA ALONE IN EXPECTING COAL UNITS TO HAVE A DISPATCH ADVANTAGE OVER GAS UNITS**
2 **IN THE FUTURE?**

3 A. No. In the recently-released 2017 Annual Energy Outlook, the Energy Information
4 Administration also forecasts a resurgence in coal generation during this period without the
5 Clean Power Plan.²⁴

6 **Q. ARE THERE OTHER ENVIRONMENTAL REGULATIONS THAT COULD AFFECT THE RELATIVE**
7 **COMPETITIVENESS OF THE KILLEN AND STUART UNITS?**

8 A. Yes. Outside of the CPP, the two regulations that coal generators have raised as a concern are
9 Coal Combustion Residuals (CCR) and Effluent Limitation Guidelines (ELG). DP&L has
10 represented on its website for both Killen and Stuart that it has “an effective system in place to
11 manage coal combustion residuals (CCR) that meets or exceeds all regulations governing CCR
12 requirements.”²⁵

13 **Q. WHAT IS THE STATUS OF THE EFFLUENT LIMITATION GUIDELINES?**

14 A. There is general industry concern about the cost of compliance with ELGs. The final ELG rules
15 were published in the Federal Register on November 3, 2015.²⁶ This date established when
16 appeals could be filed. A number of timely appeals were filed. The appeals were consolidated
17 at the U.S. Court of Appeals for the Fifth Circuit. The initial arguments were filed with the Fifth
18 Circuit in December 2016. Oral arguments are expected in 2017.

²⁴ [http://www.eia.gov/outlooks/aeo/pdf/0383\(2017\).pdf](http://www.eia.gov/outlooks/aeo/pdf/0383(2017).pdf), page 69

²⁵ cccr-killen.com/Home/default.aspx; <http://ccr-stuart.com/Home/default.aspx>

²⁶ <https://www.federalregister.gov/documents/2015/11/03/2015-25663/effluent-limitations-guidelines-and-standards-for-the-steam-electric-power-generating-point-source>

1 Multiple outcomes are possible for the ELG appeals including a remand by the Fifth Circuit to
2 EPA to address the industry challenges. The Trump Administration is likely to support such a
3 remand. Any remand could result in an EPA withdrawal of the current rule with or without a
4 revised plan going forward. Given the significance of the ELG rules to the economics of all coal
5 plants with wet scrubbers, a concern about customer costs would appropriately include a
6 deferral of any plant closure decisions until there is greater clarity regarding future of the ELG
7 rules.

8 **Q. IF LOW COST POWER PLANTS ARE RETIRED, WHAT HAPPENS TO POWER PRICES?**

9 A. Power prices increase as higher cost generation is needed to meet demand.

10 **Q. DO YOU THINK THERE ARE OTHER CONCERNS RELATED TO THE CLOSURE OF KILLEN AND**
11 **STUART THAT DP&L AND THE PUCO SHOULD CONSIDER?**

12 A. Absolutely, the economies of the communities in which these plants are located are heavily
13 dependent on these plants. DP&L's inclusion of nominal dollars to "help" these affected
14 communities does not come close to offsetting the economic devastation associated with the
15 closure of these plants.

16 **Q. WHAT HAS BEEN THE DELAY IN SELLING THESE PLANTS?**

17 A. It appears the delay was related to AES deciding it wanted to hold out for higher prices for the
18 generation. DP&L is believed to have periodically solicited bids for these assets from third
19 parties.²⁷ As noted above, in a supplemental filing on February 25, 2014 in Case No. 13-2420-EL-
20 UNC, DP&L indicated that AES had "recently begun to evaluate the transfer of the DP&L's

²⁷ <https://www.rtoinsider.com/aes-dpl-remorse-1403/>

1 generation assets to an unaffiliated third party through a potential sale.”²⁸ At that time, DP&L
2 said the “sale could occur as early as 2014”. Not long thereafter, on July 2014 AES issued a press
3 release saying it had decide to retain the generation because “of the potential recovery of
4 power prices, as well as PJM capacity prices.”²⁹ AES stated it believed “that this business has
5 additional value that can be captured by continuing to own and operate these generating
6 assets.” AES further said it would transfer the generation to an affiliate by January 1, 2017.

7 **Q. DID AES ASSUME ADDITIONAL RISK BY DELAYING THE SALE OF GENERATION ASSETS?**

8 A. In my opinion, while AES hoped the value of the plants would increase, it knew that there was
9 the potential for the value of the plants to decrease. By delaying what appeared to be a
10 potential sale, it was accepting the risk of a decline in value as the divestment was a known
11 regulatory obligation.

12 **Q. DO YOU THINK THERE WERE THERE OTHER REASONS FOR THE DELAY?**

13 A. Not unrelated, AES was concerned about the downgrades for DP&L and DPL that would likely
14 occur with the divestiture of generating assets. Moody’s Investor Service placed DP&L and DPL
15 long-term debt ratings under debt ratings under review for downgrade in September 2014.
16 Moody’s noted:

17 *The review for downgrade of DP&L’s Baa1 senior secured debt rating is prompted by the*
18 *possibility that the Public Utility Commission of Ohio (PUCO) could authorize the*
19 *generation asset separation plan as requested by DP&L. This includes transferring the*
20 *generation assets not later than January 1, 2017 to an affiliate that would result in a*

²⁸ <http://dis.puc.state.oh.us/TiffToPDF/A1001001A14B25B63152E19165.pdf>

²⁹ <http://www.aes.com/investors/press-releases/press-release-details/2014/AES-Retains-DPL-Inc-Generation-Assets/default.aspx>

1 *significant decrease in the amount of collateral that currently supports the utility's*
2 *outstanding secured debt. As a result, Moody's believes that if approved it would be*
3 *appropriate to reduce the notching difference between DP&L's secured and unsecured*
4 *ratings from our typical two to one alpha-numeric rating differential given the expected*
5 *lower amount of asset coverage.*³⁰

6 **Q. IS IT FAIR TO SAY THAT IN 2014 IT WAS KNOWN THAT THE ULTIMATE TRANSFER OR SALE OF**
7 **GENERATION WHETHER IT OCCURRED IN 2014 OR 2017 WOULD LIKELY RESULT IN DOWNGRADES?**

8 **A.** Yes absent a dramatic change in the power markets.

9 **Q. HOW DID THE OTHER OHIO REGULATED UTILITIES DEAL WITH THE DIVESTITURE OF**
10 **GENERATION?**

11 **A.** While the approaches varied, the three other affected utilities had committed to divestment of
12 their generation by the end of 2014.

13 **Q. WHEN DID FIRSTENERGY TRANSFER ITS GENERATING ASSETS?**

14 **A.** FirstEnergy on behalf of its Ohio operating companies (i.e., Ohio Edison, Cleveland Electric
15 Illuminating and Toledo Edison) filed a transition plan in late 1999. The transition plan included
16 proposals on corporate separation of its regulated and unregulated operations and proposed
17 recovery of generation costs over a market development period. On July 19, 2000, the PUCO
18 approved with some modification the transition plan. On May 18, 2005, the Ohio operating
19 companies entered into certain agreements implementing a series of intra-system generation
20 asset transfers. The asset transfers, which were completed in the fourth quarter of 2005,
21 resulted in the respective undivided ownership interests of the Ohio companies being

³⁰ https://www.moody's.com/research/Moodys-places-DPL-and-DPL-long-term-debt-ratings-under--PR_308493

transferred to FirstEnergy Generation Corporation (FGCO) which is now part of FirstEnergy Solutions.

Q. WHEN DID OHIO POWER (AEP) TRANSFER ITS GENERATING ASSETS TO AEP GENERATION RESOURCES?

A. AEP formed AEP Generation Resources (AEPGR) in 2013 to take ownership and operate generation resources previously owned by Ohio Power. The generating assets were transferred AEPGR on or about December 31st, 2013 as required by Ohio Power's state-mandated corporate reorganization. This reorganization was approved by FERC on April 29, 2013. The transfers were made at net book value. The AEP situation was somewhat more complicated as coincident with the transfer AEP was also realigning its generation with the load of its various operating companies and seeking to terminate the Interconnection Agreement among its operating companies which had provided for payments between the operating companies. Ohio Power's ownership share in the Amos station was transferred to Appalachian Power and the entire Mitchell plant was transferred to Kentucky Power and Wheeling Power. The net result was that Cardinal #1, Gavin, and Ohio Power's interest in Beckjord, Conesville #4, Killen, Stuart and Zimmer were transferred to AEPGR. Beckjord was retired in 2014.

In January 2017, AEP completed the sale of Gavin along with three gas plants to Lightstone Generation LLC, a joint venture of Blackstone Group LP and an ArcLight Capital Partners affiliate. AEP indicated it was using the proceeds from the sale to reinvest in its regulated businesses.

Q. WHEN DID DUKE ENERGY OHIO TRANSFER ITS GENERATING ASSETS?

A. The Duke Energy Ohio plants had operated as merchant plants for a number of years within Duke's Commercial Power division but with revenue support through various mechanisms authorized by the PUCO. The 2011 ESP required that the generation assets be transferred to a

1 nonregulated affiliate on or before December 31, 2014. During the second quarter of 2014, the
2 nonregulated generation was transferred into Duke Energy Commercial Asset Management
3 (DECAM). Beckjord was retired in 2014.
4

5 In early 2014, the PUCO turned down Duke's request for continued revenue support and Duke
6 decided it wanted to sell the unregulated assets. Duke noted in its 2014 10-K that it wanted to
7 pursue a sale "(a)lthough the undiscounted cash flows recover the carrying value of the Midwest
8 Generation assets..."³¹ Duke felt "the recovery period is over a long period of time, with risks
9 inherent in operating these assets in competitive energy markets and in an everchanging
10 landscape of environmental regulations related to fossil fuel based generation sources."
11 Management concluded in early 2014 that the projected risk and earnings profile of these assets
12 was no longer consistent with Duke Energy's strategy and initiated a plan to sell these assets
13 and realize the fair value over a shorter period while reducing the risk and volatility associated
14 with these assets.
15

16 On August 21, 2014, Duke Energy entered into an agreement to sell its nonregulated Midwest
17 generation business to Dynegy Inc. (Dynegy) for approximately \$2.8 billion in cash subject to
18 adjustments at closing for changes in working capital and capital expenditures. The assets sold
19 included DECAM's coal-fired and gas-fired generation assets and a retail sales subsidiary of Duke
20 Energy, Duke Energy Retail Sales, LLC (Duke Energy Retail), which was certified as a CRES
21 provider in Ohio. The sale closed in 25015.

22 **Q. DO YOU BELIEVE THERE ARE BUYERS FOR KILLEN AND STUART?**

³¹ <https://www.sec.gov/Archives/edgar/data/17797/000132616015000008/duk-20141231x10k.htm>

- 1 A. Yes. There has been considerable market interest in existing coal-fired plants for several
2 reasons including those listed below:
- 3 a. A third party may have a different market view regarding coal gas price differentials which
4 would result in higher generation assumptions for the coal units and hence higher value.
- 5 b. A third party may believe the regulatory environment for coal-fired power plants will be
6 different due to of the change in administration and the likely demise of the Clean Power
7 Plan.
- 8 c. Coal producers and transporters are increasingly flexible with respect to their pricing
9 structure to improve the dispatch of coal plants. In some markets, coal producers have
10 been known to provide discounts and premiums to the coal price based upon real-time
11 power pricing. Depending upon the discounts, this could reduce the fuel cost to very low
12 levels during off-peak periods allowing plants to dispatch ahead of gas.
- 13 d. Coal producers are concerned about maintaining market. With increased numbers of plant
14 retirements, they are looking to maintain the demand for their coal through plant
15 acquisitions.

16 **Q WHO ARE THE POTENTIAL BUYERES?**

- 17 A. The potential buyers include private equity (as was seen in the sale of the Gavin power plant),
18 merchant generators (as was seen in the sale of the Duke Energy Ohio plants), and strategic
19 players such as coal producers who are increasingly interested in vertical integration within their
20 markets.

21 **Q. PLEASE REVIEW THE ADVANTAGES TO RATEPAYERS OF A SALE RATHER THAN RETIREMENT?**

- 22 A. The advantages include:

- 1 a. Possible positive value which would reduce DP&L's request for ESP riders
- 2 b. Transfer of plant closing costs
- 3 c. Reduced power costs to ratepayers
- 4 d. No economic destruction in the counties in which the power plants reside
- 5 e. Transfer of risk related to plant performance from DP&L or AES Ohio Generation LLC to
- 6 a third party

7 **Q. WHAT IS THE DOWNSIDE IN CONDUCTING A SALES PROCESS FOR KILLEN AND STUART?**

8 A. I do not believe there is a downside.

9 **Q. DO YOU KNOW THE REASONS FOR THE MID 2018 RETIREMENT DATES?**

10 A. As mentioned, DP&L has provided little information about the retirements. It is possible that
11 the mid-2018 date is dictated by PJM. PJM is the regional transmission organization to which
12 DP&L belongs. PJM dispatches electric generating plants on a lowest cost basis based upon the
13 prices each generator bids. PJM provides capacity support for generators based upon prices bid
14 three years in advance. The winners of each auction are not identified by PJM so it is unknown
15 whether DP&L's capacity bids for 2018/2019 were successful. It is possible they were not, hence
16 the mid-2018 closure date. It is interesting, however, that AEP announced its bid for Stuart
17 cleared the auction for 2018/2019.

18 **Q. WHEN IS THE NEXT PJM CAPACITY AUCTION?**

19 A. The next capacity auction is in May 2017. If DP&L fails to offer its Stuart and Killen capacity in
20 this auction, it could materially reduce the value of these stations.

21 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

1 A. Yes. If additional information becomes available, I reserve the right to supplement my
2 testimony.

3

4

5

1 **APPENDIX A**

2 **RESUME OF**
3 **EMILY S. MEDINE**
4

5 **EDUCATIONAL BACKGROUND**

6 M.P.A. Woodrow Wilson School of Public and International Affairs, Princeton
7 University, 1978
8 B.A. Geography, Clark University, 1976 (magna cum laude, Phi Beta Kappa)
9

10 **PROFESSIONAL EXPERIENCE**

11
12 **Current Position**

13 Emily Medine, a Principal, has been with Energy Ventures Analysis since 1987. Her experience includes
14 forecasting, bankruptcy support, market strategy development, fuel procurement audits, fuel
15 procurement, acquisition and investment analyses, and strategic studies. She has also provided expert
16 testimony on utility fuel procurement practices and coal contract disputes. The types of projects in
17 which she is involved are described below:
18

19 ***Fuel Procurement***

20 Ms. Medine develops and implements fuel procurement strategies for U.S. and foreign coal
21 consumers. Fuel procurement assistance has ranged from determining an appropriate strategy
22 to soliciting bids and negotiating purchase agreements. In the last five years, Ms. Medine has
23 advised several international coal consumers of their fuel procurement activities. Ms. Medine
24 continues to advise numerous U.S. and international coal consumers on their coal and
25 petroleum coke procurements.
26

27 ***Forecasting***

28 Ms. Medine develops forecasts of U.S. and global solid fuel demand and prices for alternative
29 coal types, coke and market segments. These forecasts are provided to individual clients and
30 are documented in various FUELCAST/COALCAST reports.
31

32 ***Bankruptcy Support***

33 Ms. Medine was an advisor to the Horizon Natural Resource companies which operated as a
34 debtor-in-possession in the development of a plan to accomplish reclamation on all permits not
35 sold and transferred as part of the plan of reorganization. For a period of 15 months, Ms.
36 Medine served as Executive Vice President of Centennial Resources, Inc., a debtor-in-possession,
37 as part of EVA's contract to manage this company post-petition. In this capacity, she managed
38 the day-to-day operations of the company as well as serving as the liaison between the
39 company, state and county regulatory agencies, the bankruptcy court, and the lenders. This
40 assignment ended upon the filing of Centennial's plan of reorganization. Ms. Medine has also
41 served as the advisor to secured lenders in another coal industry bankruptcy. In this capacity,
42 she reviewed and developed independent financial forecasts and operating plans of the debtor-
43 in-possession. Most recently, Ms. Medine supported the Department of Justice in a major U.S.
44 coal bankruptcy.
45
46

Acquisition and Investment

Ms. Medine was the agent for Lexington Coal Company in the sale of its assets in Indiana and Illinois. As part of this engagement, Ms. Medine was responsible for the sale of three mines to Peabody Energy. Ms. Medine also routinely evaluates the economics of potential projects or acquisitions for producers, developers, and industrials. For coal projects, this includes market and financial forecasts. In addition to the above, Ms. Medine has completed the sale of multiple mine assets. Ms. Medine was an advisor to and on the board of The Elk Horn Coal Company until its sale to Rhino Energy in June 2011. Ms. Medine managed the sale of a small Central Appalachian producer in 2015.

Forecasting

Ms. Medine develops forecasts of U.S. and global solid fuel demand and prices for alternative coal types, coke and market segments. These forecasts are provided to individual clients and are documented in various FUELCAST/COALCAST reports.

Fuel Procurement Audits

Ms. Medine manages and performs fuel procurement audits on behalf of regulatory commissions, utility management, and third-party interveners. She has performed over 25 audits of utilities regulated by the Public Utilities Commission of Ohio and testified in a number of proceedings. She also managed two major audits of the fuel procurement practices of PacifiCorp. Recent audits include Appalachian Power (2006, 2007, and 2014) and Monongahela Power (2007 and 2015) on behalf of the Consumer Advocate of the State of West Virginia, Tucson Electric Power on behalf of the Arizona Corporation Commission in 2007/2008 and 2012, AEP Ohio on behalf of the Ohio's Consumer Counsel, and AEP Ohio (2009, 2010, 2011, 2012, 2013 and 2014) and Dayton Power & Light (2010, 2011, 2012, 2013, 2014, and 2015) on behalf of the staff of the Public Utilities Commission of Ohio.

Market Strategy Development

Ms. Medine assists clients in the development of marketing strategies on behalf of coal suppliers and transporters. She has helped to identify the high value markets and strategies for obtaining these accounts.

Expert Testimony and Presentations

Ms. Medine prepares analyses and testimony in support of clients involved in regulatory and legal proceedings. She provides testimony in commission hearings on fuel procurement issues and arbitration proceedings on contract disputes and damages. Ms. Medine regularly speaks at industry meetings.

Prior Experience

Prior to joining EVA, Ms. Medine held various positions at CONSOL including Assistant District Sales Manager – Chicago Sales Office and Strategic Studies Coordinator. Prior to CONSOL, Ms. Medine was a Project Manager at Energy and Environmental Analysis, Inc. where she directed two large government studies. For the Environmental Protection Agency, Ms. Medine directed an evaluation of the energy, environmental and economic impacts of New Source Performance Standards on Industrial Boilers. For the Department of Energy, Ms. Medine directed an evaluation of the financial impacts of requiring utilities with coal capable boilers to reconvert to coal. Ms. Medine worked as a Research Assistant at Brookhaven National Laboratory while she attended graduate school.

1 APPENDIX B

4928.17 Corporate separation plans.

(A) Except as otherwise provided in sections 4928.142 or 4928.143 or 4928.31 to 4928.40 of the Revised Code and beginning on the starting date of competitive retail electric service, no electric utility shall engage in this state, either directly or through an affiliate, in the businesses of supplying a noncompetitive retail electric service and supplying a competitive retail electric service, or in the businesses of supplying a noncompetitive retail electric service and supplying a product or service other than retail electric service, unless the utility implements and operates under a corporate separation plan that is approved by the public utilities commission under this section, is consistent with the policy specified in section 4928.02 of the Revised Code, and achieves all of the following:

(1) The plan provides, at minimum, for the provision of the competitive retail electric service or the nonelectric product or service through a fully separated affiliate of the utility, and the plan includes separate accounting requirements, the code of conduct as ordered by the commission pursuant to a rule it shall adopt under division (A) of section 4928.06 of the Revised Code, and such other measures as are necessary to effectuate the policy specified in section 4928.02 of the Revised Code.

(2) The plan satisfies the public interest in preventing unfair competitive advantage and preventing the abuse of market power.

(3) The plan is sufficient to ensure that the utility will not extend any undue preference or advantage to any affiliate, division, or part of its own business engaged in the business of supplying the competitive retail electric service or nonelectric product or service, including, but not limited to, utility resources such as trucks, tools, office equipment, office space, supplies, customer and marketing information, advertising, billing and mailing systems, personnel, and training, without compensation based upon fully loaded embedded costs charged to the affiliate; and to ensure that any such affiliate, division, or part will not receive undue preference or advantage from any affiliate, division, or part of the business engaged in business of supplying the noncompetitive retail electric service. No such utility, affiliate, division, or part shall extend such undue preference. Notwithstanding any other division of this section, a utility's obligation under division (A)(3) of this section shall be effective January 1, 2000.

(B) The commission may approve, modify and approve, or disapprove a corporate separation plan filed with the commission under division (A) of this section. As part of the code of conduct required under division (A)(1) of this section, the commission shall adopt rules pursuant to division (A) of section 4928.06 of the Revised Code regarding corporate separation and procedures for plan filing and approval. The rules shall include limitations on affiliate practices solely for the purpose of maintaining a separation of the affiliate's business from the business of the utility to prevent unfair competitive advantage by virtue of that relationship. The rules also shall include an opportunity for any person having a real and substantial interest in the corporate separation plan to file specific objections to the plan and propose specific responses to issues raised in the objections, which objections and responses the commission shall address in its final order. Prior to commission approval of the plan, the commission shall afford a hearing upon those aspects of the plan that the commission determines reasonably require a hearing. The commission may reject and require refiling of a substantially inadequate plan under this section.

(C) The commission shall issue an order approving or modifying and approving a corporate separation plan under this section, to be effective on the date specified in the order, only upon findings that the plan reasonably complies with the requirements of division (A) of this section and will provide for ongoing compliance with the policy specified in section 4928.02 of the Revised Code. However, for good cause shown, the commission may issue an order approving or modifying and approving a corporate separation plan under this section that does not comply with division (A)(1) of this section but complies with such functional separation requirements as the commission authorizes to apply for an interim period prescribed in the order, upon a finding that such alternative plan will provide for ongoing compliance with the policy specified in section 4928.02 of the Revised Code.

(D) Any party may seek an amendment to a corporate separation plan approved under this section, and the commission, pursuant to a request from any party or on its own initiative, may order as it considers necessary the filing of an amended corporate separation plan to reflect changed circumstances.

(E) No electric distribution utility shall sell or transfer any generating asset it wholly or partly owns at any time without obtaining prior commission approval.

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

Summary: Testimony Direct Testimony of Emily S. Medine, Principal, Energy Ventures Analysis, Inc. on Behalf of Murray Energy Corporation electronically filed by John F Stock on behalf of Murray Energy Corporation